

Redbreast Whiskey Launch



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CS4047 – Multimedia Industry Perspectives

Assignment 03

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Phase 01

Creative Response 01 – A Taste Through Culture

“A Taste Through Culture” is an immersive, multi-sensory whiskey experience that transports visitors between Ireland and Japan, reflecting the fusion at the heart of Redbreast Mizunara Edition. The experience will take place inside a 20 × 20 m pavilion, serving as a connection between the foggy forests of Hokkaido and the landscaped grounds of Midleton Distillery.

Using a WebAR interface, visitors begin their journey by scanning the label of a Redbreast bottle. This causes the physical area around them to change into a living digital forest, where Mizunara oak environments are created by dissolving the walls through the use of projection mapping. Interactive scent diffusers emit smells of sandalwood and spice at many of the key story sections, and spatial audio varies from Irish rainfall to Japanese wind as guests wander through the space. The visual language blends warm amber light, natural wood textures, and rich copper tones with calm whites, gentle blues, and mist-like projections. The sensation of craftsmanship is reinforced by tangible elements, for example, dangling Mizunara oak staves.

Through AI-enhanced storytelling and responsive projection, the guided narrative reveals the true craftsmanship of Mizunara wood maturation and pot still whisky. Through movement and interaction of the visitors, they actively influence the entire experience, which concludes in a climactic reveal. A digital whisky bottle emerging from darkness into light is unveiled.

The whole concept positions Redbreast as not only a product but also as a cultural journey of time, craft, and discovery. This is done by merging physical installation with AR, sound, and scent to create an emotionally touching and memorable experience.

Physical elements

- Pavilion space (20m x 20m)
- Visitors walking through environments
- Scent diffusers (smell = physical)
- Spatial audio (in real space)
- Any sculptural elements (e.g. hanging leaves)
- Final physical reveal moment

Digital elements

- WebAR scanning
- Projection mapping (walls + floor)
- AI-driven storytelling

Creative Response 01 – Sketches



Figure 1: AI-Generated Image of a "A Taste Through Culture"

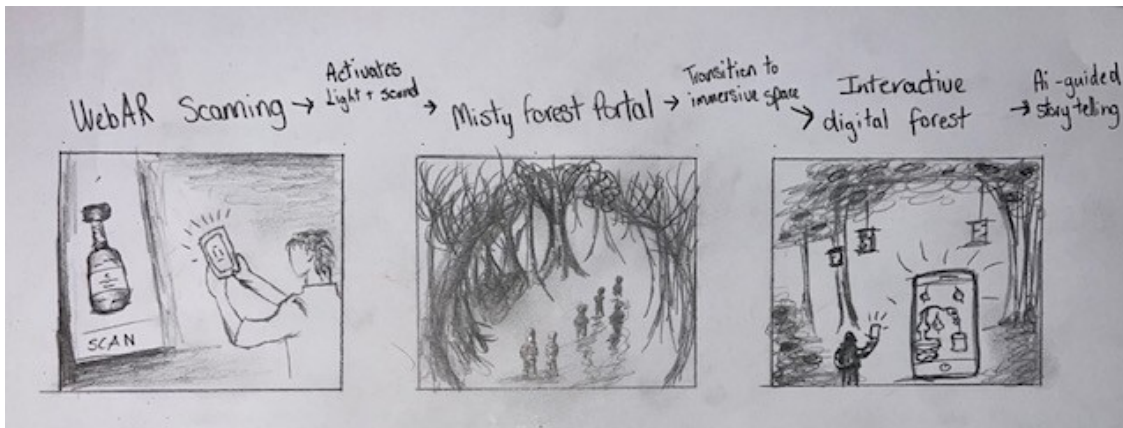


Figure 2: Sketch 1 of "A Taste Through Culture"

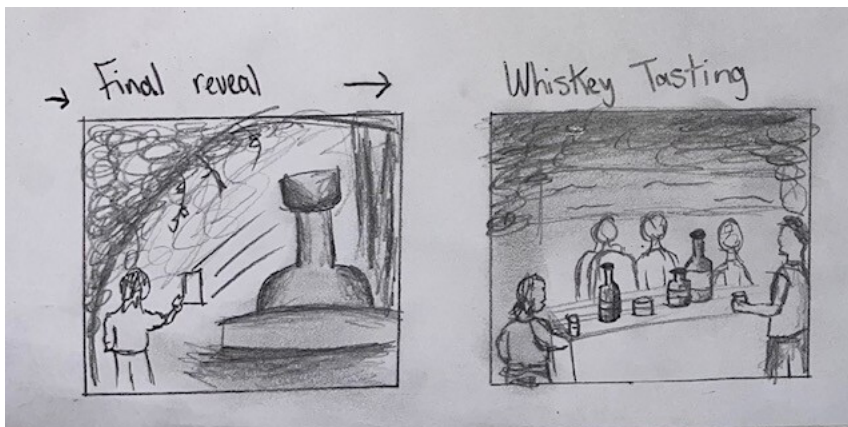


Figure 3: Sketch 2 of "A Taste Through Culture"

Creative Response 02 – The Living Forest

The Living Forest is an immersive pavilion experience. Visitors walk into a dark and almost empty room. The only things in it are real Mizunara oak staves hanging from the ceiling, the same wood used to finish Redbreast whiskey. There are no screens, no signs and no instructions.

The experience only starts when you take out your phone and point it at one of the staves. Through the camera, a story appears.

An animated robin flies from the green hills of Ireland across to the forests of Japan, showing the journey the whiskey takes. Each stave unlocks something different. As visitors move through the space the sound changes, starting as soft Irish rain and slowly becoming Japanese wind. At certain points a scent is released into the air, sandalwood and coconut, the actual notes of the whiskey itself. The reveal at the end is something you have to earn. Only after going through the whole space can you scan a pedestal at the back of the room. When you do, a glowing bottle of Redbreast rises out of the darkness in a beam of light.

The whole idea is built around the Redbreast brand theme of the hidden gem. Something rare that you discover for yourself rather than being told about. The darkness, the silence and the slow unfolding of the story are all designed to make visitors feel like they found something special that not everyone gets to see. Each person's journey is also slightly different because a short quiz at the entrance shapes which stories they unlock along the way.

Creative Response 02 – Sketches

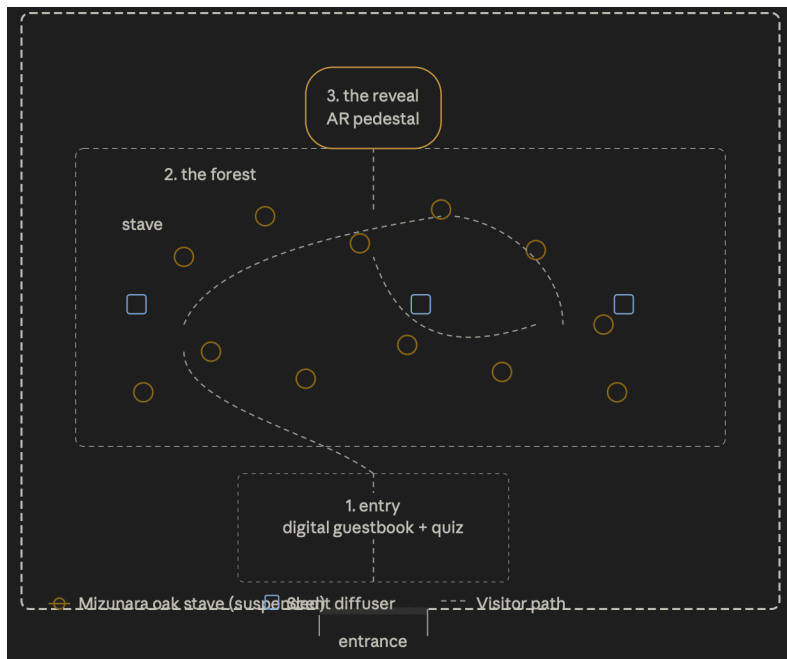


Figure 4: User Flow Diagram of "The Living Forest"

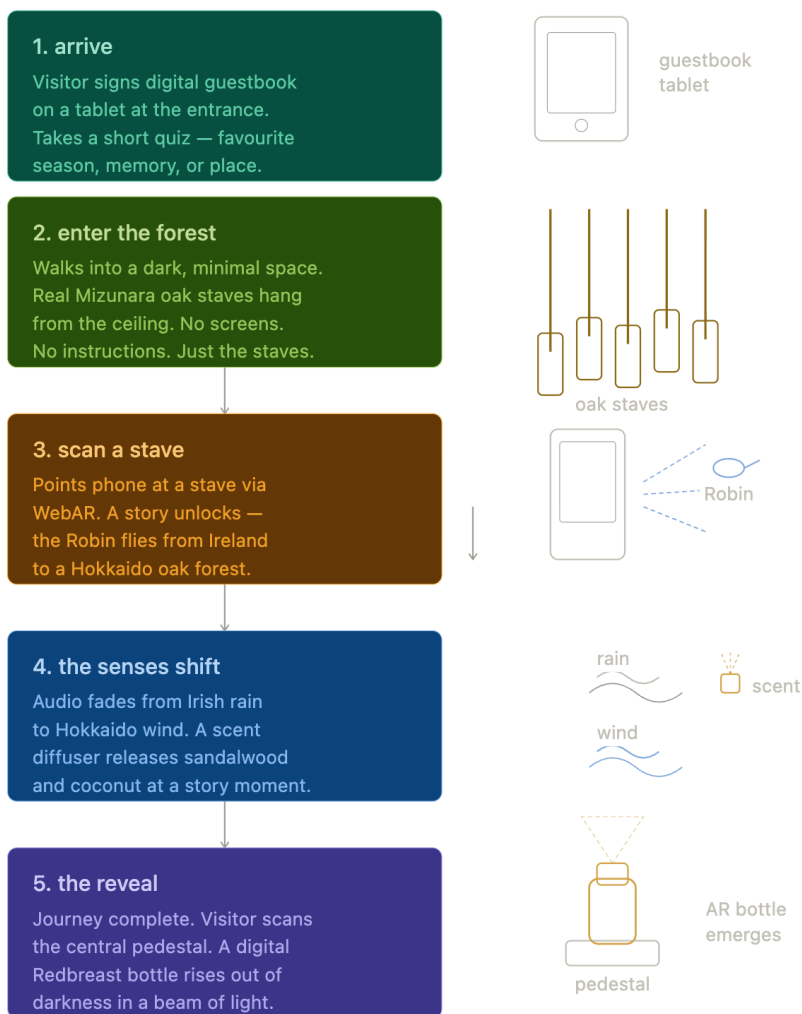


Figure 5: User Flow of "The Living Forest"

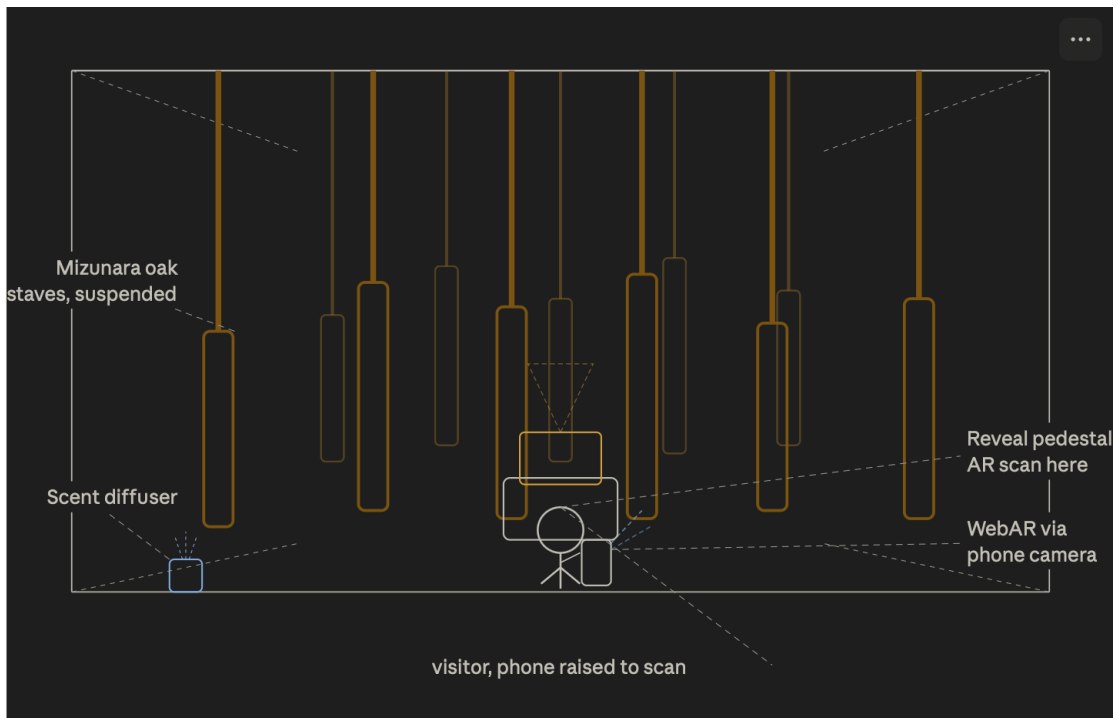


Figure 6: Visual Mock-up of "The Living Forest"



Figure 7: Mock-up of AR Screen for "The Living Forest"

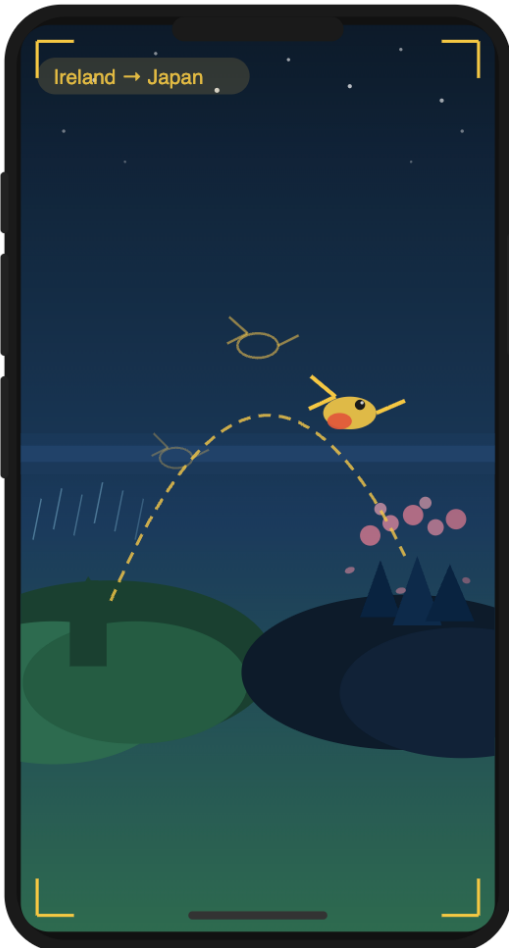


Figure 8: Mock-up of AR Screen for "The Living Forest"

Creative Response 03 – The Master’s Atelier

The Master’s Atelier is an immersive, high-concept exhibition space that bridges the gap between traditional Japanese craftsmanship and emerging technology.

Visitors walk into an experience at the intersection of a physical workshop and an interactive bar. They are invited to participate in a collaborative finishing process that emphasises the rarity of Mizunara oak and the luxury of the Redbreast Mizunara Whiskey blend.

The Atelier is designed as a sensory sanctuary. Visitors enter the pavilion, which is defined by the raw, honeyed scent of Mizunara oak and the tactile weight of artisan glass. Central to the space is a dual-purpose bar and engraving station. Here, the physical and digital blur as visitors interact with raw materials, such as feeling the unique grain of the wood and the texture of hand-crafted bottles. To reinforce the theme of exclusivity, each guest receives a limited-edition bottle or miniature Mizunara cask. Through a live carving station, these objects are personalised with the guest’s name, transforming a luxury product into a unique artefact.

The technology acts as a guide, elevating the whiskey’s story without overshadowing the liquid itself. An intelligent, voice-responsive AI modelled after the Master Blender’s persona engages guests in real time. This guide explains the nature of Mizunara ageing and answers questions about the blending process. The bar surface functions as a digital canvas. Using computer vision, the table detects when a tasting glass is placed down, triggering an aura of light that reveals the specific batch history, molecular tasting notes, and the whiskey’s journey from forest to glass. The reveal occurs when the guest’s name is projected directly onto the bar’s surface or onto the bottle itself during the final presentation, syncing the digital identity with the physical object. A minimalist digital counter tracks the day’s participants (e.g., "Visitor 21 of 500"). This constant reminder of the limited run reinforces the value of the experience. Lastly, by focusing on the difficulty of working with Mizunara wood, the exhibition highlights that each bottle is a collaboration among the guest, the blender, and the oak’s unpredictable nature.

Creative Response 03 – Sketches



Figure 9: AI-Generated Image of "The Master's Atelier"

THE MASTER'S ATELIER: VISITOR EXPERIENCE FLOW

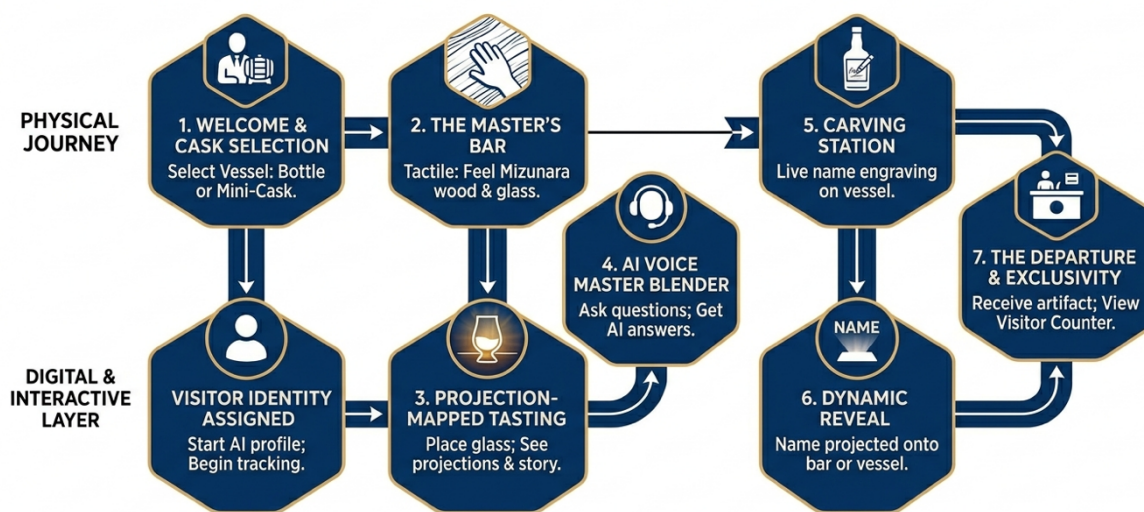



Figure 10: A Visitor Experience Flow of "The Master's Atelier"

Audience Personas

The Whiskey Connoisseur

I collect stories, not just bottles. Show me the craft and make me feel like I earned it!



Kenji
52 | Tokyo | Senior Finance Professional | Primary Audience

Situation and context
What is the typical context of the real people represented by this archetype?

