



tru

WELLNESS SPACES

Where wellness meets Harmony: Holistic Approach to  
Relaxation, Mindfulness, and Renewal of You

## 518 Studio A

### **Instructors:**

Douglas Pyle, M.S., HCDE

Hyewon Suh, Ph.D., HCDE

### **Team TRU:**

Grace Huh, Ranjitha Rangaswamy,

Willa Wei, Maxine Tang

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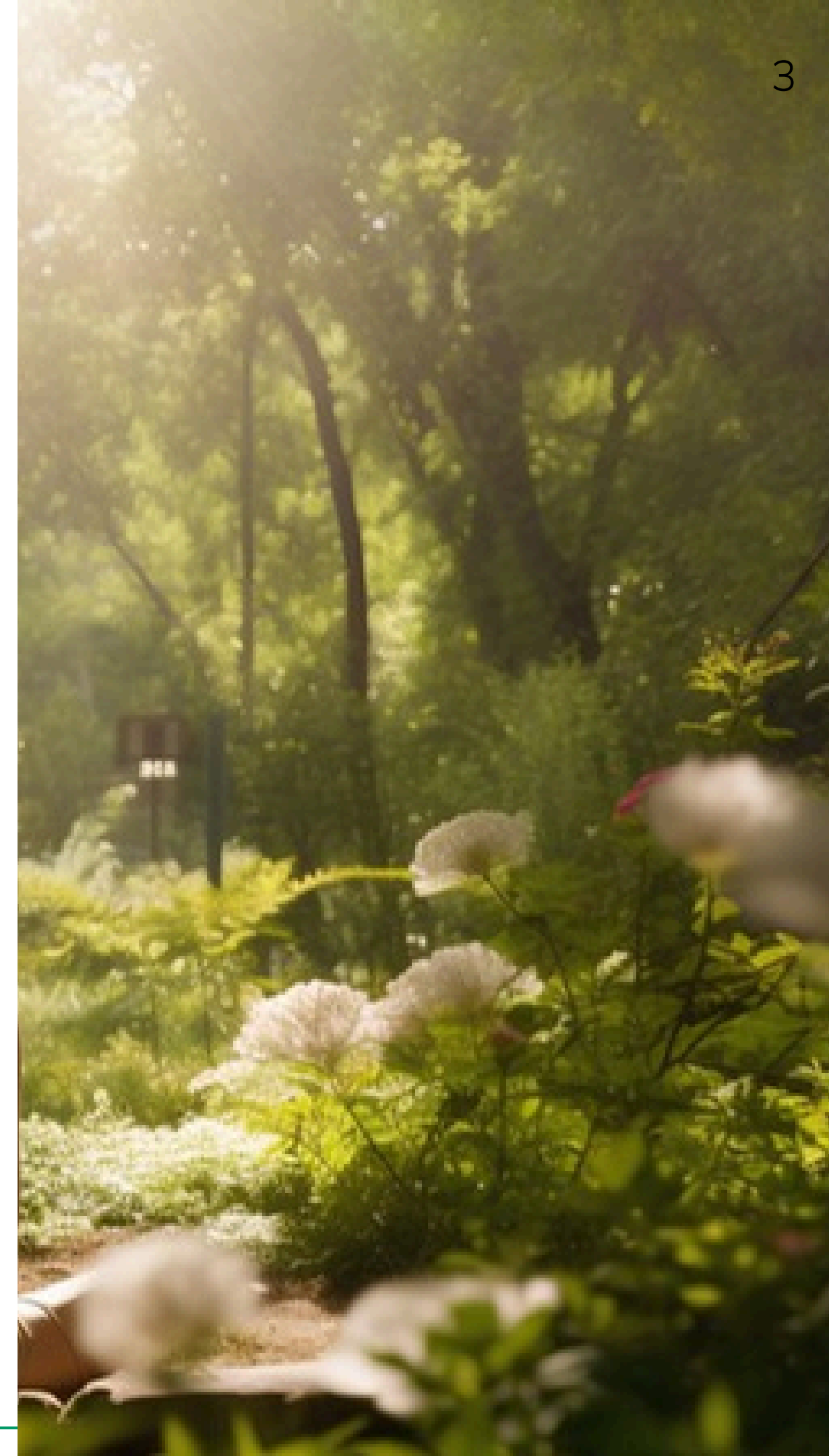
# INTRODUCTION

Welcome to the design document presented by team TRU, where we introduce our Harmony Wellness Pods!

This design solution document is intended to serve as a blueprint for implementation: it defines the problem space, summarizes empirical insights, articulates design goals, and specifies the digital and physical components of a wellness pod system targeted at student stress management, right here at University of Washington.

## **Intended Audience for this document:**

This specification is intended for campus facilities planners, architects/interior designers, and UX/engineering teams responsible for implementing the TRU wellness pods (digital booking system, kiosk software, and physical pods). Other stakeholders include developers, engineers, or fabricators who would implement the digital and physical interfaces without needing further clarification.



# PROJECT OVERVIEW

## CONTEXT AND BACKGROUND

Students experience frequent transitions between classes, work, and extracurricular activities, often lacking access to spaces that support short, effective recovery. Hallways, crowded cafés, and libraries do not adequately support rest, privacy, or mental decompression. Stress accumulates not only during major deadlines, but also in the short transitional periods, often 30–60 minutes between classes, when students are mentally depleted yet still on campus. Existing spaces (hallways, libraries, cafés) do not reliably support rest, privacy, or intentional mental recovery. Universities increasingly offer counseling and wellness programs, but these are often appointment-based, time-intensive, or socially stigmatized. There is a gap for short, accessible, on-demand spaces dedicated to stress management.

## CORE PROBLEM

The core problem is the absence of micro-recovery spaces tailored to students' temporal rhythms, sensory and practical needs. The solution must:

- Fit into 30–60 minute gaps between commitments.
- Support multiple forms of recovery (rest, quiet focus, private calls).
- Balance digital detox with the reality that students rely on phones and laptops.
- Clearly communicate purpose, features, and rules at a glance.
- Address concerns about safety, hygiene, and cost.

## DESIGN QUESTION

*How can we design wellness spaces to address student stress management?*

# RESEARCH AND IDEATION

## RESEARCH

**Online surveys** - we collected quantitative data on stress drivers, times, locations, coping behaviors, desired space features, preferred session durations, and willingness to try wellness spaces.

When/ where stress happens

66.7 %

students get stressed on **Tuesday through Thursday**

53.8 %

students get stressed **in class**

What helps

71.8 %

Listen to **Music**

69.2 %

prefer to be in **plant & nature environment**

Ideal Duration

10-45 mins

Readiness for novel solutions

51.3 %

would try a biophilic wellness pod

**Semi-Structured Interviews** - 20-30 min conversations on stress triggers, routines, coping, and conditions for using wellness spaces.