- Serious whiskey collector. Owns 500+ bottles, tracks limited releases globally.
- Already researched Reborned Mizunara before attending Expo.
- Visiting specifically for the high-Japanese craft fusion story.
- Expecting a rare, once in a lifetime tasting moment.
- Active in niche whiskey communities online and offline.

Goals and motivations
Beyond the product, what motivates this person?

- Wants to understand the full provenance of the whiskey from Hokkaido forest to the Irish distillery.
- Wants to experience something genuinely exclusive that most people will never access.
- Leaves with a tangible or digital memento/reminder to commemorate the experience that proves their attendance.
- Potentially acquire a bottle or engraved limited edition keepsake.
- Has a deep appreciation for craft spirits and the stories behind them.
- Is drawn specifically to the high-Japanese cultural fusion of the Mizunara edition.
- Is seeking a rare, once in a lifetime tasting experience at Expo 2025.
- Potentially acquire a bottle or engraved limited edition keepsake.

Fears and frustrations
What keeps them up at night? What does a bad day look like?

- Experiences that feel like marketing, not genuine storytelling.
- Shallow AR gimmicks that add spectacle but no meaning.
- Crowds and fast moving environments that reduce intimacy.
- Cultural references that feel superficial or aesthetic.
- A tasting that ignores the craft story entirely.

Tasks and tactics
What does the person do to accomplish their goals?

- Researches extensively before arriving. Already knows the key facts.
- Spends significantly longer than the average dwell time. Engages with every detail.
- Photographs and shares on specialist/niche forums and social media.
- Engages directly with brand ambassadors and asks technical questions.
- Recommends the experience to other collectors in their network.

Digital fluency and tech habits
How comfortable is this person with technology, and how do they use it?


- Very comfortable with technology and always keen to try new digital experiences first.
- Has prior experience using whiskey-themed AR applications, such as Macallan Journey 12 and Jack Daniel's AR.
- Regularly participates in whiskey-focused online communities like Reddit (r/whisky), the Distiller app, and collector forums.
- Engages directly with brand ambassadors and asks technical questions.
- Very comfortable using a smartphone, but prefers real, hands-on experiences.

Expectations
What does this person expect from the experience?

- A deep, layered narrative experience, not a sales pitch.
- A genuine craftsmanship on display at every touchpoint.
- A product reveal that feels earned and ceremonial.
- Expects a ceremonial tasting moment. The whiskey should be presented with the same care as the journey that preceded it.
- Something to take home that connects them to the experience after leaving.

The Luxury Lifestyle Explorer

I come for the atmosphere, but I stay for the story.



Isabella
44 | Sydney | Creative Director at Design Agency | Primary Audience

Situation and context
What is the typical context of the real people represented by this archetype?

- Travels globally for premium brand experiences.
- Values immersive, Instagrammable environments. Came to Expo for unique experiences.
- Interested in the cultural crossover between Ireland and Japan.
- Not a dedicated whiskey collector but open to discovering something new and premium.
- Always looking for culturally rich content to document and share with her audience.

Goals and motivations
Beyond the product, what motivates this person?

- Have an experience worth talking about and sharing.
- Learn something surprising about Irish whiskey and Japanese craft.
- Feel part of something exclusive and beautifully designed, not a generic brand event.
- Leave with a shareable digital keepsake that extends her content beyond the day.
- Capture high-quality, atmospheric photos and videos worth posting on Instagram and TikTok.

Fears and frustrations
What keeps them up at night? What does a bad day look like?

- Spaces that look great in marketing but are dull and not photogenic in person.
- Pacing that is too slow or too fast/heavy. Loses interest fast if not visually stimulated.
- Technology that requires lengthy setup or feels clunky to use in the moment.
- Brand experiences that feel corporate or promotional rather than culturally genuine.
- Cultural references that feel like decoration rather than real depth.

Tasks and tactics
What does the person do to accomplish their goals?

- Moves through the space with phone ready actively seeking the best shot or video moment.
- Engages most deeply with interactive elements that feel visually rewarding and intuitive.
- Posts Instagram Stories and TikToks in real time during the experience and/or afterwards.
- May not absorb every narrative detail but will remember the emotional and visual arc.
- Tags the experience and brand on social media, driving organic reach for the brand.

Digital fluency and tech habits
How comfortable is this person with technology, and how do they use it?

- Very comfortable with AR on smartphones. Uses filters and AR features as part of daily creative work.
- Views Instagram and TikTok as both professional and personal tools, appreciating experiences through a content-oriented mindset.
- Expects digital interfaces to be instantaneous. Has zero tolerance for loading delays.
- Would be excited to use a WebAR experience if it creates content worth sharing.

Expectations
What does this person expect from the experience?

- A visually stunning space with multiple moments specifically worth photographing and filming.
- Interactive elements that feel effortless, magical and produce something beautiful on screen.
- A clear emotional arc. Curiosity on entry, wonder in the middle, revelation at the end.
- Expects to leave the whiskey as part of the experience and for it to be presented in a way that looks and feels as good as everything else in the space.
- A digital take-home e.g. a filter, collectible, or QR/bookmark that lives beyond the day on her feed.

The Press & Trade Guest

Give me a story I can actually write about!



Declan

34 | Dublin | Spirits Journalist & Drinks Industry Consultant | Secondary Audience

Situation and context

What is the typical context of the real people represented by this archetype?

- Attending Expo specifically to review and report on the Redbreast Mizunara launch.
- Travelled from Dublin and has prior knowledge of Irish Distillers and Redbreast's portfolio.
- Sees the experience as a standard for immersive brand activations in the spirits industry.
- Interested in how Irish whiskey brands are expanding into the Japanese market.
- Arrives with specific questions prepared and a critical eye for detail.

Goals and motivations

Beyond the product, what motivates this person?

- Gather enough material, facts, quotes, emotional impressions for a strong feature piece.
- Find the genuine story angle that differentiates Redbreast Mizunara in a crowded market.
- Experience the full visitor journey from entry to re-visit to write about it accurately.
- Access behind-the-scenes detail, e.g. cask sourcing, production rationale, brand decisions.
- Make contact with brand representatives for follow-up interviews and fact-checking.
- Wants to assess how well the brand handles the Irish-Japanese cultural crossover.
- Looking for a quieter moment or event that no other journalist will have. Something that sees their gear stand out from standard launch coverage.

Fears and frustrations

What keeps them up at night? What does a bad day look like?

- Experiences that prioritise spectacle over substance but there's nothing to actually write about.
- Doesn't like marketing language that hides the real craft behind the product.
- Being rushed through a standard visitor journey with no access to deeper detail.
- Cultural storytelling that feels borrowed or superficial rather than researched and authentic.
- Technology choices that feel like trends rather than meaningful enhancements to the narrative.

Tasks and tactics

What does the person do to accomplish their goals?

- Takes detailed notes and photographs throughout. Obscures design decisions others miss.
- Tests interactive elements rigorously to understand how they work, not just how they look.
- Engages critically and identifies where the experience succeeds and where it falls short.
- Seeks out brand representatives on the day for direct quotes and context.
- Cross-references claims against prior research and the narrative.

Digital fluency and tech habits

How comfortable is this person with technology, and how do they use it?

- Highly proficient across all digital platforms. Uses tech as a professional research and reporting tool.
- Familiar with AR, projection mapping and AI experiences from prior editorial coverage of the industry.
- Will test and critically evaluate interactive elements. Interested in the "why" behind technology choices.
- Likely to write about the technology as part of the editorial angle. It needs it to be genuinely purposeful.
- Recognises when technology feels superficial or poorly integrated, drawing from previous experiences.

Expectations

What does this person expect from the experience?

- A genuinely newsworthy concept with a clear, authentic narrative hook that is worth publishing.
- An experience that holds up under scrutiny not just surface aesthetics.
- Access to supporting materials or brand representatives for follow-up after the event.
- A story that connects Irish and Japanese culture with real depth, evidence and craft.
- Leaves with a clear sense of whether this experience sets a new standard for immersive spirits launches.
- Expects to taste the whiskey and form an independent opinion on it. The tasting notes and finish are part of the story he'll write.

The Young Discover

I didn't know I liked whiskey, until tonight.



Hana

20 | Osaka | University student | Secondary Audience

Situation and context

What is the typical context of the real people represented by this archetype?

- Visiting Osaka Expo 2025 with a group of friends. The experience needs to work as a shared social moment.
- At the legal drinking age in Japan (20+) but has limited experience with premium spirits.
- Drawn into the Redbreast Mizunara exhibition through its strong visual identity and atmosphere; design has to see specific whiskey that pulled her in.
- Studies design and cultural history. Genuinely curious about the Irish-Japanese connection.
- Naturally social and always open to trying new things.

Goals and motivations

Beyond the product, what motivates this person?

- Have a genuinely memorable shared experience she and her friends will talk about afterwards.
- Learn something new about craft, culture and heritage in a way that feels fun not formal.
- Capture content for TikTok and Instagram Stories. Visually striking moments to share.
- Feel welcomed into the world of premium whiskey and not made to feel like an outsider.

Fears and frustrations

What keeps them up at night? What does a bad day look like?

- Formal or exclusive environments that feel unwelcoming to someone new to whiskey.
- Long pieces of text or dense narration. Loves focus quickly without visual stimulation.
- Being unsure how to participate in the tasting in front of her friends.
- Interactive tech that requires heavy reading instructions. Expects everything to be intuitive.
- Feeling like a sales target rather than a welcome guest in the space.

Tasks and tactics

What does the person do to accomplish their goals?

- Explores the space with her friends. Gravitates toward light, movement and interactive elements.
- Naturally encourages her group to join in and try things alongside her.
- Documents the experience on TikTok and Instagram Stories as she moves through it.
- Engages enthusiastically with AR and gamified elements.
- Dives in headfirst. Naturally the first in her group to touch, scan or interact with anything, setting the tone for everyone around her.

Digital fluency and tech habits

How comfortable is this person with technology, and how do they use it?

- True digital native. Uses smartphone daily. Completely fluent with AR, filters and other immersive apps.
- TikTok, Instagram and LINE are daily habits. Thinks in short-form video and visual content.
- Expects every interface to be prompt and require little to no instruction to understand.
- More likely than any other persona to share the experience organically across multiple platforms.

Expectations

What does this person expect from the experience?

- A welcoming space that does not require prior whiskey knowledge to enjoy or engage with.
- Interactive moments that can work as a group activity or are fun to do together, not just alone.
- A sense of genuine discovery. Finding out something surprising about two cultures meeting in the one bottle.
- Wants to leave feeling like the time spent was genuinely worth it and that she had a good time and discovered something new.
- Expects to be able to taste the whiskey and leave with something tangible. E.g. physical keepsake or a story worth retelling to friends.

Site Evaluation

SITE EVALUATION



Figure 1: The Grand Ring, Expo 2025 Osaka, designed by Sou Fujimoto (2025).
Source: ArchDaily / Expo 2025 official imagery.



Figure 2: The triskele symbol



Figure 3: Magnus RINN sculpture, designed by Hiroyuki Tsuji, the custodian of the Karasaki Pine Tree, in collaboration with Joseph Walsh Studio.

Osaka Expo 2025:

Expo 2025 Osaka, Kansai, Japan is scheduled to take place from 13 April to 13 October 2025 (184 days) on Yumeshima Island in Osaka Bay (Japan Association for the 2025 World Exposition, 2025). It's overall attendance reached over 29 million visitors, with an average daily attendance averaging 158,000.

Event Scale

It spans 155 hectares with 150+ participating countries, featuring Sou Fujimoto's Grand Ring, described as a large circular wooden structure that connects the various pavilion zones while reinforcing sustainability narratives central to the Expo's theme.

Thematic Framework

The Expo's theme, "Designing Future Society for Our Lives," structures around three sub-themes: Saving Lives, Empowering Lives, and Connecting Lives.

Ireland Pavilion:

The Ireland Pavilion at Expo 2025 is officially themed "**Creativity Connects People**", aligning with Ireland's national branding strategy and cultural diplomacy objectives (Government of Ireland, 2025). The pavilion highlights Ireland's strengths in creativity, innovation, and cultural expression, with a particular emphasis on storytelling, design, and live performance.

The Ireland Pavilion at Expo 2025 is located beside the main entrance, acting as a gateway for visitors to the entire Expo site (Ireland.ie, 2025). It features an abstracted Celtic triskele design made from three elliptical areas clad in Irish-grown Douglas fir timber, which echoes the wooden aesthetic of the nearby Japanese Grand Roof (Ireland.ie, 2025).

Visitors are greeted by the gilded Magnus RINN monumental sculpture set in an Irish landscape garden, designed by Joseph Walsh Studio in collaboration with Japanese landscape expert Hiroyuki Tsuji (Ireland.ie, 2025).

The pavilion's "Creativity Connects People" theme comes alive through live performances, exhibitions, and the Kwaidan Project, an Irish-Japanese art collaboration featuring prints inspired by Lafcadio Hearn's work (Ireland.ie, 2025).

Interior experience

The Ireland pavilion is designed to bring visitors on a journey through the three ellipses of the pavilion:

The first ellipse is "**Ireland**". Through Time, immerses visitors in Ireland's creative heritage through visual and sensory displays of craft traditions from prehistory to present day, set against Irish landscapes and natural sounds that echo the exterior Magnus Rinn sculpture.

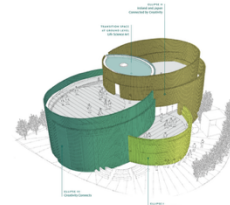
The second ellipse, "**Ireland and Japan**", Connected by Creativity, explores geographical and cultural connections through hands-on materials like woodwork, ceramics, and textiles, alongside stories of Irish innovation in life sciences and sustainable development developed in parallel with Ireland House Tokyo.

Visitors then pass through a transition space before entering the third ellipse, "**Creativity Connects**," where live performances demonstrate collaborative creativity through Irish music, dance, and spontaneous co-creation blending ancient traditions with modern technology (Ireland.ie, 2025).

Kwaidan Project

On the walls of the pavilion VIP space, located on the first floor, specially framed 'Kwaidan Project' prints have been hung.

The 'Kwaidan Project' is an Irish-Japanese cultural collaboration. It is exhibition of fine art prints & photographs by 40 Japanese and Irish artists inspired by Lafcadio Hearn's masterpiece 'Kwaidan'. In addition to its permanent presence at the Ireland Pavilion for the six months of Expo, the exhibition is currently touring. (Ireland.ie, 2025)



Physical Constraints:

Ireland's Pavilion Type falls under Type A (Self-Built)

Type A (Self-Built): 47 countries (including Ireland) designed and built their own pavilion on assigned plots.

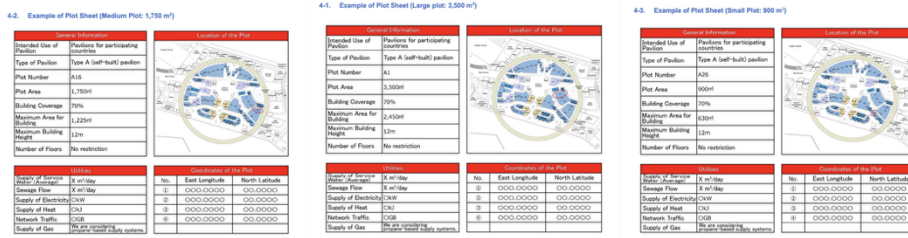


Figure 4: Type A Pavilion technical specifications from official Expo 2025 Design Guidelines (Japan Association for the 2025 World Exposition, 2022, pp. 36,38,40).

Height restrictions: Base maximum of 12 metres. Up to 17 m permitted for inner-side-of-Main-Street pavilions if the area above 12 m was $\leq 50\%$ of building area. Up to 20 m for exterior-side pavilions under the same condition. Maximum building coverage: 70% of plot area. Excavation limited to 2.5 m depth.

Power supply: Japan uses 100V at 60Hz in the Osaka/Kansai region which is lower than most countries, requiring voltage adaptation for imported equipment. The Organiser provided electricity infrastructure to plot boundaries via utility conduits. Renewable energy installations (solar, wind) permitted.

Climate control: Minimum indoor ventilation of 30 m³/h per person required. The Organiser supplied cooling water for air conditioning centrally, recommending participants use this rather than installing standalone outdoor units. Sunshade devices (eaves, blinds, pergolas) mandatory in queuing areas. Additional heat countermeasures recommended includes water-retentive pavement, greenery, and fine mist sprinklers.

Design Requirements

3. Design Requirements

This chapter describes guidelines in detail, using the codes of **Control and Guide**, providing for requirements and other details to design pavilions.

3-1. General Principles of Design

3-1-1. General Principles of Design

C-01 Participants must take necessary measures to appropriately manage and operate their pavilions, including visitor services, access and lines of flow, security, fire fighting/disaster prevention, cleaning and waste management, etc.

C-02 Participants must consider the most suitable pavilion structure for the ground conditions of the allocated plot and comply with the terms specified for construction and demolition. (For more information, please refer to "Annex 1: Information on Ground".)

C-03 Prior to submitting the construction of buildings and other structures, participants must submit an application for a building permit to have the buildings and other structures confirmed by building officials or a designated inspection body (designated by the Minister of Land, Infrastructure, Transport and Tourism or a governor of prefecture) that they comply with the provisions of the Building Standards Act. Participants also must ensure they receive a notification of building permit. Please note that if and when a competent authority deems that a temporary building has no particular concern in respect to its safety, fire fighting management and hygiene, some provisions of the Building Standards Act may be relaxed. Even in such a case, participants must submit applications for a building permit along with permission procedures. At each plot does not link to roads under the Building Standards Act, participants must submit an application for a building permit. (Articles 43 and 85 of the Building Standards Act)

C-04 If a participant's intention to use new types of materials and construction methods results in partial non-conformity to the Building Standards Act, the participant must seek and receive permissions from the Minister of Land, Infrastructure, Transport and Tourism in advance. (Article 38 of the Building Standards Act)

G-01 Pavilions need not be big. Based on the Theme and Subthemes of the Expo, it is recommended that participants should pursue to make aesthetic presentation of the country's buildings, landscape, culture and natural resources and form seamless landscape in harmony with the Expo site as a whole. It is recommended that participants should proactively use natural and reusable/recyclable materials and adopt sustainable structures and construction methods. (For more information, please refer to "3-4. Environmental Consideration: Promotion of Resource Recycling and RC")

G-03 It is recommended that participants should keep universal design in mind when planning their pavilion so that everyone can enjoy the Expo comfortably and with a sense of security. (For more information, please refer to "Universal Design Guidelines for Facility Implementation".)

3-2. Planning Conditions

3-2-1. Setback and building coverage

C-07 Participants must secure a setback of at least 10 m (at least 5 m in case of small plots) from the main line of flow (Main Street), other lines of flow (streets other than the Main Street), or the boundary of a plot in front of the pavilion. However, such setback is required at only one side of the plot if it is a corner, when, however, a corner plot faces the main line of flow, the setback must be secured at the side facing the main line of flow.

C-08 Participants must secure a setback of at least 1 m from the boundaries other than those specified in C-07 (in adjacent plot and the boundary of the line of flow of service pavilion at the back of the pavilion).

C-09 The maximum building coverage must be 70% or lower.

C-10 Participant must comply with provisions set out in the plot sheet in respect to the details of setbacks in each plot, plot area, and maximum building coverage (the maximum building-to-land ratio).

C-11 Participants must ensure that visitors can easily access to the pavilion from the main line of flow (Main Street) or a plaza in the Pavilion World.

Plot Size	Plot Area	Setback (Front)	Setback (Side/Rear)
Large Plot	About 3,500 m ²	10 m or more	1 m or more
Medium Plot	About 1,750 m ²	10 m or more	1 m or more
Small Plot	About 900 m ²	5 m or more	1 m or more

3-3. Design Consideration for Better Operation

3-3-1. Queue Management

G-04 If visitors of a pavilion are expected to stand in a queue, the queue must be contained within the plot of the pavilion.

G-07 It is recommended that participants should design a queue area based on the level-of-service D defined by J. J. Fruin.

G-08 It is recommended that participants should adopt a reservation system to avoid a long queue.

G-09 In order to provide visitors in the queue with comfortability and fun, it is recommended that participants should offer drinking fountains, places to rest (benches) and other services as well as give exhibition-related entertainment including the projection on the pavilion and events.

Level of Service	A	B	C	D	E	F
Space (m ² /pedestrian)	More than 3.2	2.3 ~ 3.2	1.4 ~ 2.3	0.9 ~ 1.4	0.5 ~ 0.9	Less than 0.5
Free flow of pedestrians	Free flowing	Minor conflicts	Some restrictions to speed	Restricted movement for most	Restricted movement for all	Shuffling movement for all

Figure: A level-of-service concept by J. J. Fruin

official Expo 2025 Design Guidelines (Japan Association for the 2025 World Exposition, 2022, pp. 25,26,29)

Compliance with Laws and Regulations and Other Standards

Participants must pursue the planning, designing, and construction of Type A (self-built) pavilions in compliance with relevant Japanese laws, prefectural or municipal ordinances of Osaka, and other laws and regulations. (Japan Association for the 2025 World Exposition, 2022)

Opportunities and Challenges:

Food and beverage regulations

Alcohol consumption at Expo 2025 Osaka is regulated in accordance with Japanese law. The legal drinking age in Japan is 20, and age verification is required for purchase.

While alcohol is commonly available in licensed hospitality settings across Japan, specific policies regarding its sale within Expo venues are managed by individual pavilion operators and site regulations. Visitors are required to comply with on-site rules regarding consumption and permitted items.

Expo 2025 averaged 158,000 daily visitors with September peaks exceeding 200,000, though evenings offered a break from daytime queues. With 40 pavilions requiring lottery reservations and popular waits reaching 2 hours (Japan Times, 2025).

Standard Operating Hours

Site opens: 9:00 AM
Pavilions open: 10:00 AM - 9:00 PM
Site closes: 10:00 PM (exit time)



Visitors typically experience 7-10 pavilions per day, (15-60 minutes each).

Weather:

Osaka has a warm summer climate with the May - June floating around 20-29 degrees celsius. With brutal temperatures through July - August.

Oaka's August consists of highs of 33-34°C, and high humidity. Despite Expo's 3,000 parasols and 30 mist fans, a number of heatstrokes have been reported at the facility.

What the venue offers:

Expo 2025 Osaka drew 29 million visitors from 183 countries (Japan Times, 2025), providing a large, culturally curious international audience.

The Ireland Pavilion's prime location beside the East Gate (the main arrival point for the 71.6% of visitors who arrived by metro) ensured consistently high footfall throughout the six-month run (Expo 2025 Official Website, 2025).

Japan represents a highly receptive market. Its whiskey sector was valued at \$4.3 billion in 2024 and is projected to reach \$7.3 billion by 2033 (IMARC Group, 2024).

Evening hours offered a distinct opportunity. Night Tickets (available from 4–5 PM) attracted a more relaxed crowd with shorter queues and cooler temperatures (Japan Guide, 2025), making the 6–9 PM window particularly suitable for an intimate, reservation-only tasting experience.



The Ireland Pavilion and Osaka Expo 2025 Findings:

Brand Fit: Redbreast at the Ireland Pavilion

The Ireland Pavilion's philosophy of engaging all five senses through craft-focused, culturally rooted experiences (Ireland.ie, 2025) closely mirrors Redbreast's brand positioning.

The pavilion's three-ellipse narrative journey mirrors the immersive, sequential tasting experience Redbreast delivers at Bow Street Distillery in Dublin. It is a reservation-only, 16-guest format held in the Master Distiller's Office (Irish Distillers, 2025).

Ireland's 2025 Japan strategy provided a strong diplomatic context for any brand activation. The opening of Ireland House Tokyo alongside the Expo presence was described by the Irish government as "the most ambitious investment in this valued relationship since the opening of Ireland's Embassy in Tokyo in 1973" (Gov.ie, 2025), elevating a commercial activation into genuine cultural exchange.

There are notable parallels between Irish and Japanese whiskey traditions. Both are rooted in island cultures with deep appreciation for craft, patience, and meticulous production (The Water of Life, 2024).

Japanese culture's concept of monozukuri: the philosophy that making things is a disciplined craft rooted in method, care and pride (GLOBIS Europe, 2025) creates a natural philosophical bridge to Redbreast's single pot still method and triple distillation heritage, providing authentic narrative grounding for the experience concept.



Visitor Data: Expo 2025 Osaka (Official Statistics)
Source for Graphs & Data: Expo 2025 Official Website (2025).



Figure 5: Total visitor attendance at Expo 2025 Osaka. (Total: 29,017,524 visitors).

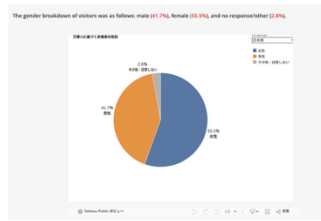


Figure 6: Gender breakdown of Expo 2025 Osaka visitors. Female visitors accounted for 55.5%, male 41.7%, and no response/other 2.8%.



Figure 7: Age demographic breakdown of Expo 2025 Osaka visitors. Visitors in their 50s represented the largest group at 20.8%, followed by those in their 40s (18.4%) and those aged 29 and under (16.1%).

Collected Feedback

The collected feedback was written by peers who were presented with the concept. They wrote the following:

Feedback for Creative Response 01:

I really like the WebAR scan of the bottle, as it feels like an interesting way to engage with the exhibit, but I would be worried that too many people would be on their phones rather than engaging with the exhibit around them. I think it's a good detail that the exhibit changes based on the AR scan, as I feel like that would ground the visitor and pull them away from their phone, but definitely something to keep in mind. I really like the diffuser's ambience and the added ambience it creates. I feel like there should be more emphasis on the whiskey tasting and not just the reveal of it, as I feel like that should be a bigger priority for this experience, as not only is the reveal important, but the experience of the tasting should be the focus.

Feedback for Creative Response 02:

I really like the individual element of the experience and how unique it can be. This individual element reinforces the concept behind Redbreast: the importance of discovery. The minimalism of staring in an empty room with only the stove feels like an intimate, cohesive whiskey experience. I feel implementing the individual element of the experience with the quiz could be difficult and confusing for the end user, making the overall experience less intuitive and potentially frustrating.

Feedback for Creative Response 03:

I found this to be the strongest of the three creative responses, as it made the visitor an active participant rather than just a passive observer. The souvenir of the personalised cask is a particularly compelling touch. It carries the experience beyond the walls of the exhibit and into the visitor's everyday life, extending the brand moment long after they leave.

The concept of the dual-purpose bar and engraving station is well thought out. Grounding the digital elements in a physical, tactile environment means the technology feels purposeful rather than decorative. The computer vision surface that responds to a placed tasting glass is a strong example of this. The interaction is intuitive, unforced, and directly tied to the act of tasting itself.

The voice-responsive AI modelled on the Master Blender's persona is the right creative choice for a brand of this calibre. It lends authority and warmth to the storytelling without replacing the human craft at the centre of the experience. Similarly, the visitor counter is a quietly effective mechanism; the reminder that you are one of only 500 participants that day does significant work in reinforcing the sense of exclusivity without overstating it.

What elevates this concept above the other two responses is its thematic coherence. The idea that each bottle represents a collaboration between the guest, the blender, and the unpredictable nature of Mizunara oak gives the experience a genuine narrative. The site evaluation supports this direction well, too. The layout and zoning already account for the kind of spatial sequencing the Atelier depends on, giving this concept a strong practical foundation to build from.

Phase 02

Design Variation 01

Version 1 reimagines the original Master's Atelier by reducing the 7-step visitor journey into a single central bar interaction. The AI voice, originally a guide throughout, now only speaks at the end, delivering a personalised Spirit profile built from the visitor's choices.

The word Spirit is used deliberately; it refers to both the whiskey and the visitor. The Redbreast Mizunara edition is defined by characteristics such as oak, sandalwood, and spice. As visitors answer questions, their Spirit is gradually revealed, connecting their personality to one of the blend's key notes in the whiskey.

The Journey:

- The visitor arrived and was told their "Spirit" is being built. They sit at the Bar.
- Choices are projected one at a time onto the bar surface in front of them.
- They make instinctive choices, one by one.
- A loading animation builds on the bar surface, and their "Spirit" is revealed.

Example Questions:

- Where would you rather spend a quiet afternoon... walking through a forest? Or sitting by the ocean?
- Do you prefer to take your time with things or trust your first instinct?
- Do you find yourself drawn to bold, loud flavours or quiet, subtle ones?

The Reveal:

The bar surface goes dark; a loading animation slowly builds across the entire surface of the table. The "Spirit" emerges, a personalised result unique to them:

- "Visitor 21 of 500, you are the Oak."
- "Quiet, patient, and the foundation everything else is built on."
- "Only 12% of today's visitors share your Spirit!"

Their name projects across the bar surface, and they leave with a digital profile card (summarising their "Spirit", visitor number and place in the edition) or an engraved whiskey bottle with their name on it or both.

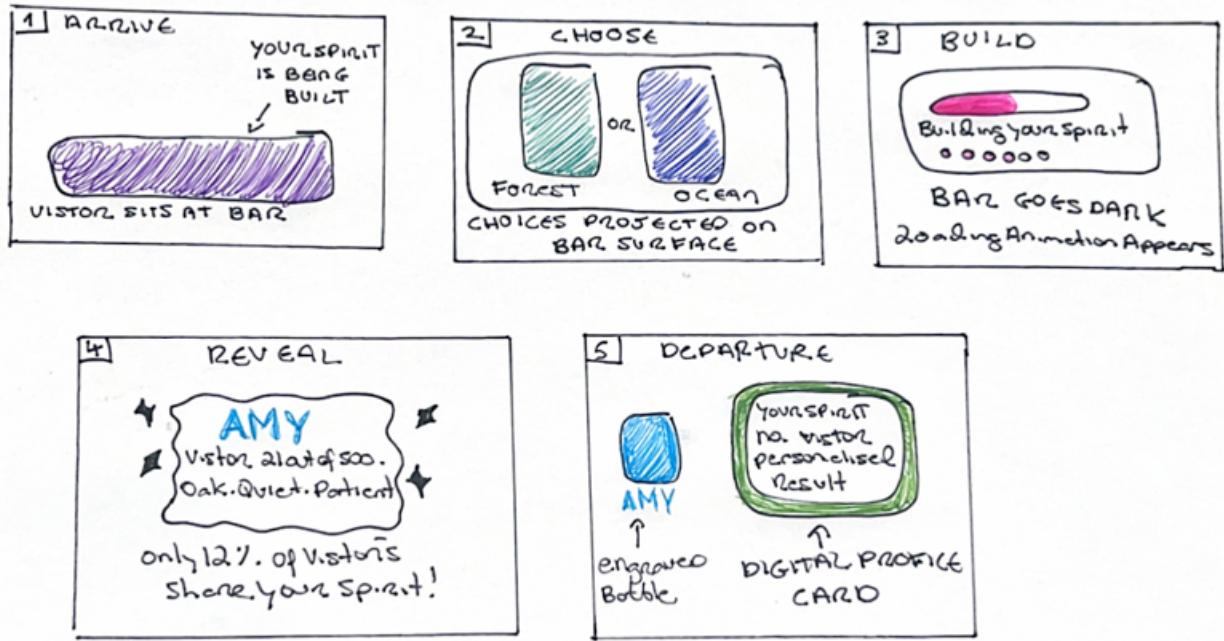


Figure 11: Storyboard of Design Variation 01



Figure 12: AI-Generated Image of "The Spirit"

Design Variation 02

In this version, the visitor is "selected" by the whisky rather than the other way around. The idea is based on the unpredictable nature of Mizunara oak; since no two barrels behave in the same way, no two guests receive the same treatment. Subtle environmental cues like light, music, and projection change in response to each visitor's presence, movement, and choices, transforming the atelier into a responsive selection place. Visitors can explore at their own pace with their own initiative.

The serene setting centres on a Mizunara bar, with other similar stations nearby. Nothing is active at first. One station lures people in because there is a subtle reaction to movement, such as a flickering projection, a gentle glow, or a sound. Every visitor is assigned to a specific area of the room. The surface begins to exhibit unexpected visual effects when individuals interact, such as wood-grain motion, crack formation, and flowing liquid. The result feels natural and mysterious, in contrast to a quite controlled system.

Each visitor receives a somewhat different ending rather than a shared last moment. The absence of a shared conclusion creates a lingering sense of curiosity among visitors. This reinforces rarity, individuality, and the idea that the whiskey is not mass-produced.

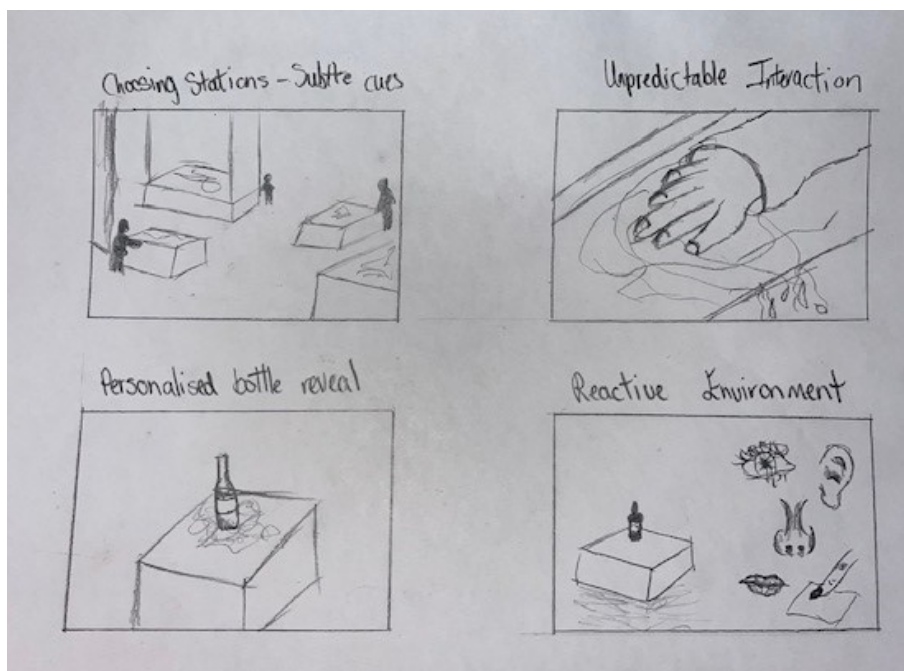


Figure 13: Storyboard of Design Variation 02



Figure 14: AI-Generated Image of Design Variation 02

Design Variation 03

The Five Keepers

Concept Statement

The Master's Atelier is reimagined as a detective experience built on sensory decoding. Visitors are not guided through the whiskey. They are recruited to find it. The Redbreast Mizunara formula, hidden since 2001, was divided between four keepers. The visitor must locate all four through taste, touch, and instinct. The bar surface is not a display. It is an accomplice.

The Hook

Visitors pre-register before arrival. When they sit at the bar, their name is already burning faintly through the wood grain, visible for just a moment before it disappears. The surface darkens. One line materialises in gold:

"The formula was hidden in 2001. Four keepers were chosen. Find them."

Four glasses sit on sealed circular marks burned into the wood. Four ancient cooperage symbols glow faintly beneath them. No instructions. No guide. No explanation. The visitor picks up the first glass and begins.

The five Keepers

Keeper I Oak

The visitor lifts the first glass and tastes it. Deep, dry, ancient. Something that has lived in darkness for a very long time.

The bar surface reveals a hollow shape cut into the wood, the exact outline of a single piece of timber. Around it, five wooden pieces are scattered across the surface. Each one is different. Different grain, different weight, different age. Only one fits the hollow exactly.

The visitor tastes again. They study the pieces. They slide the correct one into the shape.

It locks. Gold light floods through the grain. The first branch of the sakura grows from the base of the bar, slow and certain, reaching left through the wood.

The task is to taste it, find the matching wood, and slide it into the shape. No whiskey knowledge needed. Just instinct.

Keeper II Sandalwood

The visitor lifts the second glass and tastes it. Warm, soft, lingering. Like incense in a quiet room, or a candle just blown out.

The bar surface reveals a single Japanese character burned almost invisibly into the wood:

白檀

Below it, letters begin to appear one at a time, like someone sending a message from very far away:

s . . . a . . . n . . .

It stops. The remaining letters are scattered across the surface, broken and out of order, like a cipher someone left in a hurry. The visitor arranges them with their hands to complete the hidden word.

The bar reads their answer. A pale white light, soft as smoke, traces the second branch outward through the grain, quieter and more delicate than the first.

The task is to complete the broken word using the scattered letters on the surface.

Keeper III Spice

The visitor lifts the third glass and tastes it. At first, it seems gentle. Then, a few seconds after swallowing, something builds at the back of the throat. Warm. Sharp. It finds you after the sip, not during it.

The bar surface reveals a clock face with no hands. Around its edge, instead of numbers, six sensations:

cold · sharp · sweet · burning · bitter · hollow

The face pulses slowly. Like a heartbeat getting quieter.

The visitor drags a single line from the centre of the clock to the word that matches what they feel. The bar waits. No time limit is shown but the pulse slows with every second.

The correct answer is burning.

Deep red light moves through the wood grain like fire catching in dry bark. The third branch shoots outward, further and faster than the others.

The task is to drag the hand of the clock to the sensation that matches the taste.

Keeper IV Orchard Fruit

The visitor lifts the fourth glass.

The bar goes completely dark. No symbols. No text. No images. Just their own reflection in the black surface, faint and still.

They taste. Bright, sweet, light. Like the first cold apple of autumn. Fresh and surprising after everything that came before.

They wait. Nothing happens.

Twelve seconds of silence. Then the only direct question in the entire experience appears:

"What does this remind you of?"

Not a list of flavours. A list of moments:

the morning before something important

the last day of a place you loved

a gift you didn't expect

the first cold day of autumn

Any answer is correct. But each one grows a different configuration of blossoms on the tree. No two visitors ever see exactly the same sakura. Because the fourth keeper is always personal.

The task is to choose the memory that matches the feeling. There is no wrong answer.

Keeper V The Taster

There is no fifth glass.

After the fourth keeper is found, the bar goes quiet. The visitor waits for something else to appear. Nothing does. Just silence and their own reflection in the surface.

Then one line materialises, slowly, like it is being carved in real time:

"There is one keeper left. You have been sitting with them this whole time."