Seeks **convenience** as #1 factor for a space to rest

Existing wellness spaces are limited and **located too far**

Need for **privacy & sound-proof** space

## KEY FINDINGS

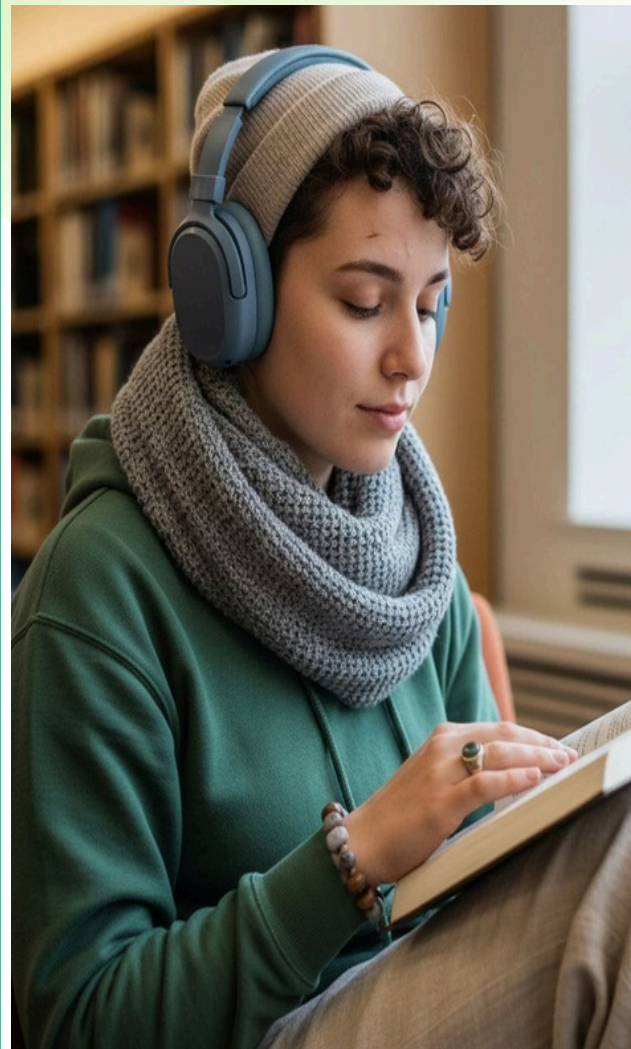
Adoption hinges on **proximity** and **low effort**. Our solution must be located near **stress hotspots** and throughout the campus.

Students want **quick, quiet, biophilic, private micro-breaks** (10-45 min) with sensory control.

Need for a **private personal space** on campus - i.e. praying, pumping for student Moms

Stress is **academic** and situational (classrooms/study areas), peaking mid-week evenings.

# USER PERSONAS / TARGET AUDIENCE



## Alexis Jones

**Age:** 23  
**Location:** Seattle, WA  
**Education:** 3rd year student at the UW school of Education

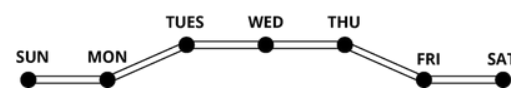
### Goals & Objectives

- Graduating College with good grades
- Getting an internship, Wants to be a teacher after graduation
- Taking care of my body and managing pain

### Behaviors

- She suffers from hypermyalgia and migraine, and she has sensory issues: gets hyper sensitive to triggers in the environment
- She sometimes have to take her clothes off to desensitize.
- She is sleep deprived from all of the school work and exams
- She loves to listen to music to relieve stress
- Saturday is a Sabbath day

Stress levels throughout the week



### Key traits

- Feels tired most of the times
- Anxiety during mid term & final exams
- Anxiety trying to compete with peers as a person who has chronic pain

### Pain Points

- When she gets episodes of pain on campus, she feels the need to step out for a bit to relax
- Lack of private space to take breaks in the campus to help ground her sensory issues
- On the days that she has to study on campus until late night, she struggles to fight off falling asleep



## Amir Ibrahim

**Age:** 26  
**Location:** Seattle, WA  
**Education:** 2nd year Biomedical Health & Informatics PhD student

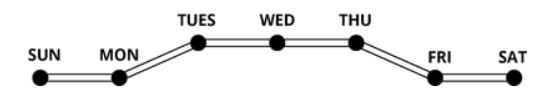
### Goals & Objectives

- Submit PhD thesis for yearly goals and tests
- Secure funding for the next project to cover expenses
- Get published in reputed academic conferences/ journals
- Balance work (TA/ ASE) life with PhD commitments

### Behaviors

- As a Muslim, he needs to find a corner 5 times a day to pray
- Stressed about his conference deadlines, lack of constructive criticism from his advisor and professor
- Bad sleep cycles / lack of breaks
- Less social interaction
- Scared of navigating relationship dynamics in the lab/ academia
- Likes growing small plants in the house

Stress levels throughout the week



### Key traits

- Intellectual, but often stresses about his lack of time and monetary support
- Digital device dependent
- Anxiety over deadlines
- Mild depression - takes meds

### Pain Points

- Trying to find a quiet space on campus to pray can be challenging at times
- Occasionally spends the night on campus prepping for conference or thesis
- Some days his symptoms of depression gets worse, making it harder for him to focus, and getting an urge to just go home and rest

### Primary users/ Target audience:

- Undergraduate students with packed course loads who seek short recovery between classes.
- Graduate students balancing research, teaching, and work, needing quiet, private decompression.
- Staff and faculty, including post-doctorate researchers, research scientists, and academic student employees.

All users are assumed to have basic smartphone literacy and access to campus facilities.

# DESIGN REQUIREMENTS / GOALS

Our mission was to foster safe, inclusive spaces that help rejuvenate overall mental health of students in stressful environments on campus. We formulated these design goals:

**Location and visibility:** The location of these spaces must be situated in central locations which are easily identifiable. These spaces should be clearly visible with markings on online maps or digital findings with clear visual signage on the building, helping students locate the space without confusion.

**Stress relief and emotional restoration:** The design should promote restorative experiences through spatial balance, comfort, and an atmosphere that promotes sensory calmness. Materials, colors, and spatial arrangements should promote relaxation and relieve stress, supporting students' ability to decompress and regain focus in a supportive environment.

**Biophilic and restorative design:** The design should promote mental and physical wellness through biophilic design, i.e., calming natural elements, including natural light, green vistas, and close access to fresh air as guiding principles of architectural design to support emotional restoration and physical rejuvenation.

**Inclusivity:** The space must be inclusive and normalize environments where seeking mental health help would be comfortable and welcoming, rather than clinical or evaluative, thereby decreasing stigma associated with seeking support.

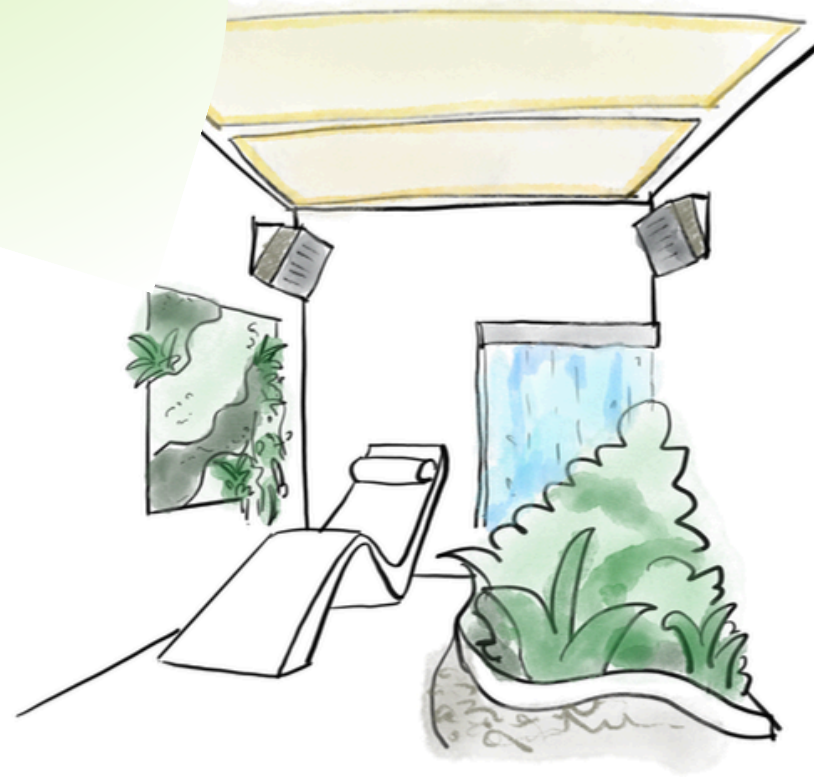
**Equitable representation:** The wellness spaces should be accommodative towards diverse cultural and spiritual practices

**Accessibility:** The environment must be intuitive and barrier-free for users with diverse mobility needs. Accessibility should be seamlessly integrated into the design of the spaces, so that users can approach, navigate, use, and benefit from these spaces without discomfort. The design should convey openness rather than a mere institutional formality to accommodate ADA compliance norms, which may induce feelings of alienation for students with accessibility needs.

**Privacy:** The design should support personal autonomy and privacy by providing versatile spaces that promote individual reflection, contemplation, and relaxation. Privacy should be intrinsic to the spatial layout for maximised emotional safety and reduction of barriers to use.

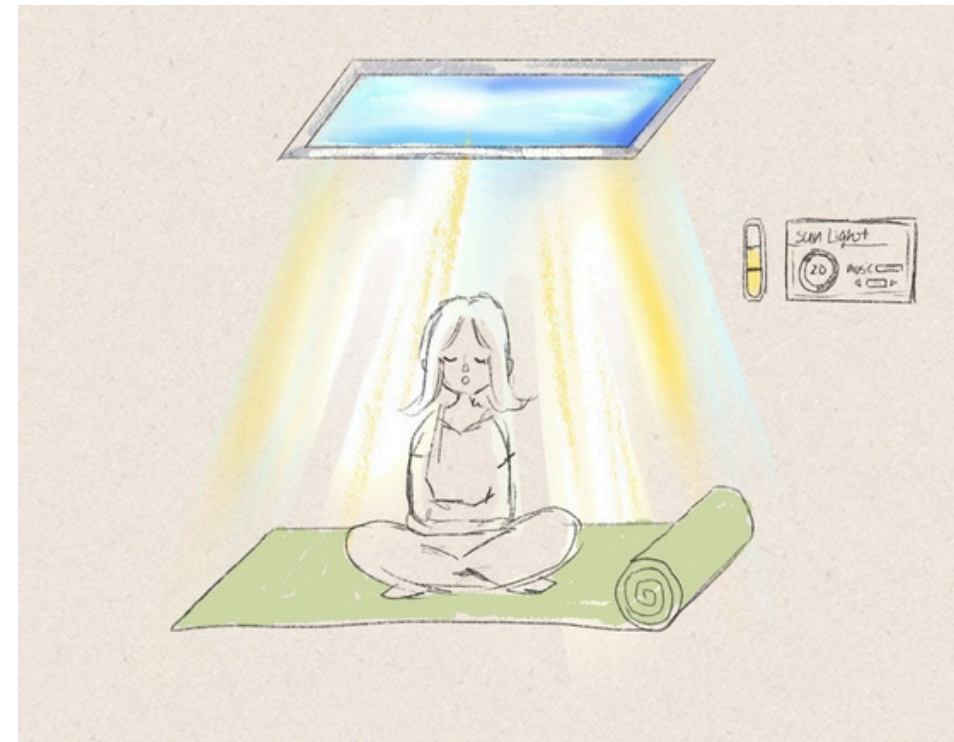


# IDEATION AND PRIMARY DESIGNS



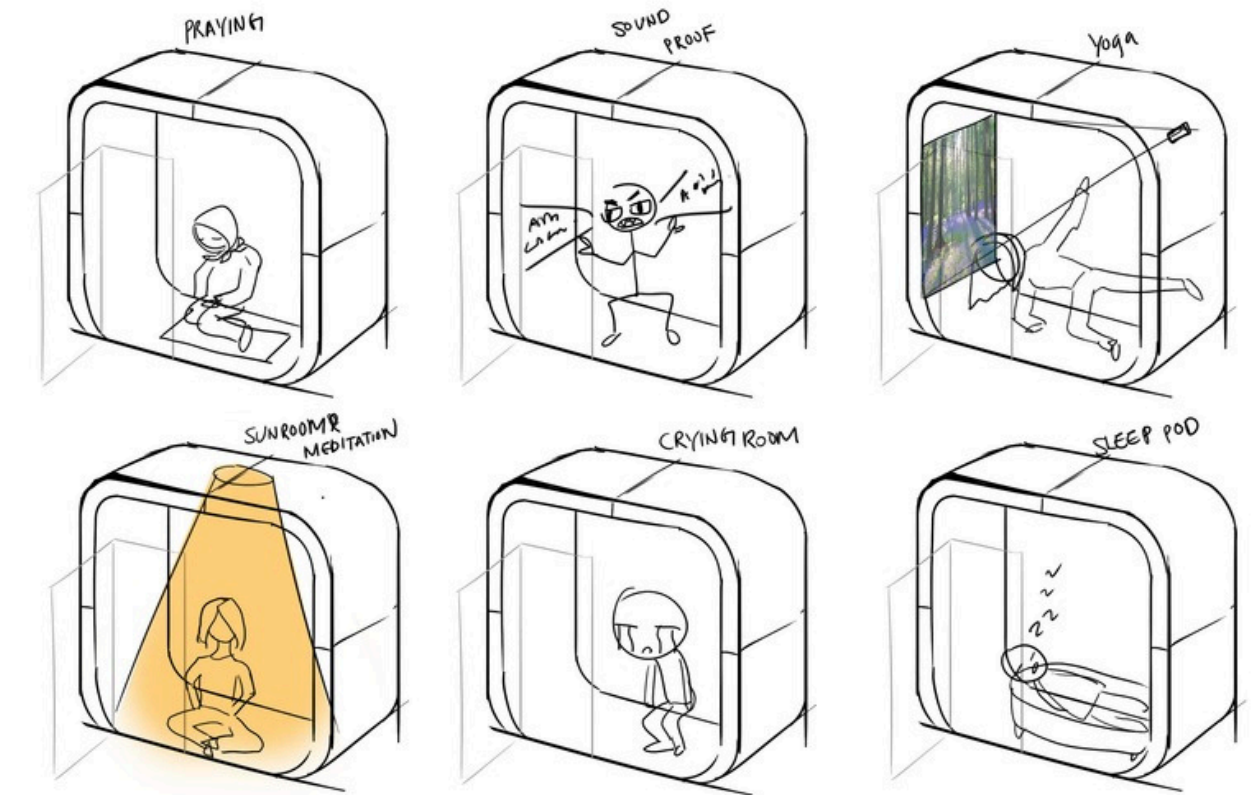
## Biophilic design

This is design inspired by natural ambience and elements simulated to seek response from users, similar to what they experience when in nature. It seeks to incorporate elements of nature into pod spaces, promoting well-being, creativity, and a harmonious relationship with the environment.that helps you



## Artificial Sunlight

Artificial sunlight therapy can help fight seasonal depression and mood swings, and it can enhance mood, boost energy levels, and improve focus and concentration.