The visitor looks down. The hands shaped hole is on the bar surface. they touch it and it lights as a missing puzzle. The bar reads the contact. The fifth and final branch erupts from the centre of the tree — the tallest, the fullest, the one that makes the whole sakura complete. Blossoms cascade outward from it in every direction.

Then the full reveal begins.

This changes the final line of the Master Blender's voice too:

"Oak. Sandalwood. Spice. Bloom. And you. You were never looking for the formula. You were always the last keeper."

Takeaway

The visitor leaves with three things. A limited-edition Redbreast Mizunara bottle engraved "keeper 5". Their personal cipher. A sealed wax card printed with their visitor number and one line: *"You completed the formula."*



Figure 15: Mock-Up of Keeper V



Figure 16: Mock-Up of Keeper V

Refined Design Concept

The Master's Atelier was reenvisioned. Taking ideas from all three design variations, a four-step immersive exhibition space was imagined.

The visitor walks into the pavilion and is invited to take a seat at a bar in the centre of the pavilion. The bar encloses a large Mizunara oak tree. Each side of the bar has four seats, creating space for 16 visitors.

Once the visitor takes their seat, the bartender offers them two drinking vessels: a cask-like mug and a Redbreast whiskey bottle glass, from which they can pick one. Next, they are introduced to the first keeper.

Keeper I Sandalwood

The visitor lifts a fragrance bottle and is invited to spray it onto themselves or onto a paper strip. Smelling the fragrance, the visitor needs to guess what they are smelling. The bar reveals three circles labelled sandalwood, pine and vanilla. They place their mug/glass onto the spot labelled with the smell they think was released. If they select the correct next bit of the bar, it illuminates. If they select the wrong spot, the surface will reveal Japanese characters burned almost invisibly into the wood: 白檀

Below it, letters begin to appear one at a time: *s . . . a . . . n . . .* It stops. The visitor gets to pick again. The task is completed once the visitor selects the correct smell, and the next task on the bar is unlocked. This part of the interaction uses NFC technology.

Next, the visitor is introduced to the second keeper.

Keeper II Oak

The visitor is introduced to three coaster-like shapes, each made of a different wood. Different grain, different weight, different age. The bar surface reveals three hollow shapes cut into the wood, the exact outline of the coasters. The visitor matches each coaster with the name of the wood. Similar to the previous interaction, this task uses NFC technology, and when the correct coaster is placed, the bar will illuminate further.

Next, the visitor is introduced to the third keeper.

Keeper III Spice

The barkeeper will fill the visitor's glass with the Redbreast Mizunara whiskey and invite the visitor to taste it. The visitor then places the mug/glass onto the bar surface. The bar surface reveals a clock face with no hands. Around its edge, instead of numbers, six sensations:

cold · sharp · sweet · burning · bitter · hollow

The face pulses slowly. Like a heartbeat getting quieter. The visitor drags a single line from the centre of the clock to the word that matches what they feel, what they taste. The task is to drag the clock hand to the sensation that matches the taste. After a while, the bar will reveal the whiskey's taste profile to the visitor.

Next, the visitor is introduced to the fourth keeper.

Keeper IV Orchard Fruit

The visitor gives their mug/glass to the barkeeper. While they are engaging with the fourth keeper, the barkeeper engraves their mug/glass with the visitor's name and date of the experience.

The bar transforms into a quiz with a small orchard on one side. The visitor is asked four questions: Would you rather spend a quiet afternoon walking through a forest or sitting by the ocean? Do you prefer a flavour profile that is bitter, sweet, sour or salty? Which colour speaks most to you? Lastly, what weather makes you feel most at ease?.

Any answer is correct. But each one grows a different configuration of blossoms in the orchard. No two visitors ever see exactly the same. Because the fourth keeper is always personal.

The Orchard grows and reveals their fruit. "You are an Apple." The visitor's name is displayed below. "Only 12% of today's visitors share your fruit!"

They leave with a physical whiskey taster certificate and an engraved cask-like mug or a Redbreast whiskey bottle glass with their name and date on it.

Technical Requirements

Pre-Arrival – Booking System

A QR code-accessible booking page is required for visitors to register their name and time slot from 48 hours before arrival. The page is a simple web form built in HTML, CSS, and JavaScript, hosted online and accessible via a QR code printed at the venue entrance. When a visitor registers, they are assigned a visitor number (e.g. Visitor 24 of 500). This data is stored locally, so the bar surface can load the visitor's name automatically when they sit down. A few spots will be kept available for walk-ins.

Welcome (Bar Surface & Vessel Selection)

The bar surface functions as a large-format interactive touch display. It is embedded into the bar, so it appears as part of the wood surface rather than a visible screen. It must support multi-touch input across the full surface simultaneously across all 16 seats. The display shows a welcome screen featuring the Mizunara oak tree visual and loads the visitor's pre-registered name. The bar surface UI is built in HTML, CSS, and JavaScript.

Physical props required at this stage:

- Cask-like mugs and Redbreast-style whiskey glasses, enough for all visitor slots available during the exhibit (as visitors take their engraved mugs/glasses home with them after the exhibit)
- Each vessel must have an NFC tag embedded in its base, used across Keeper I and Keeper III

Keeper I - Sandalwood (Scent Identification)

Keeper I requires the following hardware and physical props:

- A fragrance spray bottle to accommodate visitors at the station, scented to match sandalwood.
- Paper scent strips available at each seat
- Three NFC readers embedded into the bar surface beneath each of the three labelled scent circles (Sandalwood, Pine, Vanilla)
- Smart LED strip or LED panel beneath the bar surface to produce the progressive illumination effect.

Keeper II - Mizunara Oak (Wood Matching)

Keeper II requires the following physical props:

- Three wooden coasters per visitor station, made from Aspen, Beech, and Mizunara Oak.

- Each coaster must have a meaningfully different grain texture, weight, and colour so visitors can distinguish them.
- Each coaster must have a unique NFC tag embedded underneath

Keeper III - Spice (Taste & Clock Interaction)

An NFC reader is required at the clock zone on the bar surface to detect when the visitor places their vessel down and trigger the interaction. The bar surface must support smooth, real-time finger-drag tracking to register the clock-hand drag gesture accurately. A hexagonal radar diagram is required to display the whiskey's taste profile.

Keeper IV - Orchard Fruit (Personalised Quiz & Reveal)

The bar surface must support tap inputs for selecting buttons for the four quiz questions. A visual of an orchard tree is required on the panel of the surface, capable of animating from bare to fully blossomed in real time as questions are answered. Calculations are needed to determine the visitor's orchard fruit result (Apple, Pear, Plum, etc.) from the combination of answers given. The reveal screen must dynamically populate with the visitor's name and a generated statistic. A laser engraver is required at the bartender station to personalise the visitor's vessel during this stage.

End of Experience - Keepsakes & Visitor Output

The engraved vessel (cask mug or whiskey glass) is returned to the visitor after Keeper IV is complete.

A digital Redbreast Whiskey Taster Certificate, with the visitor's name, orchard fruit result, visitor number, and date, with a shareable link of the certificate via a QR code/link, so visitors can share the experience.

Space & Infrastructure

The entire installation must fit within the assigned 20m × 20m pavilion plot. The pavilion is subject to a base maximum height of 12 metres, with potential allowances up to 17m or 20m, depending on the plot's location within the Expo site. This must be factored into the design of the central Mizunara oak tree sculpture, which rises from the middle of the bar structure, as well as any overhead lighting or audio rigging. The bar seats 16 visitors across four sides, and needs open space around it for visitor flow. As the pavilion is located at Osaka Expo 2026, all electrical equipment must be adapted for Japan's 100V at 60Hz power supply. Stable power is required for the bar surface displays, LED system, NFC readers, audio speakers and laser engraver.

Storyboards

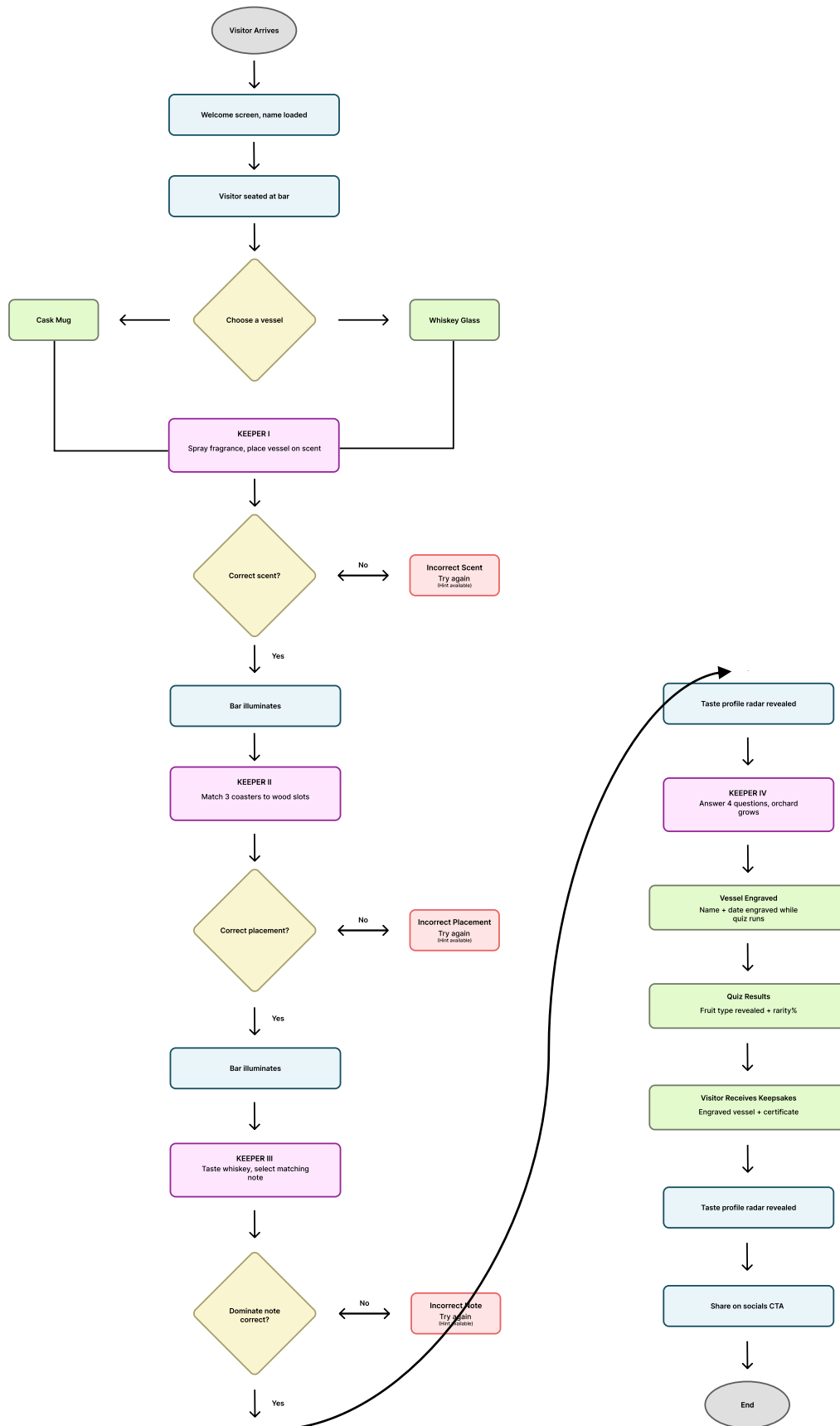


Figure 17: Storyboard for the Refined Concept (Uses AI-Generated Imagery)



Figure 18: Storyboard for the Refined Concept

User Interaction Flow



Collected Feedback

Feedback was collected from a peer who wrote the following:

I think the letters appearing of “s”, “a”, and “n” are too obvious. I think it would be more constructive for the user's experience if you guided the notes of the fragrance rather than giving them the answer.

I love the idea of the mini cask, which would be my choice, as it seems like a very unique experience compared to other bar settings.

I fear the singular allocation of the clock hand to a sense could be too binary and less nuanced than the flavour profile. Possibly having a more open-to-interpretation way to express what they are tasting could be beneficial. As in you organise the sensations around the clock, and where the hand starts, and then as it clicks, it represents the different notes as the flavour progresses.

I really like the engraving of the mug/glass, and this would make a really memorable souvenir from this experience, more than something generically branded.

I really like how communal the bar settings feel, and how tied to nature it is through the oak trees.

The designs for each keeper feel intuitive and engaging for visitors.

Overall, I think this exhibit would offer an exciting, engaging experience where users would feel drawn to learn more about whiskey while still leaving with strong, long-lasting memories.

Phase 03

Prototype Iterations

Sketches

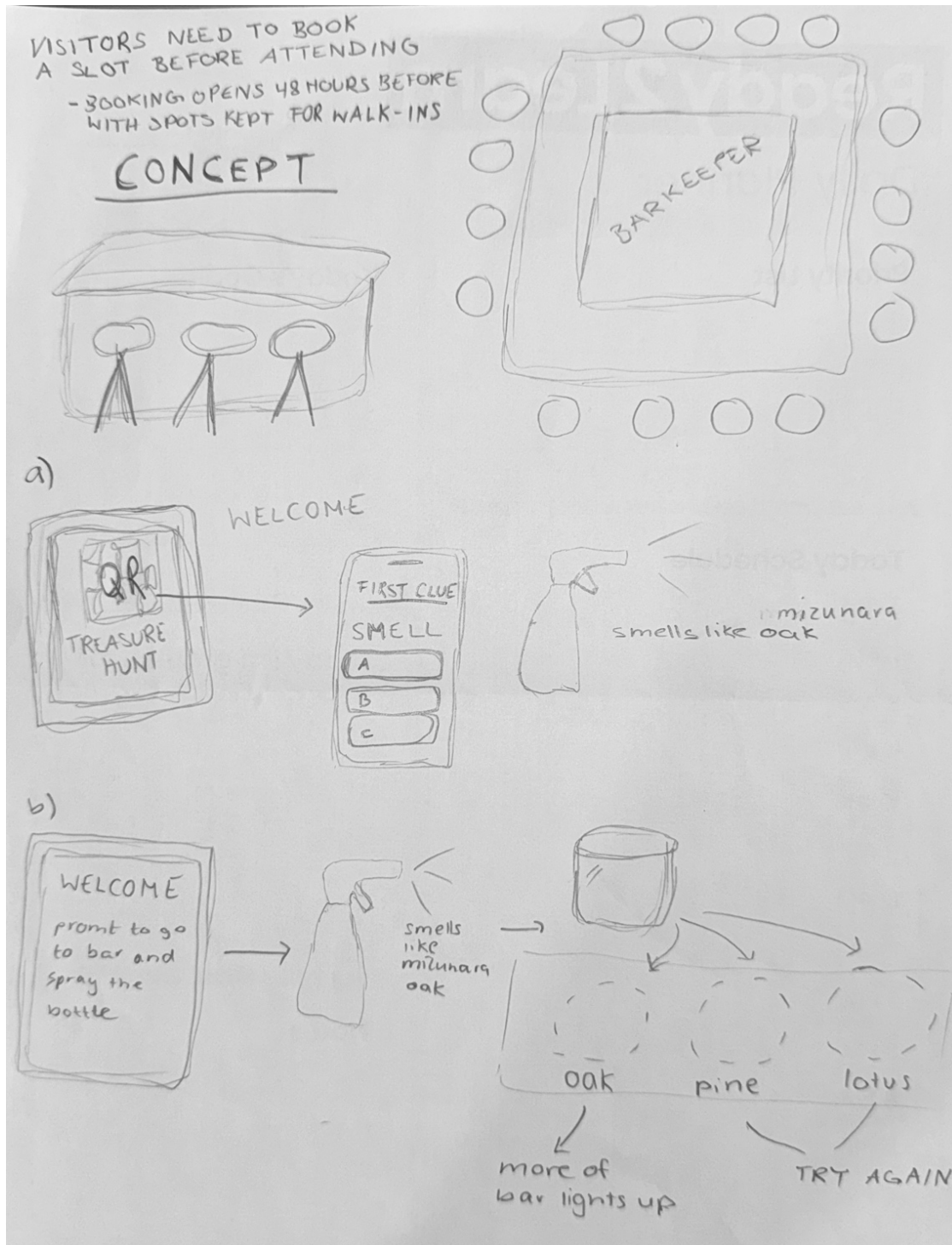


Figure 19: First Brainstorming Session

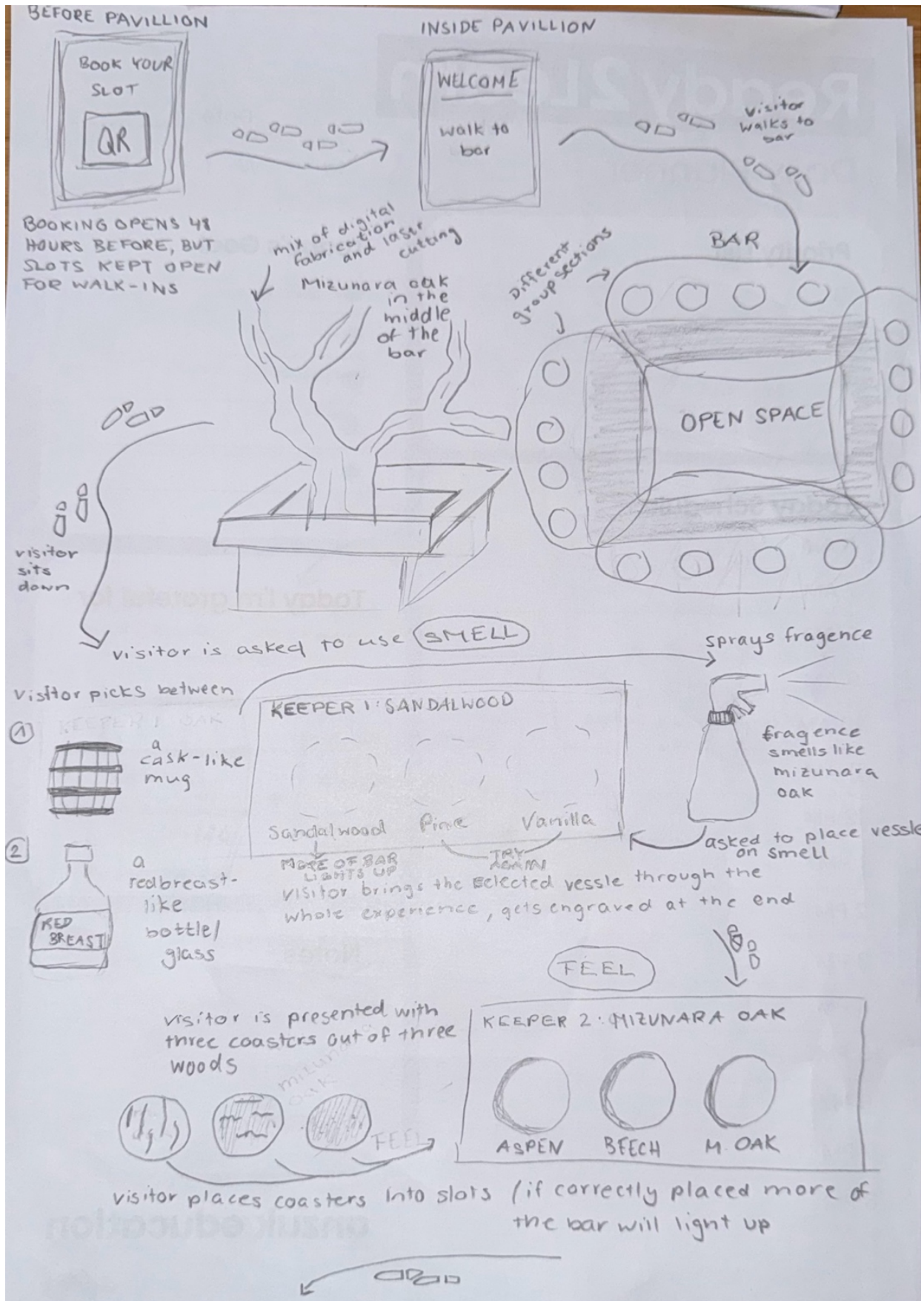


Figure 20: Exploring ways to integrate the Design Variations into one finalised concept