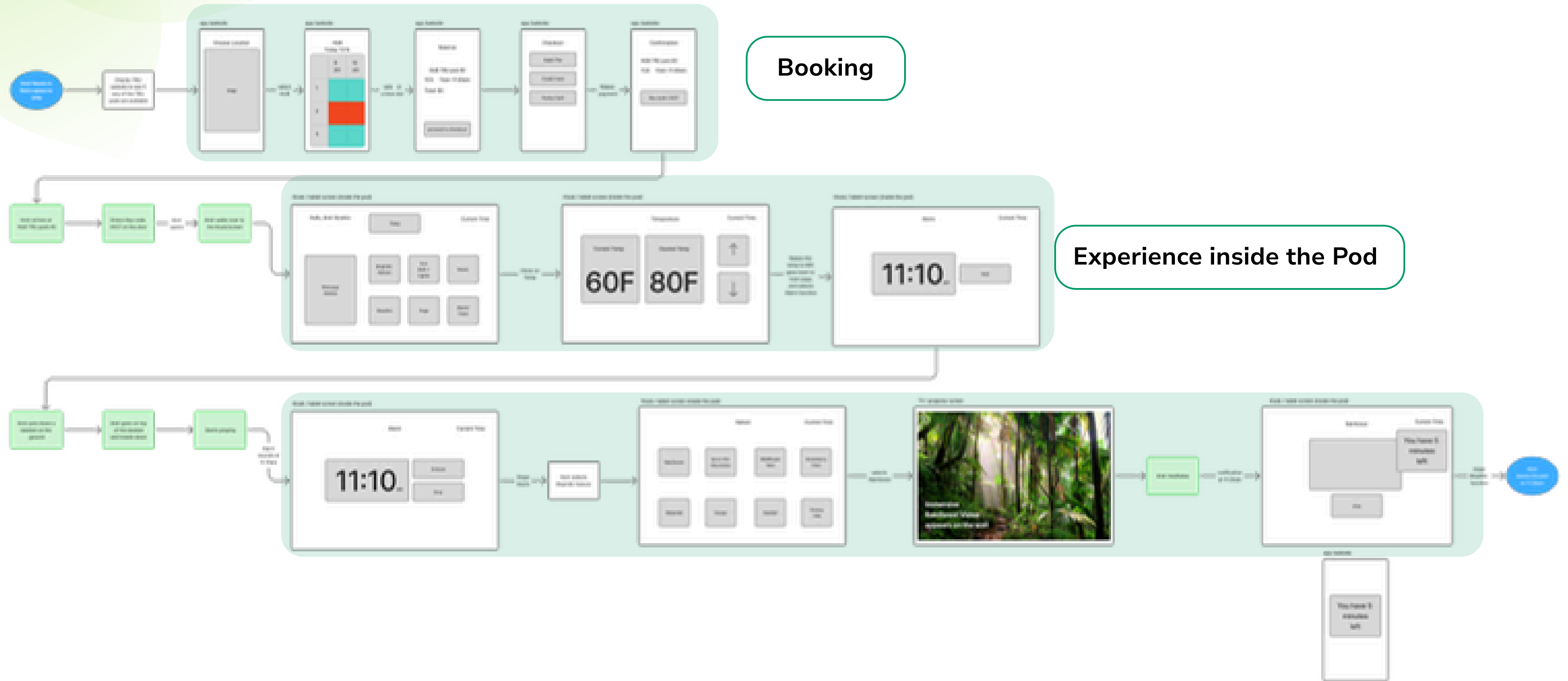


## Space for Privacy

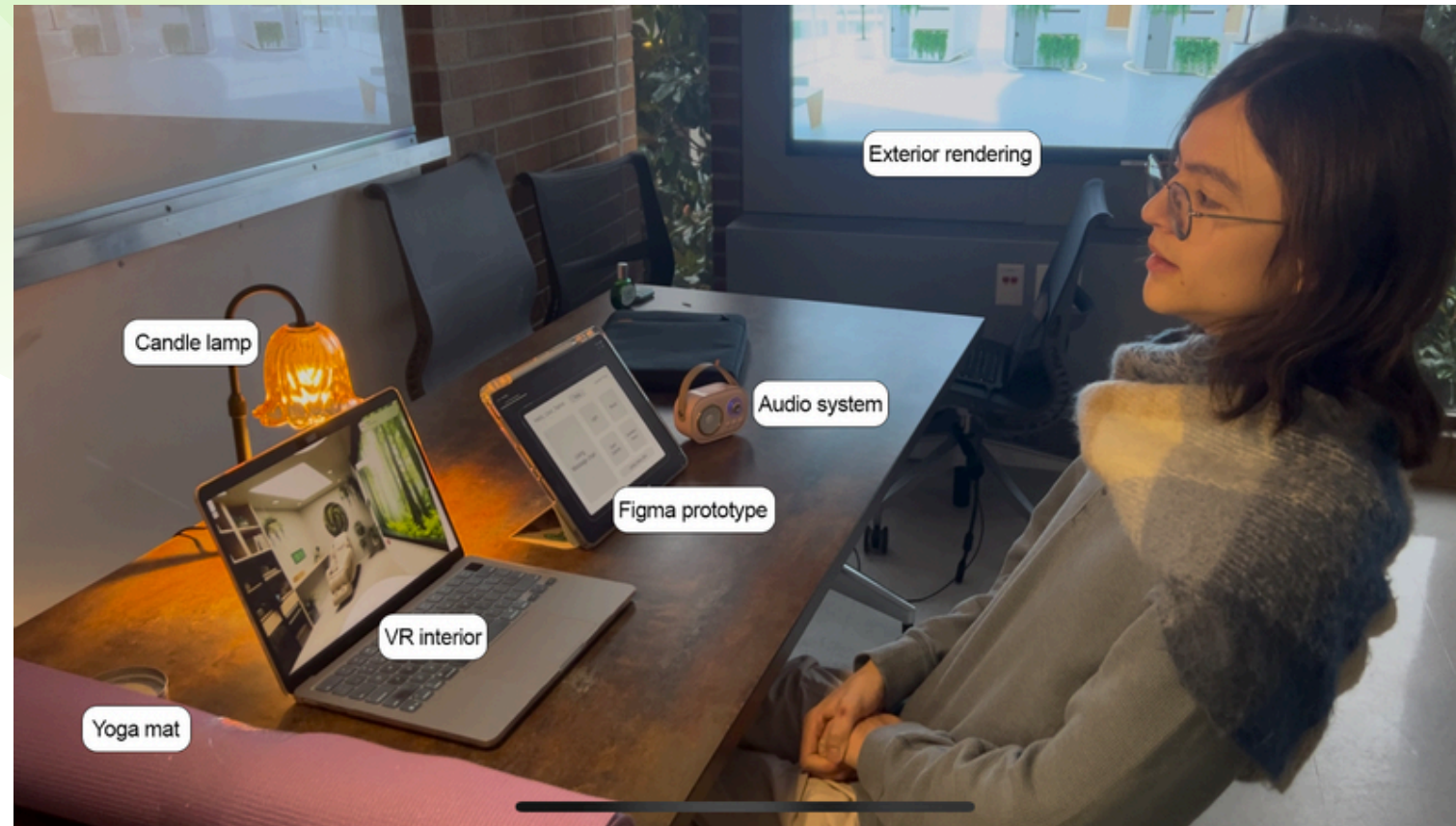
The space supports a wide range of private activities to promote physical and mental health well-being such as crying, praying, pumping, and other cultural and religious needs.