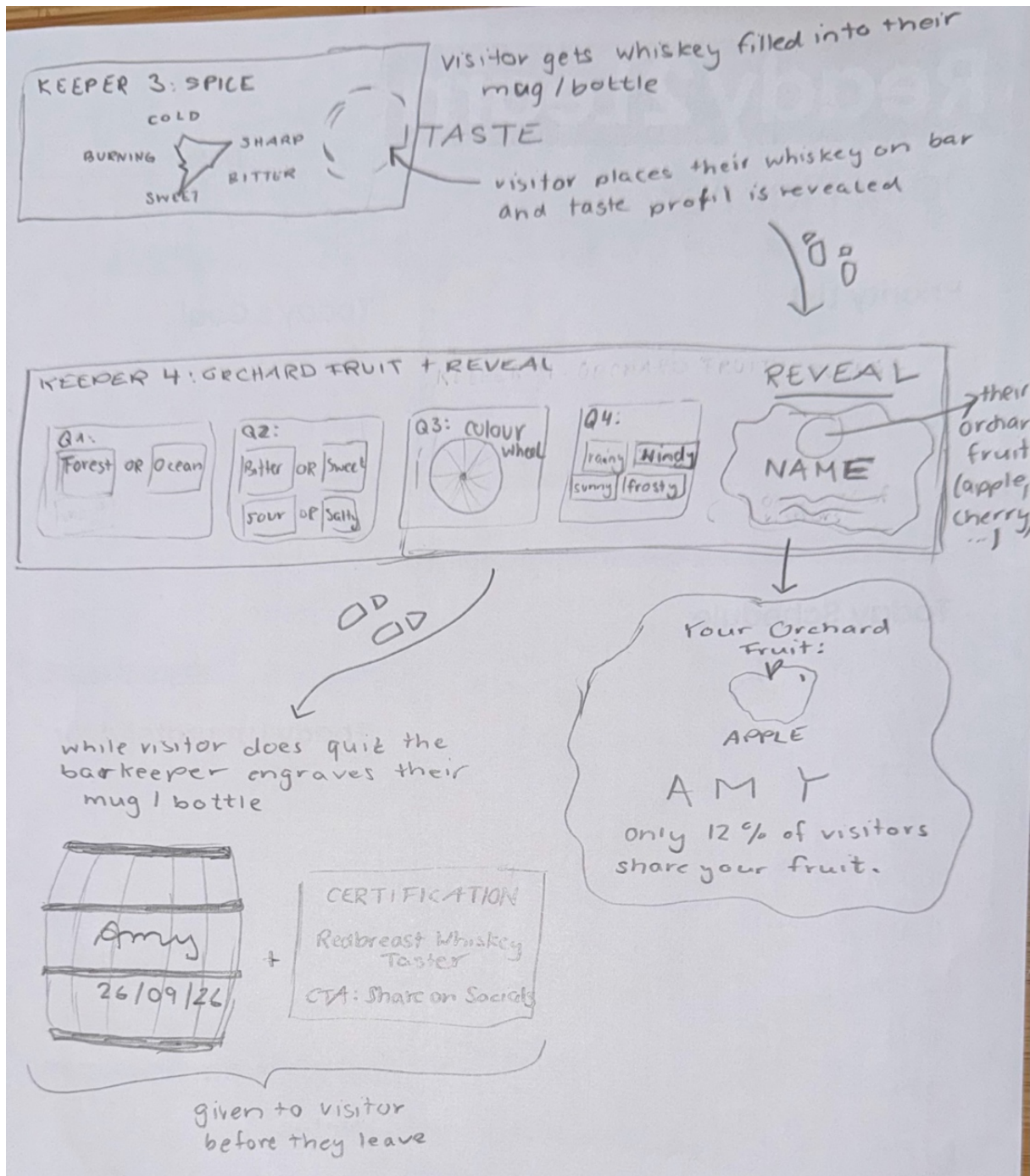


Figure 21: Exploring ways to integrate the Design Variations into one finalised concept

Blender Iteration 01

The assembly of the scene began with the construction of the central bar, which served as the structural anchor for the environment. This was modelled from a basic square plane using the inset tool to define the inner boundary, followed by removing the centre face to create the hollow square footprint. This profile was then extruded to the desired height, with the top faces scaled outward to form the characteristic overhanging lip of a bar top. To finish the asset, a procedural wooden texture was applied to align with the intended aesthetic.

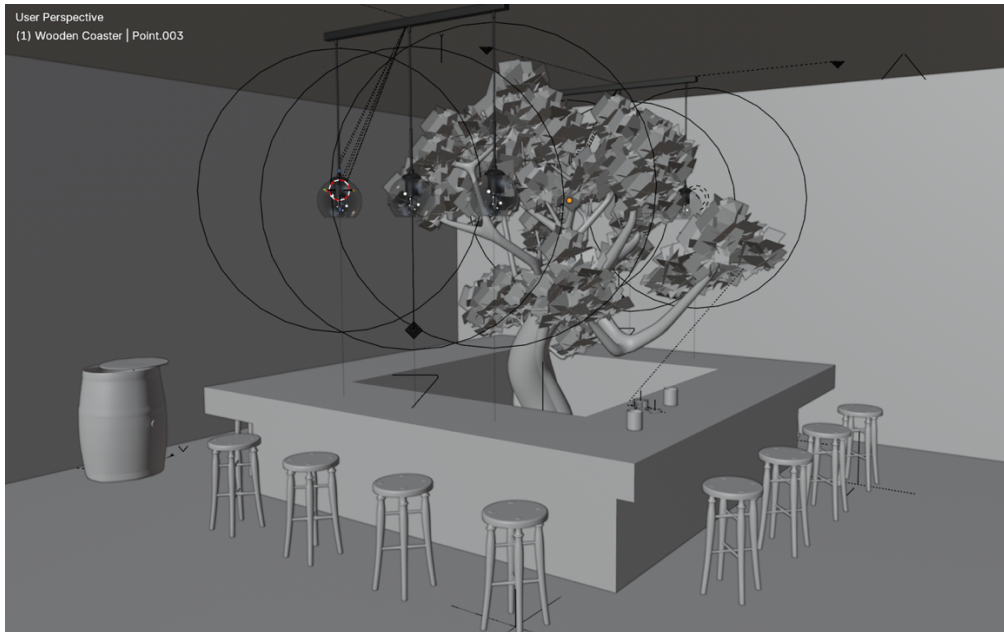


Figure 22: Blender Scene as Solid Viewpoint

Once the bar was established, the focal point was integrated by placing a Mizunaru Oak tree model sourced from BlenderKit into the centre. The original base of the tree model was removed, allowing the trunk to emerge directly from the bar structure for a more integrated appearance. The surrounding environment was then defined by inserting planes to serve as the floor and walls. The floor was assigned a tiled material, while the ceiling utilised a specialised restaurant material designed to simulate a grid of recessed lights. For the walls, a wood-and-wallpaper material was applied to enhance the atmospheric "speakeasy" theme.

The seating arrangement was finalised by importing a bar stool asset and utilising an array modifier. This allowed for the creation of four perfectly spaced seats, a configuration that was then duplicated and rotated for each side of the bar to ensure symmetry. Narrative detail was added through various props, including whiskey glasses and coasters placed on the counter, as well as a large wooden cask positioned in the corner to reinforce the central theme.

The final stage of the iteration focused on lighting and rendering. Hanging lamp models were positioned above the bar to house point lights, which provided localised illumination. To ensure the scene had realistic reflections and accurate shadow tones, a warm-bar HDRI was applied to the world environment. This provided a consistent golden glow across the various textures and materials. The completed scene was then processed through the Cycles render engine and exported as a high-quality PNG.

The first iteration of the pavilion scene does not yet address any of the technical or special requirements listed in Phase 02 and is used solely to establish a tone and atmosphere.



Figure 23: Blender Scene as Material Preview

Access to Materials and Objects used in the Scene:

Mizunaru oak tree: https://www.blenderkit.com/asset-gallery-detail/5f32c1aa-d009-4c83-8d39-b3d72c29609f/?query=category_subtree:model+bonsai+tree+order:score

Floor Material: https://www.blenderkit.com/asset-gallery-detail/dd909ca0-2731-4eaf-b76a-5675949e6d73/?query=tile+order:score+availability:free+author_id:245077

Ceiling Material: https://www.blenderkit.com/asset-gallery-detail/cb256cde-48c0-457a-a0df-f90b5e08620/?query=category_subtree:material+restarunt+ceiling%20lights+order:score+availability:free

Bar Stools: https://www.blenderkit.com/asset-gallery-detail/7a0556e8-bd41-45ac-ae9a-c18df28282a9/?query=category_subtree:model+bar+seat+order:score+availability:free

Wall Material: <https://www.blenderkit.com/asset-gallery-detail/949bffcd-c4ed-40e8-b4be-e091ef02fa99/?query=bar+wallpaper%20with%20wood+order:score>

Whiskey Glasses: https://www.blenderkit.com/asset-gallery-detail/c2bc2210-75b2-4c72-af1b-f679556640d9/?query=category_subtree:model+whiskey+glass+order:score

Coasters: https://www.blenderkit.com/asset-gallery-detail/f2e4d897-d613-42bb-8994-8d806dc0bd91/?query=category_subtree:model+coasters+order:score

Wooden Cask: https://www.blenderkit.com/asset-gallery-detail/1afb0a22-363a-479a-b52f-32546cbab30c/?query=category_subtree:model+cask+order:score

Hanging Lights: https://www.blenderkit.com/asset-gallery-detail/54ce75d7-901b-4fa5-9389-65a42888c4c3/?query=category_subtree:model+ceiling+light+order:score

HDRI, High-Dynamic-Range Imaging: https://www.blenderkit.com/asset-gallery-detail/accd6457-1a4b-4fec-a355-15c1b299aca5/?query=category_subtree:hdr+warm+bar+order:score

Blender Iteration 02

Following the previous iteration, a number of feedback points needed to be considered. Firstly, the room was modified to the correct dimensions for the exhibition space (20x20x12 meters), and then the bar was widened to provide adequate room for a bartender. Secondly, the tree dimensions were adjusted to give the bartender even more space. To avoid tripping hazards, the tree was placed within a plant pot-like cube. This allowed for the roots to be contained. Following this, several artefacts were added for realism of the scene, including three bar taps, storage for mugs, glasses and whiskey bottles and decor around the bar, including a hexagonal storage decoration for whiskey bottles and a painting of a tree in multiple parts, all of which added to the ambience of the scene. Additionally, a door was added to the scene to better showcase the exhibit's flow.

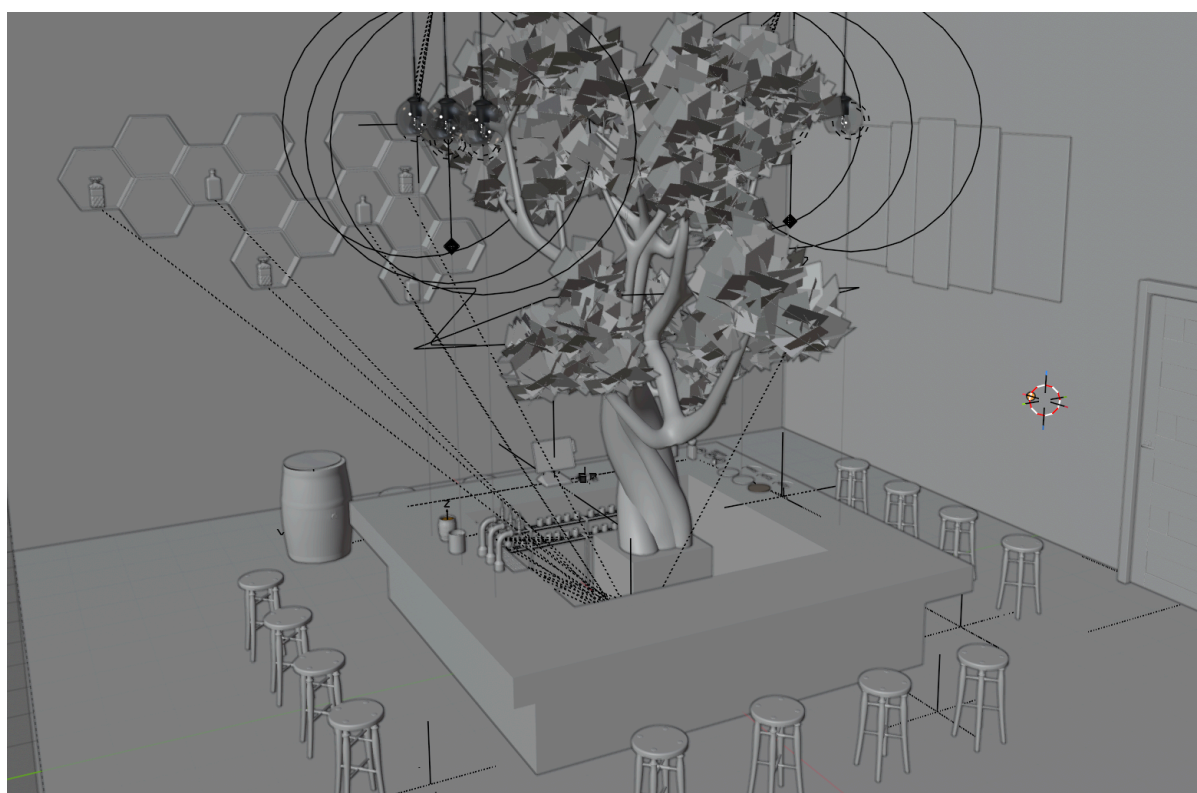


Figure 24: Improved Blender Scene as Solid Viewpoint

Next, items related to the multiple keepers in the scene were added. Firstly, a fragrance bottle with scent strips was added. Due to a lack of freely available models, the paper scent strips are represented by a scent diffuser. Next, three NFC circles were embedded in the bar surface alongside an LED progression bar, allowing visualisation in the scene and helping bring this keeper to life. Text was added to signify the different types of scent as described in the concept statement.

Then the second keeper was modelled. It was placed to the left of the first Keeper. This Keeper consists of three wooden coasters, each made from a different wood to represent Aspen, Beech, and Mizunara. Then an area for the coasters was cut out of the bar, where visitors

could place them in the correct spot to complete the keeper. Text was added to signify to the user their different choices. The last two Keepers are developed outside of Blender and will be added to the scene in post-production.



Figure 25: Added Keepers and Engraving Station

Based on the proposed design for the mizunara cask-style mug to be engraved, one was created. For this, a cask was imported into the scene. The top was removed, then a solidify modifier was applied, giving the mug thickness. A filled-in circle was then added to the mug. An amber glass material was then applied to signify it was whiskey. This was then placed on the bar surface and duplicated for the storage rack behind the bar.

Finally, an engraving station was created at one side of the bar. This consisted of a screen terminal and a soldering iron station, with the lead adjusted to point into the screen terminal.



Figure 26: Improved Blender Scene as Material Preview

Access to Materials and Objects used in the Scene:

Wall Decoration (<https://www.blenderkit.com/asset-gallery-detail/66953b85-85fe-452b-b0c7-da4214711589/?query=tree+pics%20modern+order: score>)

Hexagon Wood Decoration(<https://www.blenderkit.com/asset-gallery-detail/4d6076b9-373e-4e55-9acf-dd3f1f2ca08a/?query=hexagonal+wooden+order: score>)

LED Light (<https://www.blenderkit.com/asset-gallery-detail/682bc8e4-f9e5-48af-a57a-caaa9b1dae7f/?query=led+light+order: score>)

Scent Sticks (<https://www.blenderkit.com/asset-gallery-detail/49f8340e-0c68-4fe2-864c-88a1a7b78264/?query=scent+sticks+order: score>)

Perfume (<https://www.blenderkit.com/asset-gallery-detail/b335b345-6402-43f2-b6c6-a60bba4226be/?query=perfume+order: score+availability:free>)

Whiskey Bottle 1(<https://www.blenderkit.com/asset-gallery-detail/02fa2696-5810-4db5-81a8-0bba46d8d6ce/?query=whiskey+Bottle+order: score+availability:free>)

Whiskey Decanter (<https://www.blenderkit.com/asset-gallery-detail/51d496cc-10db-49c4-b17d-650d851adc10/?query=whiskey+order: score+availability:free>)

Interior Door (<https://www.blenderkit.com/asset-gallery-detail/c402ae34-941a-4e3b-8013-4bd1a05ea3a2/?query=interior+door+order: score+availability:free>)

Whiskey Glass (<https://www.blenderkit.com/asset-gallery-detail/d485d414-0951-49dc-833c-c98e2016ac8e/?query=whiskey+Glass+order: score+availability:free>)

Storage Rack (<https://www.blenderkit.com/asset-gallery-detail/682a389a-df90-468b-a322-2ab50147e058/?query=ceiling+hanging+order: score+availability:free>)

Soldering Station (<https://www.blenderkit.com/asset-gallery-detail/3b63c95c-4a67-4b61-b6cc-d16e4d42ea31/?query=soldering+station+order: score+availability:free>)

Drain for Tap (<https://www.blenderkit.com/asset-gallery-detail/87e27dec-ff25-4d2a-aea8-a6da47e24431/?query=showerdrain+order: score+availability:free>)

Beer Tap (<https://www.blenderkit.com/asset-gallery-detail/46b17d2f-1961-40d6-b9dc-a7c510c9572d/?query=beer+tap+order: score+availability:free>)

Cask for mugs (<https://www.blenderkit.com/asset-gallery-detail/1ab33bff-d7f1-40f9-a953-fa12d9aa6efb/?query=Stubby+beer%20barr+order: score+availability:free>)

Black Leather for text(<https://www.blenderkit.com/asset-gallery-detail/399dc409-5625-4760-a256-7a7732492bd3/?query=black+leather+order: score+availability:free>)

Ancient Metal for tree base (<https://www.blenderkit.com/asset-gallery-detail/35379b9a-f31a-4536-bf8a-fa189f6b03ac/?query=ancient+metal+order: score+availability:free>)

Oak wood for coaster (<https://www.blenderkit.com/asset-gallery-detail/98e609ce-cf53-48f2-add6-572939099133/?query=oak+wood+order: score+availability:free>)

Beech wood for coaster (<https://www.blenderkit.com/asset-gallery-detail/12a44429-9ccd-4f5b-a8f2-93536bd44572/?query=natural+beech%20wood+order: score+availability:free>)

Aspen Wood for coaster (<https://www.blenderkit.com/asset-gallery-detail/82eb786c-436c-4938-abc2-5c7316573d75/?query=aspen+wood+order: score+availability:free>)

Brass for beer tap (<https://www.blenderkit.com/asset-gallery-detail/2df7112c-f41b-4001-8e75-9ab44c341684/?query=brass+order: score+availability:free>)

Whiskey for cask mug (<https://www.blenderkit.com/asset-gallery-detail/288406dc-00ca-46cf-95af-8abe2d723a46/?query=amber+glass+order: score+availability:free>)

Figma Iteration 01

Medium Fidelity Prototype

The medium-fidelity wireframes for Keeper III were developed in Figma and present two key interaction states of the bar-surface tasting interface side by side. They are connected by a directional arrow to illustrate the experience flow. By removing background colours and typography and grounding them in a greyscale foundation, the wireframes allowed the team to evaluate the spatial logic and interaction behaviour of the interface before committing to the high-fidelity visual language. The first frame shows the flavour mapping interface in its active state. The left panel contains the hexagonal radar diagram with six axes labelled Spice, Honey, Fruity, Woody, Warm and Silky, with a filled grey polygon representing the visitor's emerging tasting profile. The right panel presents six horizontally draggable scales, with Spice and Honey set to 92 and 71, respectively, to demonstrate the dominant note detection logic in a partially completed state. The Confirm Tasting button sits below the scales as a full-width, outlined rectangle, communicating an interactive affordance without final styling. The second frame documents the unlocked state, triggered when Spice is correctly identified as the dominant note. The layout remains consistent across both frames, with the only change being the appearance of the confirmation text below the button area *Keeper III unlocked* followed by *YOUR TASTING IS RECORDED*. The use of italic at this stage, even within a greyscale wireframe, was a deliberate decision to signal the tonal shift from system response to experiential reveal, a distinction that carried through into the high-fidelity design.

The medium-fidelity wireframes for Keeper IV were developed in Figma and present two key interaction states of the orchard fruit tasting interface side by side, connected by a directional arrow to illustrate the progression from active input to personalised reveal. The first frame shows the flavour mapping interface in its active state. The left panel is titled Answer to Grow Your Orchard and presents four sequential questions, each accompanied by selectable rectangular answer tiles. Q1 asks whether the visitor prefers the forest or the ocean, offering two options. Q2 asks Bitter, sweet, sour or salty, offering four options. Q3 asks, "Which colour speaks to you?" and offers four colour tiles. Q4 asks Rainy, windy, sunny or frosty, again offering four tiles. The questions are deliberately indirect, drawing on sensory memory and instinct rather than whiskey knowledge, consistent with the fourth keeper's emotional register. The right panel, labelled Your Orchard, remains empty in this state, communicating that the result is withheld until all four questions are answered. The second frame documents the revealed state, triggered when all four answers are submitted. The right panel activates to display a large filled circle representing the visitor's orchard fruit, the word Plum beneath it, and the visitor's name Amy directly below. A scarcity line reads "Only 13% of today's visitors

share your fruit”, reinforcing the exclusivity logic that runs throughout the experience. Below this, a Redbreast Whiskey Taster Certificate is presented, listing the visitor's name, their orchard fruit result, their visitor number within the edition of 500, and the date. A CLT button sits at the base of the panel as a call to action. The layout remains consistent across both frames, with the reveal contained entirely within the right panel, preserving the spatial logic of the interface without disrupting the left panel interaction flow.

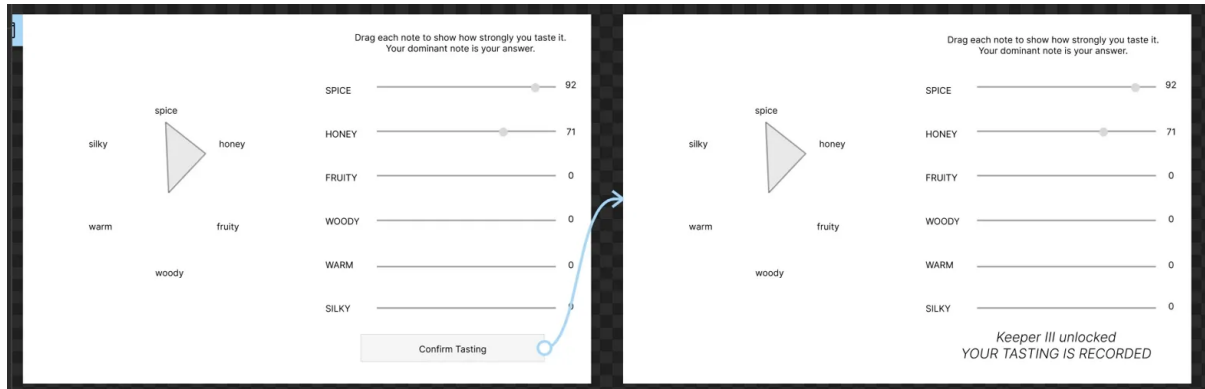


Figure 27: Medium fidelity prototype of Keeper 3

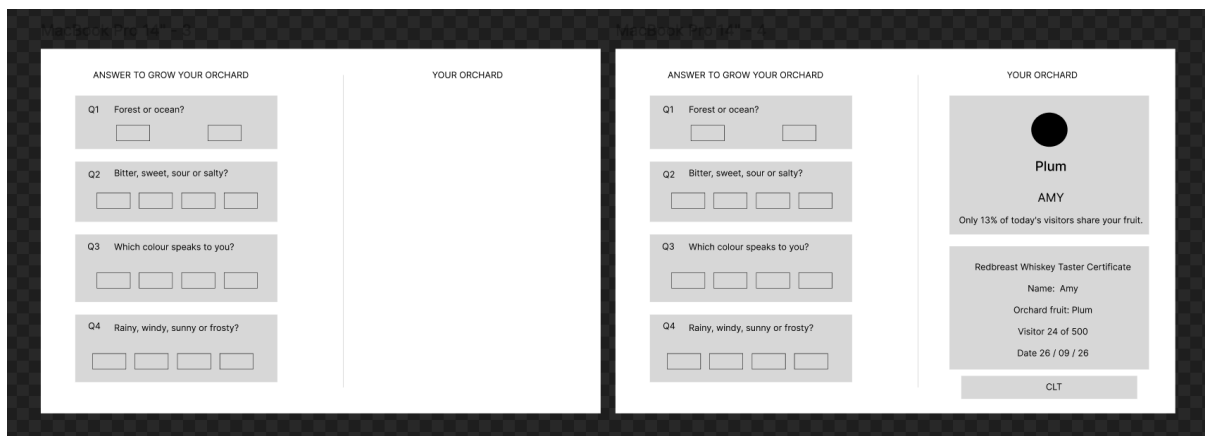


Figure 28: Medium fidelity prototype of Keeper 4

Figma Iteration 02

High fidelity prototype

The high-fidelity prototypes for Keeper III and Keeper IV were developed as fully interactive HTML files. This translated the structural and behavioural decisions established at medium fidelity into the complete visual, typographic and experiential language of The Master's Atelier. Both prototypes were built using vanilla HTML, CSS and JavaScript without external libraries, making them immediately functional in any browser environment and suitable for both report submission and live demonstration. The visual language across both prototypes is governed by a shared system of CSS custom properties, establishing a consistent palette of warm parchment tones, muted amber borders and gold accents. Cormorant Garamond at weight 300 was applied to all display, instructional and reveal text, while Josefin Sans at weights 200 and 300 handles all functional labels and question text. Together, the two

typefaces establish a clear distinction between system language and experiential language, a separation that carries through every interaction state across both keepers.

Keeper III opens with the NFC glass placement state, presented as a system of concentric SVG circles centred on the panel. On placement, an inner circle animates outward to simulate the detection pulse, after which the interface transitions to the flavour mapping panel. The flavour mapping panel is divided into two columns. The left column presents a hexagonal radar diagram constructed programmatically in SVG, with six axes corresponding to the core tasting notes of the Redbreast Mizunara whiskey. The filled polygon at the centre of the diagram updates in real time with every drag event, providing the visitor with live visual feedback on the shape of their personal tasting profile. The right column houses six draggable scale components that support both mouse and touch input, with the dominant note distinguished in gold across the label, track fill and thumb. On confirmation, the system evaluates whether Spice holds the highest value across all six scales. A correct submission reveals the Keeper III unlocked state via a fade transition, while an incorrect submission displays a transient error message that auto-dismisses after 2.5 seconds, returning the visitor to the active interaction without disrupting the experience flow.

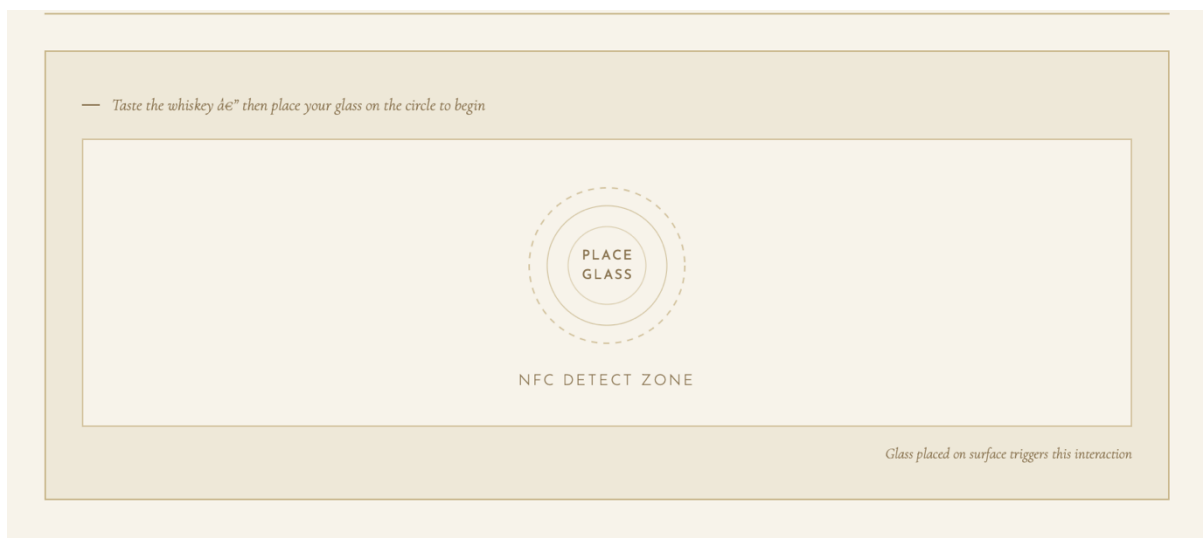


Figure 29: Keeper III beginning screen

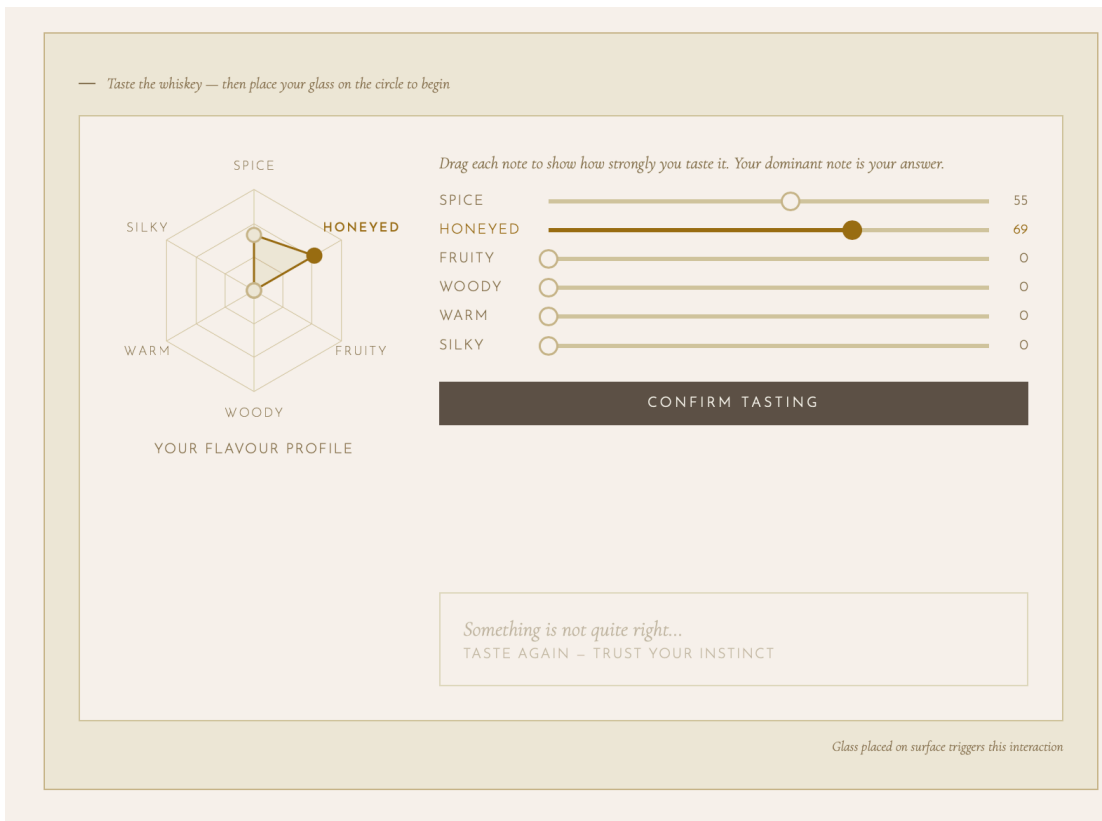


Figure 30: Screen with an incorrect dominating note in Keeper III

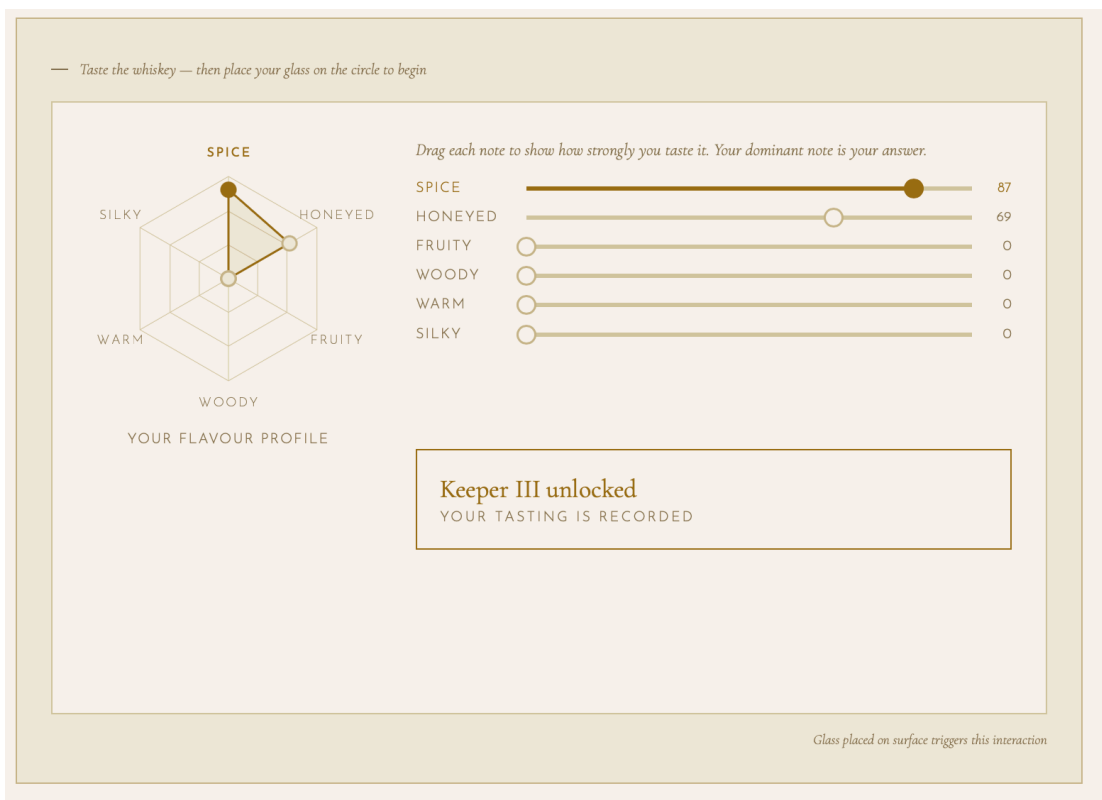


Figure 31: Screen with the correct dominating note Keeper III

Keeper IV extends the interaction model into a multi-stage format, structured as a split-panel bar surface that divides the available space between a sequential quiz on the left and a live,

growing orchard on the right. The quiz panel presents four questions that unlock sequentially, each block transitioning from a locked state at reduced opacity to an active state marked by a gold border on selection. The questions progress from the environmental and sensory to the personal, covering landscape preferences, flavour profiles, colour, and weather. Question three introduces seven colour swatches rendered as circular fill elements, departing from the standard option button format to invite a more instinctive response and introduce a moment of visual contrast within the otherwise typographic interface. The orchard panel responds in real time to each answer, with one of four SVG trees blooming per question answered. Each tree transitions from a dormant, near-invisible state to a fully illuminated form, its crown populating with gold blossoms through staggered `setTimeout` delays to create a sense of organic growth. Upon completing the fourth question, a reveal card appears, presenting the visitor's personalised fruit result, drawn from a matrix of five possible outcomes determined by the combination of answers to questions one and two. The five fruits, Apple, Pear, Plum, Quince and Damson, are each rendered as individual inline SVG illustrations. The reveal card populates with the visitor's name and a rarity statistic generated at runtime. The engraved vessel illustration and Redbreast Whiskey Taster Certificate then fade in below, with the certificate populating dynamically and closing the experience with a share-to-socials call to action.

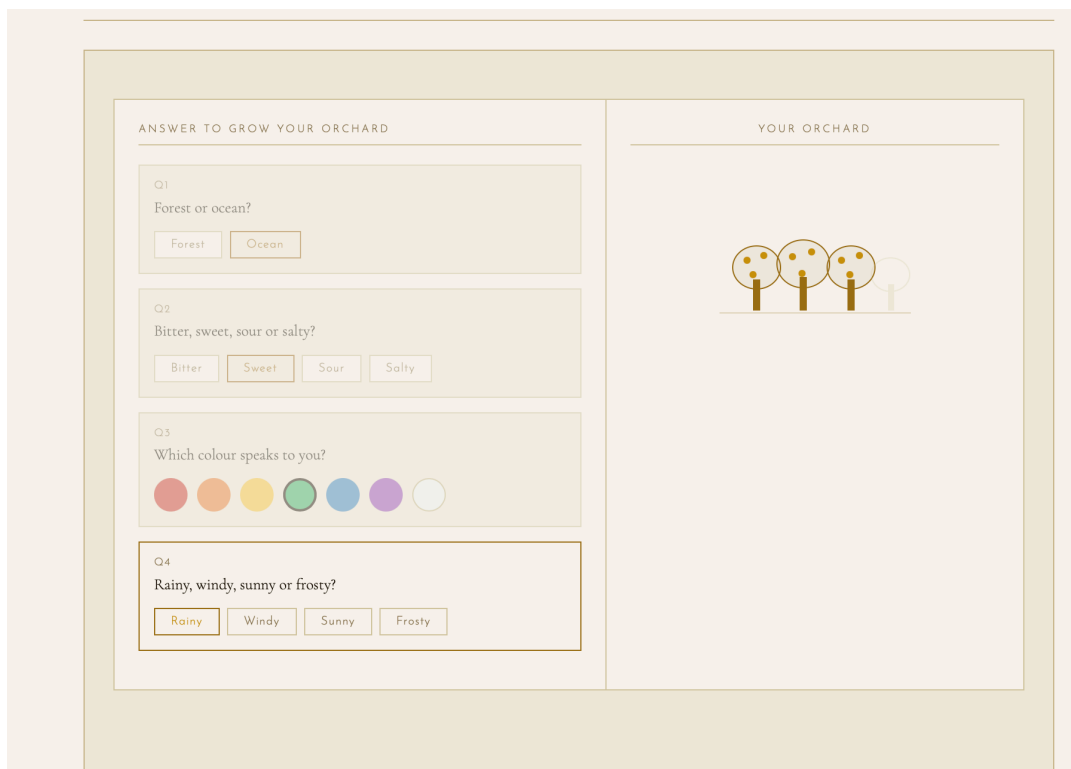


Figure 32: High Fidelity prototype Keeper 4

ANSWER TO GROW YOUR ORCHARD


Q1
Forest or ocean?