# USERFLOW

Unit Brahmi's User Flow



# DIGITAL PROTOTYPE



## Usability Testing

The present specification is grounded in iterative prototyping and usability evaluation with three student participants using both the digital and physical prototypes. Key methodological choices include:

- Scenario-based walkthroughs: Participants were asked to imagine using the pod after a draining class with approximately 45 minutes available.
- Think-aloud protocol: Participants verbalized expectations, confusion, and desires while interacting with both prototypes.
- Post-session interviews: Follow-up questions probed perceived value, feature prioritization, willingness to pay, and hygiene concerns.

## Decisions made derived from key findings

Replace technical jargon (“biophilic design”) with accessible language (“nature-inspired wellness space”) in all user-facing materials.

- Introduce a phone lockbox that allows audio pass-through.
- Remove or constrain the TV-like display to guided wellness content.
- Define technology rules per mode rather than adopting a blanket “no tech” policy.

Place a massage chair at the spatial and experiential center of the pod, with intuitive controls and clear time presets.

- Display pod inventory and hygiene practices in the booking interface.
- Provide explicit pricing at the time selection step.
- Replace or supplement shared snack cabinets with vending solutions.

Integrate a single, clearly labeled emergency button in every pod, with unambiguous affordances.



## Physical mock up

We present a cardboard prototype of our wellness pod to simulate the spatial experience of the wellness pod and gather realistic user feedback before our launch. This low-fidelity model allowed participants to step into a life-sized approximation of the pod, as different user characters (stressed sam, sleepy sarah, or exercising Eli) to interact with designated zones and artifacts in the pod. We also incorporated simple props like adjustable lamp for simulated sunlight, mockup showing SOS/ emergency setting, kiosk/ tablet interface details, so that users can easily provide feedback in the Wizard of Oz testing. This hands-on physical prototyping stage proved essential for validating the pod's spatial comfort, sensory balance, and functional layout before investing in more costly materials or digital refinements.

# PROJECT SCOPE

## IN-SCOPE ELEMENTS:

### 1. Core user journey

- Discovering and booking a wellness pod session via a digital interface.
- Arriving at the pod, entering, and initiating the selected mode.
- Experiencing the custom session based on personal needs (recharge through massage chair modes, focus with guided meditation, or private zoom call).

### 2. Digital interface specification

- Key screens and flows (home, mode selection, time and pricing selection, booking confirmation, first-time onboarding).
- Content and terminology (Modifying language on digital interfaces from “biophilic” to “nature-inspired” for ease of understanding).
- Representation of pod inventory and safety information.

### 3. Physical pod configuration

- Spatial arrangement of core elements: massage chair, phone lockbox, optional display, emergency button, sensory controls.
- Behavior of lighting, audio, and optional scent under each mode.
- High-level interface surfaces (e.g., wall panel vs. in-app controls).

### 4. Major behavior rules

- Mode-based rules for technology use (screens, phone usage, audio).
- Pricing for students based on affordability and session durations.
- Safety and hygiene affordances based on student usage. We used gym-like rulebook for easy adaptability.

## OUT-OF-SCOPE ELEMENTS:

The following aspects are left deliberately unspecified or treated only at a high level:

- Authentication and integration with campus
- Funding and pricing limitations within the university’s existing fee structure
- Low-level hardware specifications (exact light panel models, speaker brands, or accessibility-friendly massage chairs).
- Detailed maintenance protocols (e.g., specific cleaning products, schedules, cleaning responsibility).
- Security and customer support system

These out-of-scope areas require additional stakeholder input (e.g., IT, campus facilities) and are expected to be elaborated during implementation discussions.



# DESIGN SOLUTION



Biophilic design

Modeling done in SketchUp | Ai generated rendering

## EXTERIOR POD DESIGN

The exterior design of the TRU Wellness Pods embraces a clean, minimal, and biophilic aesthetic that blends seamlessly into the campus environment while remaining immediately recognizable as a place of retreat. Integrated greenery establish a calming visual presence. Each pod is fully enclosed to ensure visual and acoustic privacy, allowing users to disengage from public spaces while remaining safely within the campus ecosystem. Strategically located throughout high-traffic yet underutilized areas of campus, the pods are designed for easy access between classes, promoting spontaneous moments of rest, reflection, and personal care.

# INTERIOR POD DESIGN



Artificial Sunlamp/ light

- Nature-inspired custom lighting options for sensory needs
- Optional scent
- Detox box to pause phone usage and distractions
- Clear emergency controls
- Massage/ nap chairs
- Projector screen for simulated background generation, music, and other digital controls available on the kiosk