Q2
Bitter, sweet, sour or salty?

Q3
Which colour speaks to you?

Q4
Rainy, windy, sunny or frosty?


YOUR ORCHARD





Pear
AMY

Only 15% of today's visitors share your fruit.



Barkeeper engraves
during Q3 àé³ Q4

Redbreast Whiskey Taster Certificate

Name	Amy
Orchard fruit	Pear
Visitor	24 of 500
Date	26 / 09 / 26

SHARE ON SOCIALS

Figure 33: High Fidelity Prototype Keeper 4 Results

Feedback & User Testing & Accessibility Checks

Feedback on Blender Iteration 01

My immediate feedback and impression of the Bar scene is one of warmth and invitation. I am concerned there may not be enough room for the bartender behind the bar to serve 16 guests adequately. There also doesn't seem to be much storage space for the whiskey or the mentioned engraving station. I'm also concerned if the branches are too low for visitors to sit comfortably at the bar.

I do love the bar's atmosphere, as the warm tones of red and brown feel homely to me. Additionally, I like how communal the seating is and how it feels possible to talk to many people with the arrangement. The room looks well-lit and doesn't look stuffy or dreary. The lights are good enough for ambience without being overpowering. It feels like an open, inviting space that feeds into the Redbreast whiskey brand. The centre tree provides a nice point of contrast against the red tones and reminds me of the natural aspect, and draws the eye nicely. I do have concerns about whether the setup would fit the dimensions of the exhibition pavilion. It is important that the space is fully utilised and that the most is made of it, as any dead space may harm the room's atmosphere.

Lastly, I think all the furniture in the room looks authentic and enhances the scene's ambience and atmosphere. The strong wooden tones, in contrast to the red floral wallpaper, create a cosy bar that I would definitely enjoy spending time in.

Feedback on Blender Iteration 02

Feedback 01:

The design is much clearer with all the new additions! The area feels more realistic and complete. The flow of the room is clearer. Maybe fill the space slightly more, and if possible, make the lighting more bar-like.

Feedback 02:

The lighting is a bit flat. Adding warm amber point lights or a sun lamp with an orange tint would really elevate the mood. The tree mesh looks great, and the way it's integrated into the bar geometry shows really confident modelling work. The tiled floor material is a highlight. The pattern with the floral detail adds so much character to the scene. The overall scene composition in the viewport is really well framed, with strong use of depth and layering between foreground stools, the bar, and the background walls.

Feedback 03:

The new bar equipment and engraving station look great and make the room feel much more professional and intentional. The floor space between the bar and the walls feels a little too empty, making the room feel a bit cold. Maybe scale up the bar so it fills the centre of the room more naturally, making the design better fit the room's scale. I also agree that adding some bar-like lighting would help bring warmth to the space and really bring it to life. Overall,

the attention to detail is fantastic, and you've done an incredible job making the space feel like a real, functional, and high-end environment.

User Testing of Medium-Fidelity Figma

Three people tested the medium-fidelity wireframes for Keeper III and Keeper IV. None of them had seen the concept before. Each person was asked to work through the wireframes out loud, saying what they were thinking as they went, so the team could understand where things felt clear and where they did not. Participants were shown the Figma prototype without prior explanation. This was a deliberate choice. The goal was to find out whether the screens made sense on their own, without any context or guidance. Each person was asked to do two things: try to complete each keeper interaction and explain what they thought the reveal at the end meant. Notes were taken on where people hesitated, got confused, or reacted positively without being prompted.

Keeper III Findings

All three participants worked out how to use the draggable scales straight away without being told. Two of them understood that the radar diagram on the left was responding to what they were doing with the scales, describing it as a real-time profile being built. One person initially thought the radar was a fixed image, suggesting that making the connection between the two panels clearer through animation would help in the next version. All three worked out the dominant note logic once they noticed that Spice was set higher than everything else. However, two people said they had guessed this rather than read it anywhere on the screen, which raised the question of whether the interaction needed a clearer hint. When the unlock state appeared with the italic text *Keeper III unlocked* and *YOUR TASTING IS RECORDED*, two participants said the shift in style felt more personal and quieter than the rest of the screen. This confirmed that the typographic choice was doing the work it was intended to do.

Keeper IV Findings

Keeper IV was easier for all three participants to understand straight away. The four questions with selectable answer tiles felt familiar, and none of them needed any explanation to get started. The reveal screen had the strongest reaction of the whole session. When the right panel displayed the orchard fruit, the name, and the scarcity line, two participants paused for a moment before responding. One said it felt surprisingly personal for something so simple. Another said that seeing a name on the certificate made the whole thing feel more real. All three participants commented on the line "Only 13% of today's visitors share your fruit". Each of them said it made them curious about what their own result would be, which confirmed that the scarcity detail was having the intended effect. Two participants felt the date and visitor number on the certificate could be made more prominent, as in the current version, they blended in with the rest of the text.

User Testing of High-Fidelity Prototype

Three people tested the fully built HTML prototypes for Keeper III and Keeper IV. Before the session began, each participant was given a short introduction to the Five Keepers concept so they could engage with the prototypes as a complete experience. Sessions again used a think-aloud approach, with the focus on how people felt during the interaction, how confident they were using it, and how they responded to the reveal moments.

Keeper III High Fidelity Findings

All three participants immediately understood the NFC glass placement screen. Two described the pulsing animation of the detection circles as ceremonial, confirming that the opening screen established the right tone before the interaction began. The live update of the radar polygon as the scales were adjusted was the most commented-on moment in Keeper III. All three participants responded positively, with one saying the diagram felt as if it were listening. This confirmed that the real-time visual feedback was creating the sense of personal response the design aimed for. The gold highlight on the Spice note was noticed by two participants, both of whom described it as a quiet signal that something was different. The fact that they sensed its significance without being able to articulate it immediately confirmed that the visual distinction was operating at exactly the right level of subtlety for this experience. When an incorrect dominant note was submitted, all three participants responded positively to the error message *Something is not quite right, TASTE AGAIN, TRUST YOUR INSTINCT*. None of them felt penalised. One said it made them want to try again, confirming that the error state was maintaining the experiential tone of the interaction rather than breaking it.

Keeper IV High Fidelity Findings

The questions, unlocking one by one as each answer was submitted, were understood by all three participants without any explanation. Nobody attempted to skip ahead, confirming that the opacity transition between locked and unlocked states was communicating clearly through visual cues alone. The colour swatch question in Q3 received more attention than any other question across both prototypes. All three participants slowed down on it, and two described it as the most personal part of the experience. This confirmed that introducing a visual, instinctive moment into an otherwise text-based interface added meaningful variety to the interaction without disrupting the overall flow. The orchard trees growing in real time as each question was answered was a highlight for all three participants. One person answered the last question slowly, saying they did not want the trees to stop growing. This response confirmed that the staggered organic animation was creating genuine emotional engagement, making the orchard's growth feel like a reward for participation rather than a simple loading state. The reveal showing the personalised fruit, visitor name and rarity statistic had the strongest reaction of the entire session. All three participants read the rarity statistic aloud without prompting, and two asked how the physical certificate would be given to visitors at

the real installation. The fact that participants were already imagining themselves inside the physical experience confirmed that the high-fidelity prototype was successfully communicating the full emotional arc of Keeper IV.

Accessibility Checks

An accessibility review was carried out on the high-fidelity prototypes for Keeper III and Keeper IV to make sure the bar surface interface could be used comfortably by as many visitors as possible.

The review looked at four main areas: colour and contrast, touch target sizing, interaction feedback, and readability. Starting with colour and contrast, both prototypes kept a clear visual difference between text, interactive elements, and the warm parchment background used throughout. The gold accent colour applied to active states and selected options stayed easy to read against the background at every stage. Across both prototypes, colour was always paired with another visual cue so that visitors did not need to rely on colour alone. In Keeper III, the dominant Spice note was highlighted through its label, track fill, and slider thumb, all changing together, not just through colour. In Keeper IV, a gold border appeared around the selected answer tile to confirm the choice clearly, regardless of how well a visitor could distinguish colours. For touch targets, both prototypes were designed with a large-bar-surface display in mind. The draggable scales in Keeper III run the full width of their panel, making them easy to grab and adjust without needing to be precise. The answer tiles in Keeper IV were wide buttons with plenty of space around them, and the colour swatches in Q3 were evenly spaced to avoid visitors accidentally selecting the wrong one. All elements worked correctly with both touch and mouse input during testing.

Interaction feedback was immediate and clear throughout both prototypes. In Keeper III, the radar diagram updated in real time as visitors moved the scales, so there was always a visual response confirming that their input was being registered. If a visitor selected the wrong dominant note, a short message appeared and then faded on its own, returning them to the interaction without extra steps. In Keeper IV, a new tree bloomed in the orchard panel after each question was answered, giving a clear signal that the answer had been recorded before the next question appeared. The final reveal transitioned in cleanly, making it obvious that the interaction was complete. In terms of readability, the two typefaces used across both prototypes each served a clear purpose. Josefin Sans handled all instructional and functional text in a clean, legible style, while Cormorant Garamond was used for the more expressive display and reveal moments. Both were sized and spaced appropriately for a bar surface environment. Instructions were kept short and only appeared when they were directly relevant, which helped keep the experience feeling calm and guided rather than cluttered or overwhelming.

Phase 04

Fully Developed Concept

The concept development of The Master's Atelier evolved through a process of iterative refinement, moving from broad immersive storytelling approaches toward a more focused, interaction-driven experience. Early ideas explored large-scale environments using projection, augmented reality, and guided narrative. However, through both feedback and internal evaluation, it became clear that the experience needed to feel more grounded and personal. In response, the concept shifted toward a more contained, tactile installation centred on multi-sensory engagement, allowing visitors to encounter the Redbreast brand through taste, smell, touch, and personal interpretation. This enhances audience engagement as it requires visitors to be physically and mentally present at every stage. It prevents them from being passive observers and makes them contributors who shape the experience through their own actions.

Before beginning the four-stage experience, visitors are invited to choose between a cask-like mug and a whiskey bottle glass. This visitor brings the chosen vessel throughout the entire journey until they reach the final engraving station, where it is personalised with their name and date.

Keeper I: Sandalwood (Scent Identification)

Keeper I introduces scent recognition as the first interaction. The visitor is presented with a fragrance bottle and invited to spray the scent onto themselves or onto a paper strip. The bar then displays three labelled options: sandalwood, pine, and vanilla. The visitor places the mug or glass onto the selected option, triggering an NFC-based response. If the correct option is selected, the LED lights turn green, the progression bar advances slightly, and the next stage is unlocked. If the incorrect option is chosen, the LED lights turn red, and an on-screen message informs the visitor that the answer is incorrect and that they may try again. A hint button is also available to provide additional support.

Keeper II: Oak (Wood Matching)

Keeper II develops the interaction through material recognition. The visitor is introduced to three coaster-like forms, each made from a different wood. The bar surface reveals three corresponding cut-out shapes, creating a direct spatial relationship between each object and its assigned position. The visitor matches each coaster with the correct wood name, and the placement activates an NFC-triggered response. When the correct object is positioned, the progress bar advances further, unlocking the third stage. If the placement is incorrect, the interface displays a brief text message indicating that the answer is wrong, allowing the visitor to try again, with a hint button available to provide additional guidance.

Keeper III: Spice (Tasting & Flavour Profile)

Keeper III is controlled by a large touchscreen interface embedded into the bar surface. When the visitor places their glass on the bar, the system uses NFC-triggered detection to initiate the flavour-mapping interface. An initial concentric SVG animation pulses to confirm the

vessel detection before the screen transitions to a split-screen layout, featuring a hexagonal radar diagram on the left and six adjustable slider controls on the right.

The visitor uses these sliders to adjust the intensity of the six taste notes: spicy, honeyed, fruity, woody, warm, and silky. As the visitor drags the sliders, the radar polygon updates in real time to visualise their personal flavour profile. Once the visitor confirms their selection, the system logic evaluates the input. If the "spice" note is correctly identified as the dominant characteristic, the interface unlocks Keeper IV and records the tasting data. If the selection is incorrect, a transient error message remains visible until the visitor interacts with the interface again, prompting the visitor to reassess their choice.

Keeper IV: Orchard Fruit (Questionnaire & Reveal)

Keeper IV utilises the bar's embedded touchscreen to present a four-step questionnaire. As the visitor answers questions regarding environmental and personal preferences, the orchard panel on the right responds in real time. Each input triggers an animation sequence where a dormant tree transitions into an illuminated form, populating its crown with blossoms. Once the questionnaire is completed, the system generates a personalised fruit identity that represents Real Redbreast orchard fruits. The five possible results are Apple, Pear, Apricot, Peach, and Plum all confirmed from actual Redbreast tasting notes based on the visitor's responses. The final screen reveals the visitor's name, a dynamic rarity statistic, and a digital Whiskey Taster Certificate. The experience concludes as the visitor proceeds to the engraving station to have their chosen vessel personalised with their name and date.

This four-stage structure transforms the visitor from an observer into an active participant. By combining a tactile environment with responsive digital technology, the installation connects physical craft with modern interaction. Because visitors are constantly engaged: smelling, tasting, and physically placing their glass to trigger system responses, the experience is memorable. This technical approach ensures the installation is intuitive while fostering a deeper, more personal connection to the Redbreast brand, leaving each visitor with a unique outcome that reflects their journey through The Master's Atelier.

Final Visual Renders

BLENDER

Based on feedback from Iteration 02, several changes were made to the Blender scene before finalisation. First, the warm HDRI from Iteration 01 was added back to the scene to provide a cosy, bar-like atmosphere. A vinyl player and a freestanding lamp were placed in the corners to enhance the ambient feel and fill the space between the bar and the walls. To further address empty areas, a row of wooden casks was added to the back wall by applying an Array modifier to two casks and stacking them. In line with previous iterations, these additional assets were sourced from the BlenderKit library to ensure visual consistency and high-quality scene dressing. Additionally, a third wall was added to better enclose the room, featuring a mirror to create a greater sense of space.



Figure 34: Final Blender Mock-up



Figure 35: Final Blender Mock-up

In addition to the earlier updates, the team decided to implement a few functional enhancements within the scene. Part of the bar was hollowed out to create a door for bartenders to exit the area. A dishwasher, sink, and tap were added to increase realism. The door leading into the pavilion was replaced with a more modern design. Small adjustments were also made to the bar's UV mapping to improve unwrapping, allowing the wooden panels to be seen more clearly. To indicate that the bar illuminated when a Keeper task was completed, an LED stripe was added to the bar surface. This was created from a cube that was extended to fit the bar's width. A face was extruded to serve as the light panel. A metal material was applied to the base of the light strip, while the panel section was given an emission node. Finally, the keepers were rearranged to start from the left and move to the right.



Figure 36: Bartender Door



Figure 37: Sink Area



Figure 38: Keeper I and II



Figure 39: Keeper I Error State

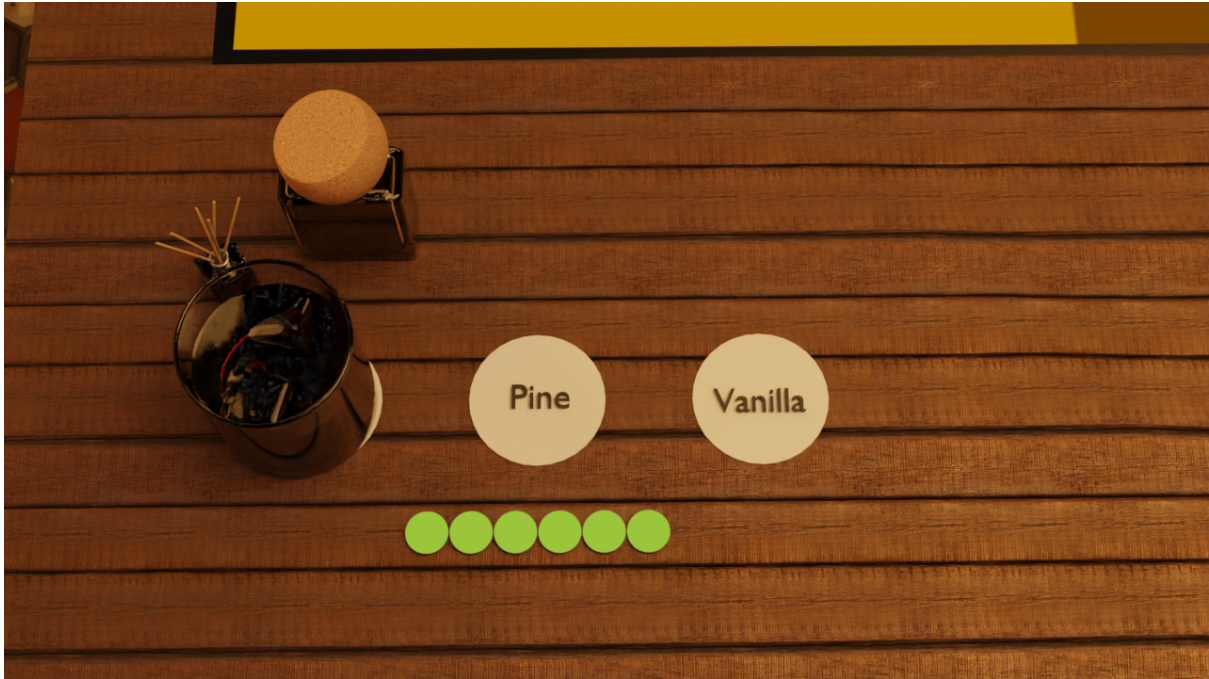


Figure 40: Keeper I Success State



Figure 41: Keeper II Error State



Figure 42: Keeper II Success State

Access to Materials and Objects:

Mirror: <https://www.blenderkit.com/asset-gallery-detail/1ad67fed-e35b-469d-887b-d251bc249708/?query=arcade+mirror+order: score>

Floor Lamp: <https://www.blenderkit.com/asset-gallery-detail/e3219c91-a7e9-4544-8d02-ba2664f571df/?query=arc+floor%20lamp+order: score>

New Door: <https://www.blenderkit.com/asset-gallery-detail/c09f3f83-d126-4d01-b44b-58f4dba0a5c5/?query=modern+door+order: score>

Wooden Barrel: <https://www.blenderkit.com/asset-gallery-detail/d5b4a910-a66a-4c3c-9dda-adf8b0e25834/?query=wooden+barrel+order: score+availability:free>

Kitchen Tap: <https://www.blenderkit.com/asset-gallery-detail/b3e5e99d-47e2-42c4-98f7-95ad8513787c/?query=elegant+kitchen%20tap+order: score+availability:free>

Vinyl Player: <https://www.blenderkit.com/asset-gallery-detail/307f3131-9e27-47f1-8c67-06af1960a3cd/?query=victor+victrola+order: score+availability:free>

Sink: <https://www.blenderkit.com/asset-gallery-detail/10afe355-c358-4741-956b-a1bf64abae42/?query=sink+single+order: score+availability:free>

Dishwasher: <https://www.blenderkit.com/asset-gallery-detail/70398d9d-538d-4384-98da-7477a17ea901/?query=dishwasher+order: score+availability:free>

HTML PAGES

Following the medium and high-fidelity Figma wireframes, Keeper III and Keeper IV were rebuilt as fully interactive, standalone HTML prototypes using HTML, CSS, and JavaScript. Both prototypes share a unified visual system that carries directly from the established Figma design language. The background uses a warm parchment tone applied across the outer surface and the inner card, creating the layered material quality of a surface placed on a bar rather than a screen mounted on a wall. All border treatments use a consistent gold-adjacent tan that reinforces the craft aesthetic without introducing unnecessary colour complexity. Typography follows the same two-typeface hierarchy established in earlier iterations, with Cormorant Garamond at weight 300 in italic reserved for instructional text, results, and any moment when the experience shifts from functional to emotional. Josefin Sans at weights 200 and 300 handles all labels, question text, button copy, and numeric values. The separation between these two roles is maintained consistently across every interaction state in both prototypes, creating a clear and readable distinction between system language and experiential language. Spacing, padding, and border weights were standardised across both files so that opening Keeper IV after Keeper III feels like moving to the next stage of the same experience rather than encountering a different interface. The inner card treatment, the top instruction bar, and the footer note appear identically in both, anchoring the visitor in a consistent spatial logic.