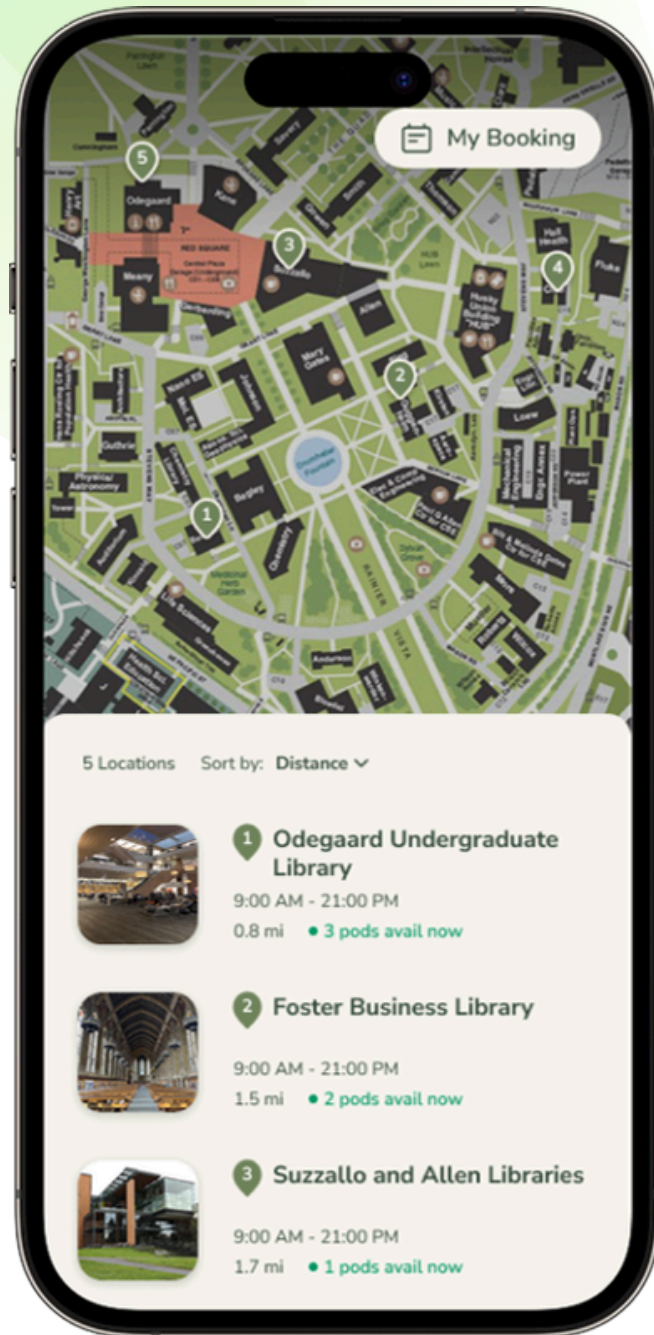
Cabinet/  
Digital Detox Box

Tablet Interface

Massage Chair

Biophilic design

# BOOKING



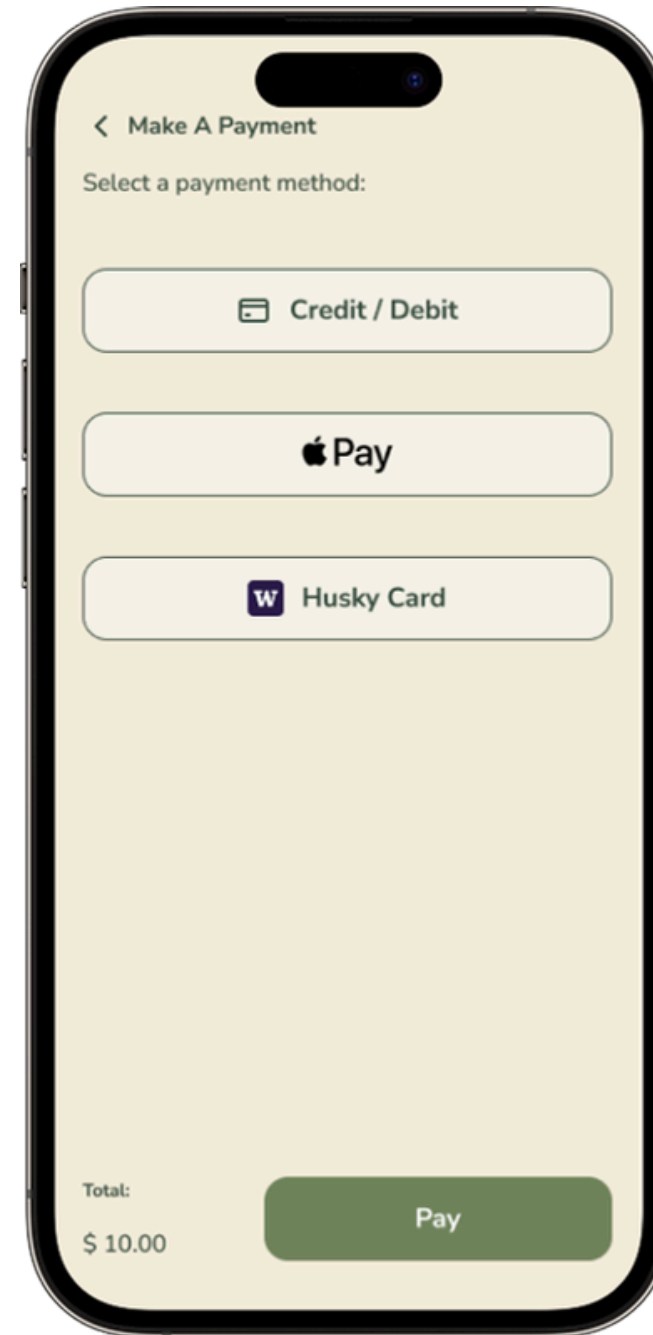
Location selection



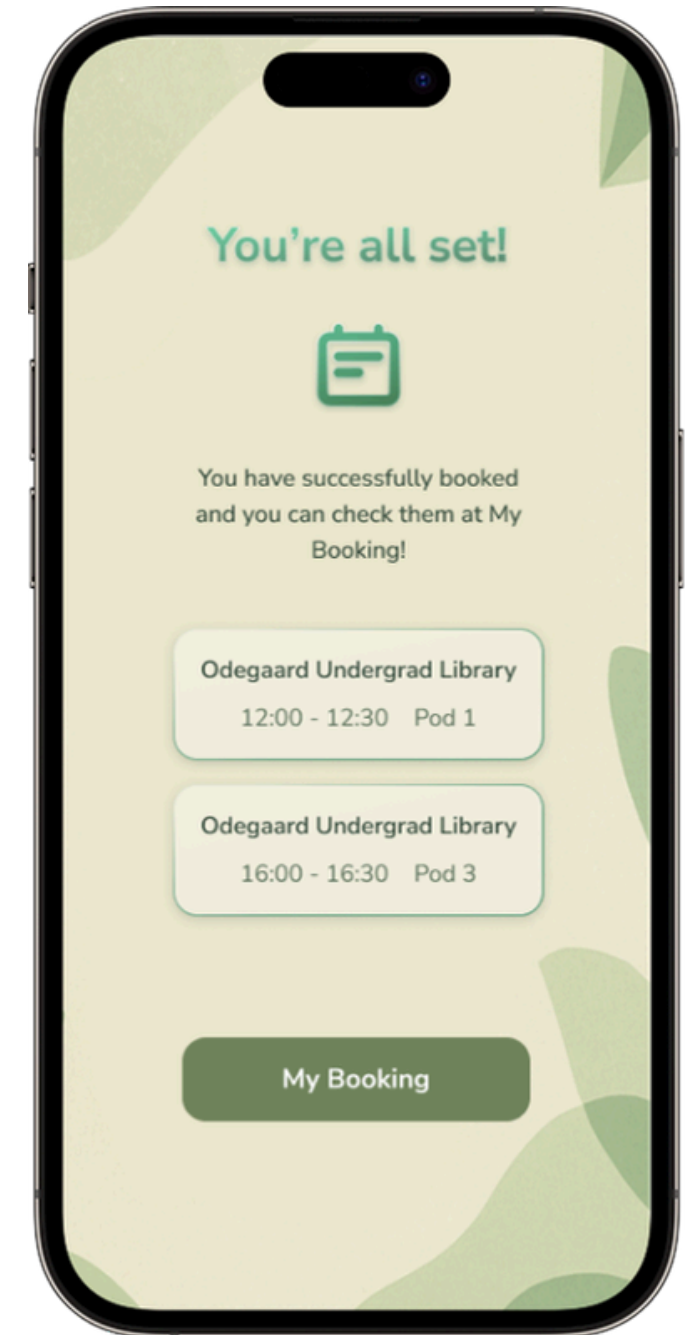
Time selection



Pod selection



Payment options

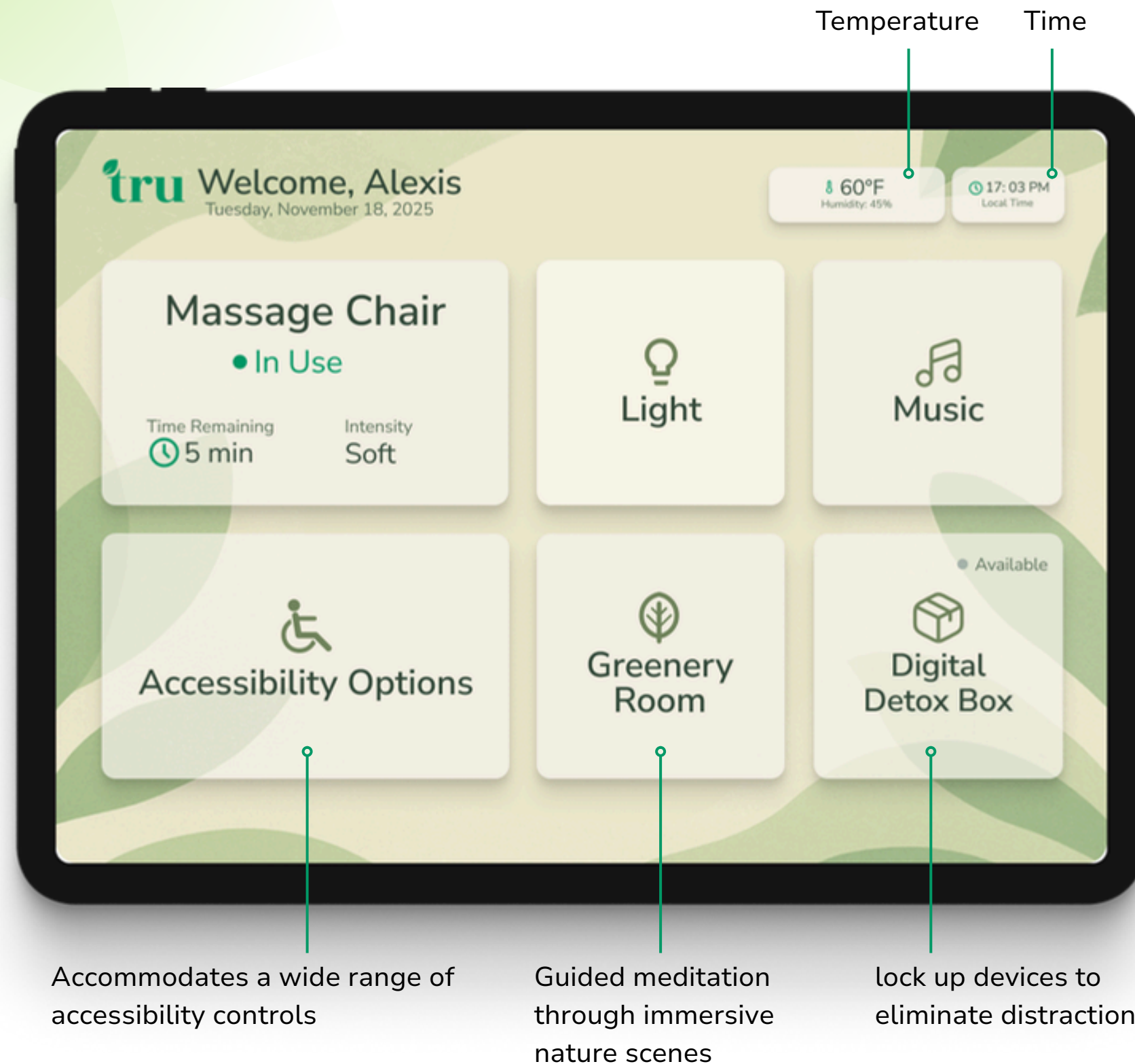


Booking complete

Entry to system:

The student opens the app or website and views a succinct description:  
 “Book a nature-inspired wellness space to recharge and reduce stress”

# KIOSK / TABLET INTERFACE: Dashboard



The main screens are:

## 1. Home / Discover

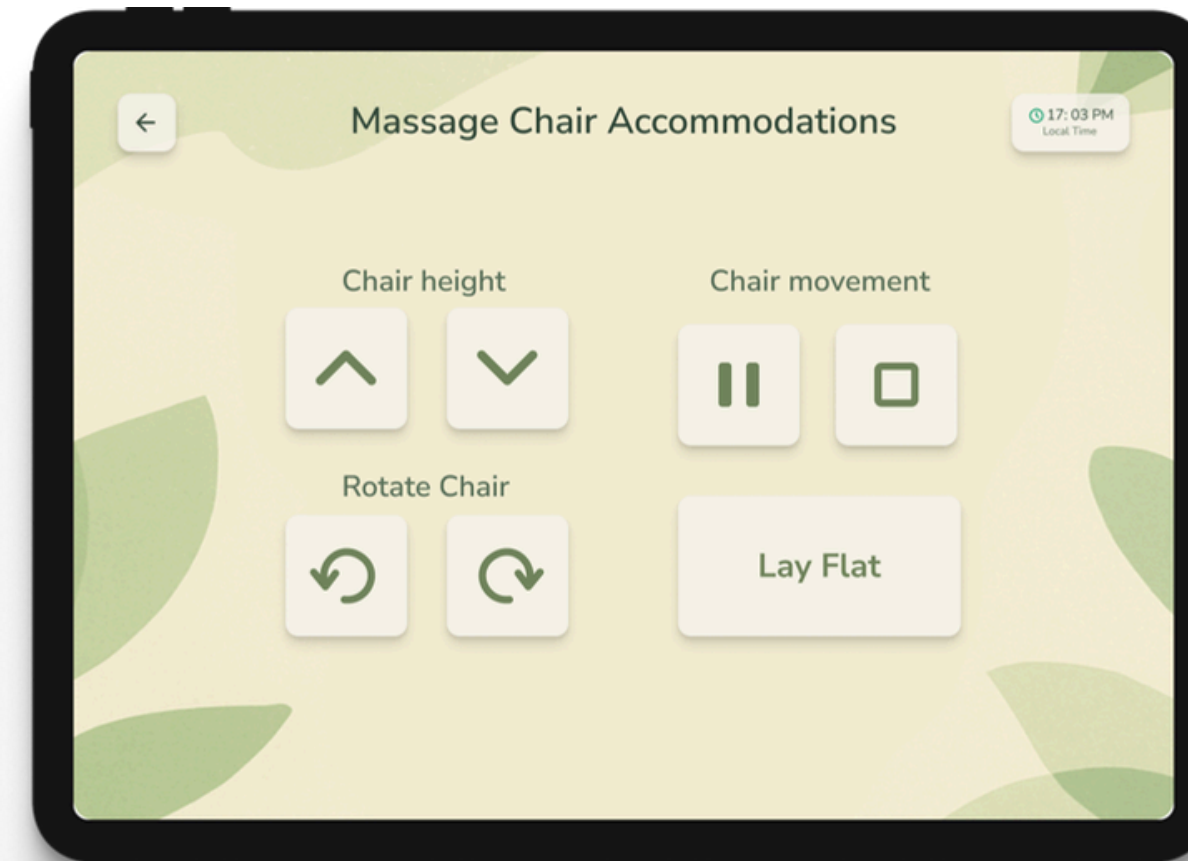
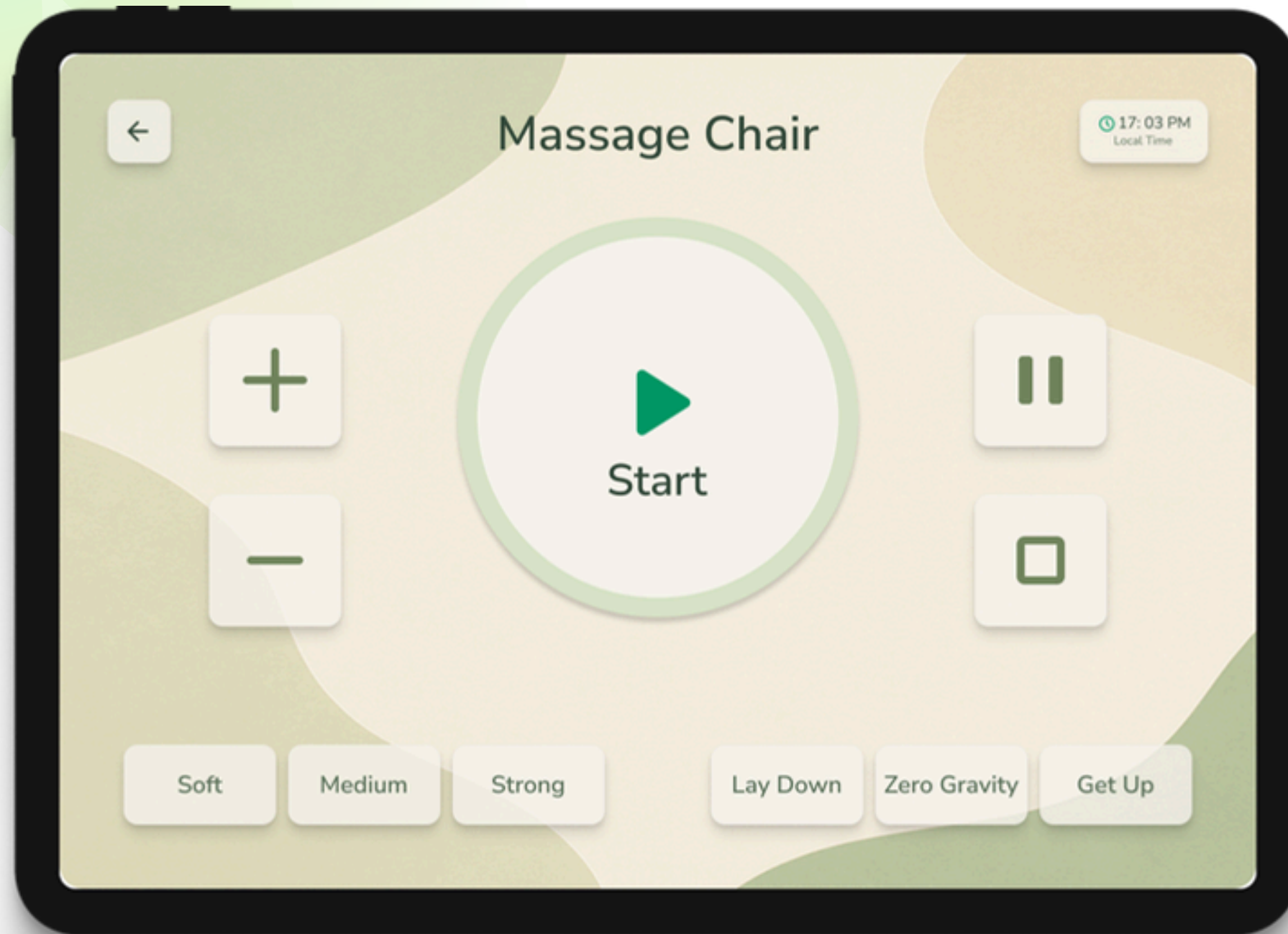
- Explains the purpose of the pods in plain language.
- Lists nearby available pods and next available times.
- Provides entry points into the booking flow.