Keeper III underwent the most significant interaction revision. In earlier versions, the radar diagram responded only to movement along each note's fixed axis, meaning a visitor had to drag in a precise straight line to move a dot. This was replaced with a fully free-drag model. Each of the six radar dots can now be moved in any direction across the hexagon surface, with the value for each note calculated as the distance of the dot from the centre point rather than its position along a predetermined path. This makes the interaction feel tactile and exploratory rather than mechanical, which is more consistent with the sensory and instinctive nature of a tasting experience. The sliders and radar remain synchronised in both directions. Moving a slider repositions the corresponding radar dot along its axis, and moving a radar dot freely updates the slider value to reflect the distance from centre, allowing visitors to use whichever input feels more natural without either representation falling out of sync. The confirmation logic was also updated so that a correct dominant note produces a result message reading Keeper IV unlocked, reinforcing the sequential narrative of the four-keeper experience. An incorrect dominant note produces an error message that remains visible until the visitor interacts with the interface again, rather than being dismissed automatically, ensuring the message is always read before the visitor continues.

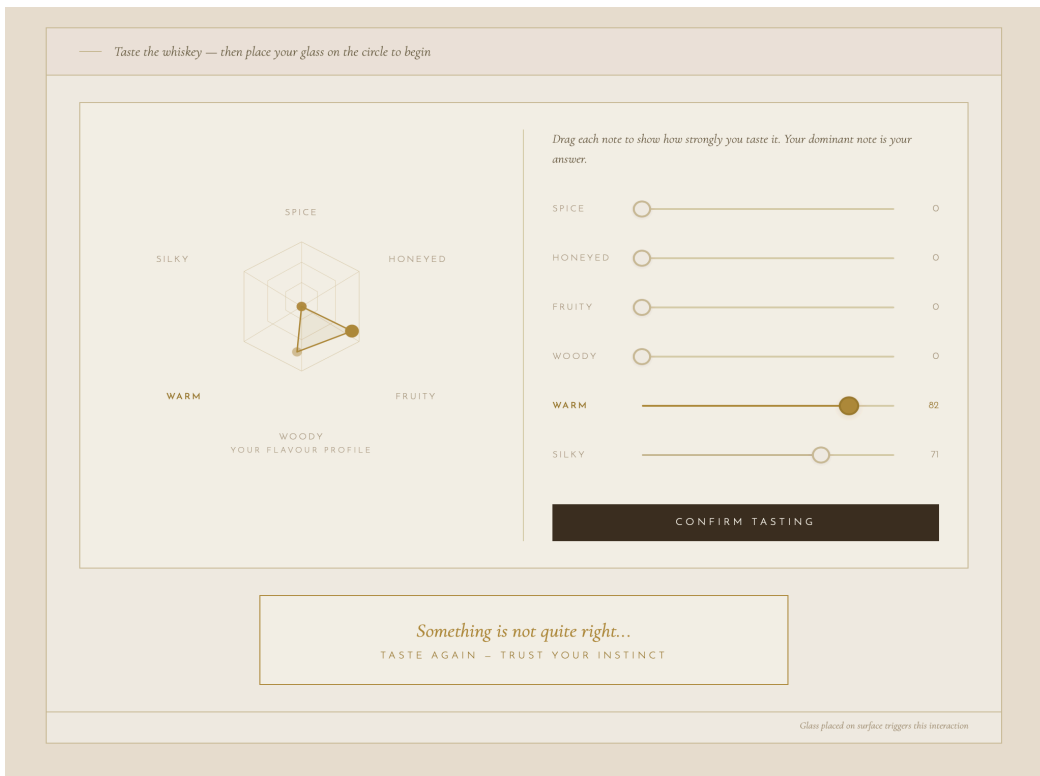


Figure 43: Keeper III Error Message

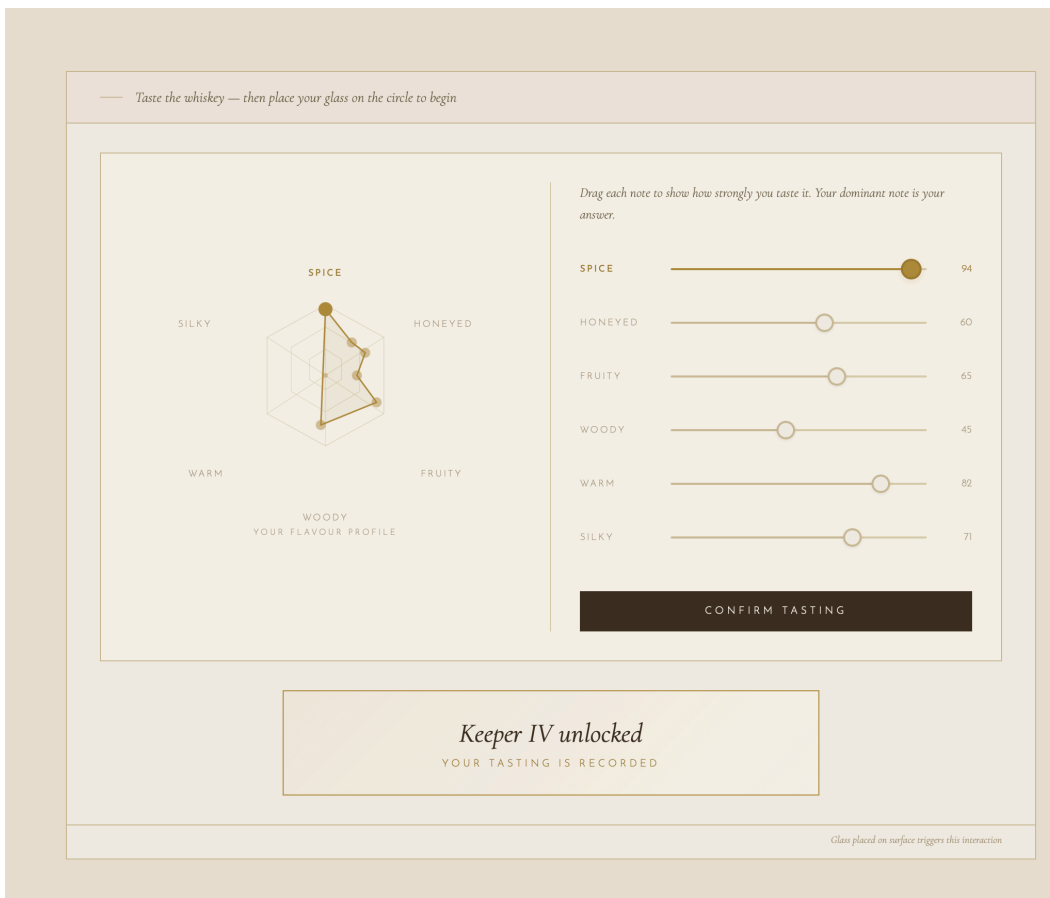


Figure 44: Keeper III Success Message

In Keeper IV, four questions unlock sequentially, with each block sitting at reduced opacity until the previous answer is submitted, communicating locked and unlocked states through visual weight rather than explicit instruction. The colour swatch question in Q3 was updated to include text labels beneath each circle, ensuring the interaction remains fully accessible regardless of colour perception. The orchard panel responds in real time to each answer, with one tree growing per question through a staggered blossom animation that creates a sense of organic, accumulating reward. The five orchard fruit outcomes were also updated in this iteration to reflect the actual documented tasting notes of Redbreast whiskey. Earlier iterations used placeholder names, and the revised prototype draws only from fruits found across verified Redbreast expressions: Apple, Pear, Apricot, Peach, and Plum. Each is assigned its natural fruit colour in the reveal card, so the result reads as a genuine reference to the whiskey rather than a decorative element. The rarity percentages for each fruit vary across results, with Plum appearing least frequently at 9% and Peach most frequently at 22%, creating meaningful variation among visitors and reinforcing the exclusivity narrative that runs throughout the full four-keeper experience.

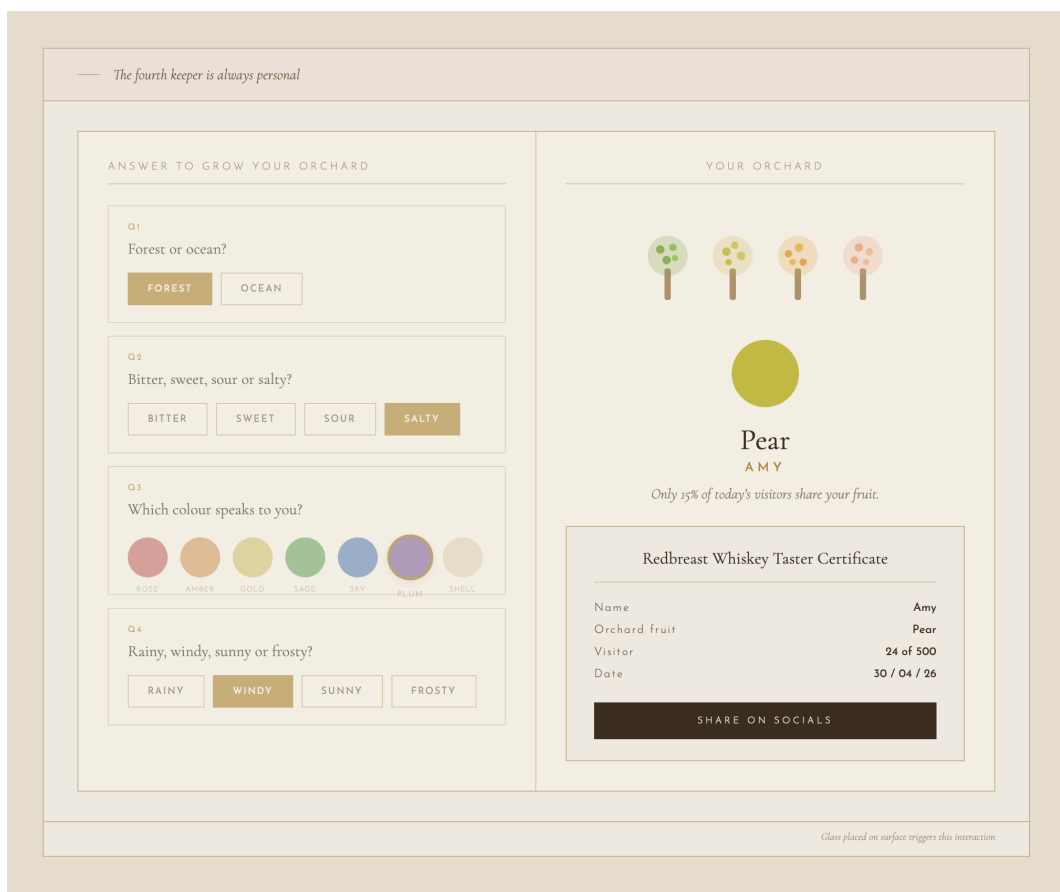


Figure 45: Keeper IV Test Results

Several targeted accessibility changes were made across both prototypes in this iteration. The slider track in Keeper III was given a 40-pixel-tall hit area rather than a 2-pixel visible line, making it significantly easier to grab and drag with both touch and mouse input. The radar dots were given invisible hit circles with a 20-pixel radius around each visible point, removing the need for precise targeting and allowing visitors to grab a note from the general area of the dot rather than landing directly on it. Colour was never used as the sole means of conveying information in either prototype. In Keeper III, the dominant note is communicated through

the gold styling on the label, track fill, thumb, and numeric value simultaneously. In Keeper IV the selected state of each answer option is communicated through both a gold border and a filled button background, ensuring that neither change alone carries the full signal. All colour swatches in Q3 carry visible text labels, so the question remains answerable without colour discrimination, and button and tile tap targets are sized generously throughout both prototypes to meet recommended minimum touch target dimensions.

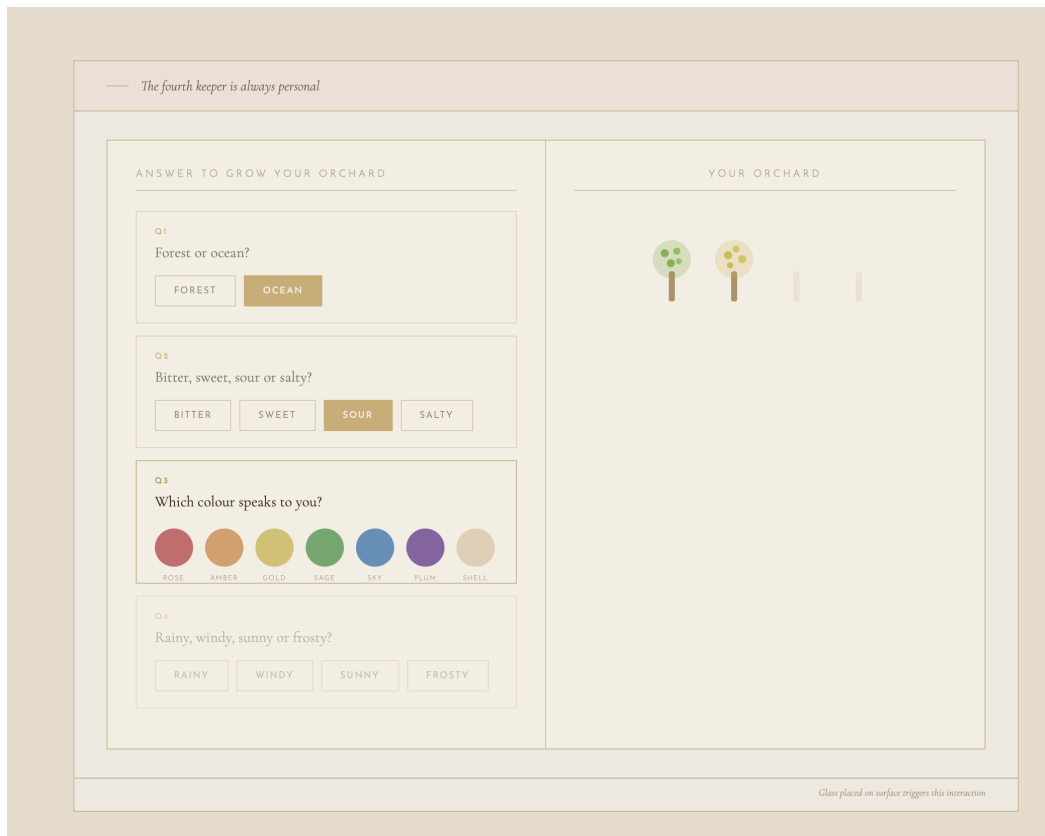


Figure 46: Keeper IV Accessibility changes of Q3 indicating the status bar of the test processing

Both Keeper III and Keeper IV were produced as single self-contained HTML files with no external dependencies beyond the Google Fonts stylesheet. All logic, styling, and structure are embedded within each file, meaning either prototype can be opened directly in a browser, shared as a file, or hosted on any static web platform without a build process, making both immediately usable for user testing, presentation, and submission alongside the written report.

Final Interactive or Digital Outcome

The Blender File can be accessed [here](#).

Functional prototype (Figma and HTML) can be accessed [here](#) and [here](#).

The final digital outcome can be accessed [here](#).

For the final digital outcome, the Blender scene was animated. Each Keeper was animated to show both an error state and a successful task completion. This was done by utilising the keyframe function within Blender. Each animated object was keyframed at its origin and at the location where it was meant to move. The movements were controlled by more keyframes and the graph editor. The LED stripe's illumination was achieved using a gradient mask within the material settings. By connecting a Mapping node to a Gradient Texture, the light was programmed to wipe across the strip. The animation was controlled by keyframing the texture's location, allowing the light to move smoothly from left to right as the Keeper tasks were completed.

Both Keeper III and Keeper IV were built as fully interactive prototypes. Each prototype responds to input in real time, simulating how the bar surface would behave during the experience. In Keeper III, the radar diagram and the draggable scales were connected so that moving either one instantly updates the other. The radar uses a free-drag model, meaning each dot can be pulled in any direction across the surface, with its value determined by its distance from the centre. The dominant note logic runs continuously, highlighting the highest scoring note in gold. A correct confirmation triggers the Keeper IV unlocked state, while an incorrect answer holds an error message on screen until the visitor interacts again. In Keeper IV, the four questions unlock sequentially through an opacity transition, guiding the visitor without instruction. Each answer grows one of four orchard trees through a staggered blossom animation. Once complete, the visitor's fruit result is revealed from a matrix of five outcomes based on their answers. The five fruits, Apple, Pear, Apricot, Peach, and Plum, were taken directly from the documented tasting notes of Redbreast whiskey. The Redbreast Whiskey Taster Certificate then fades in below, populated dynamically with the visitor's name, fruit result, visitor number, and date. The interactivity of the Keepers was conveyed through a screen recording added to the Blender animation during post-processing. This allowed us to create a fully integrated digital outcome that conveys the bar's atmosphere and the essence of each Keeper.