## 2. Mode Selection

- Allows users to see and opt modes available as features within the pod.
- Each mode includes a brief description and a visual icon.
- By hovering over each icon, users can read the description of each feature, such as:
  - Massage chair
  - Nature-inspired lighting
  - Yoga mat
  - Optional phone lockbox through digital detox mode
  - Emergency button

[Link to Figma Prototype](#)

# KIOSK/TABLET INTERFACE: Massage chair features and accommodations



## Massage Chair

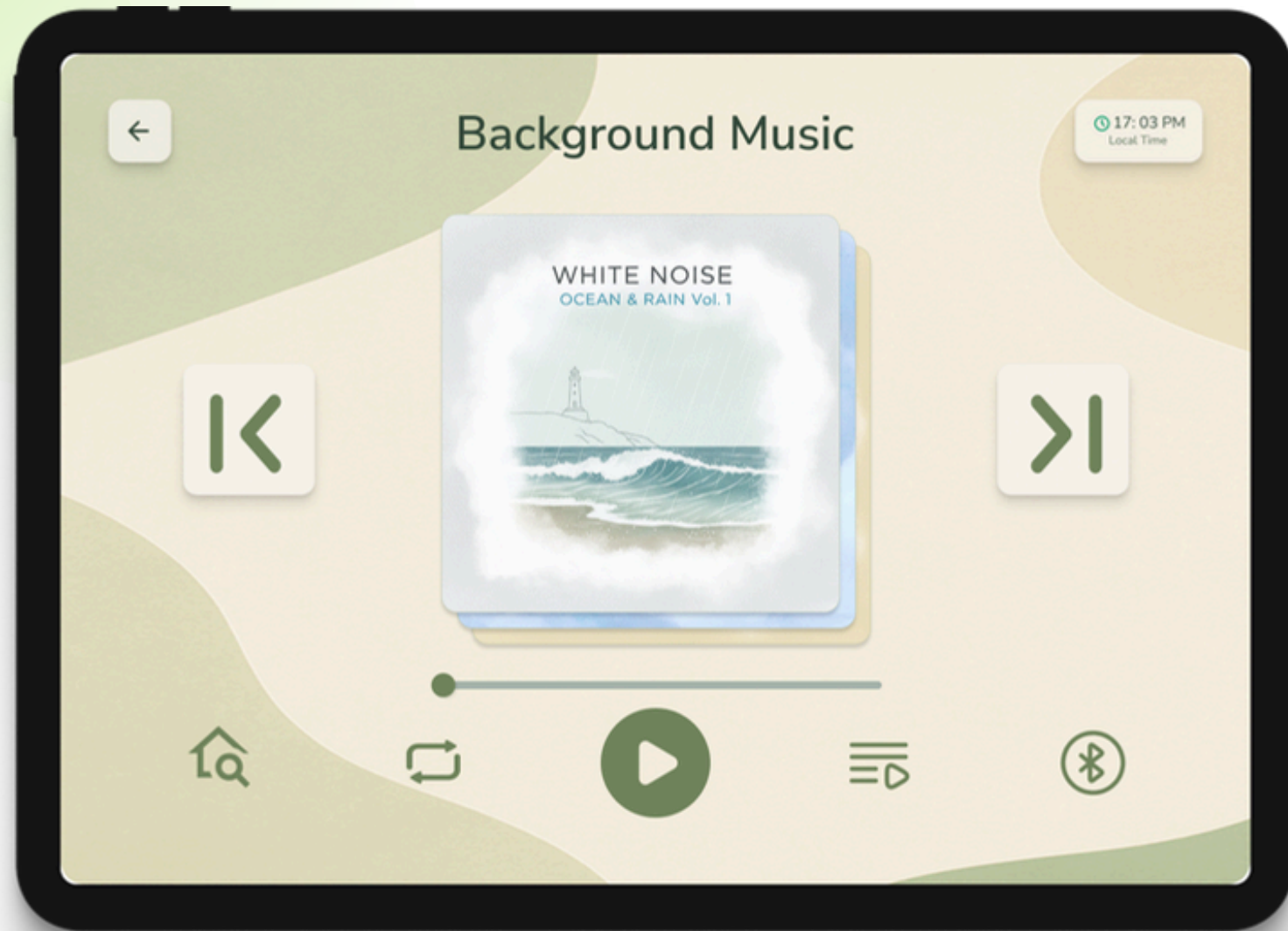
Central element, visually dominant, offering preset massage programs suitable for 15–20 minutes.

The Accommodations panel enables the chair to be accessible to users with various physical disabilities.

Alternative use: Use as a Nap pod- Studies by NASA show that strategic naps in stress environments promote alertness and performance. We implemented these metrics in our design, by making it:

- i) comfortable with phone/ digital device attachment for easy booking access;
- ii) adjustable seats for accessibility and inclusivity;
- iii) time constrained for efficient results;
- iv) privacy screen for added layer of comfort.

# KIOSK/TABLET INTERFACE



## Music

Music was one of the top stress reliever factors from our research. The users can play from our library of calming & relaxation playlists, or they can play their own music via Bluetooth.

[Link to Figma Prototype](#)

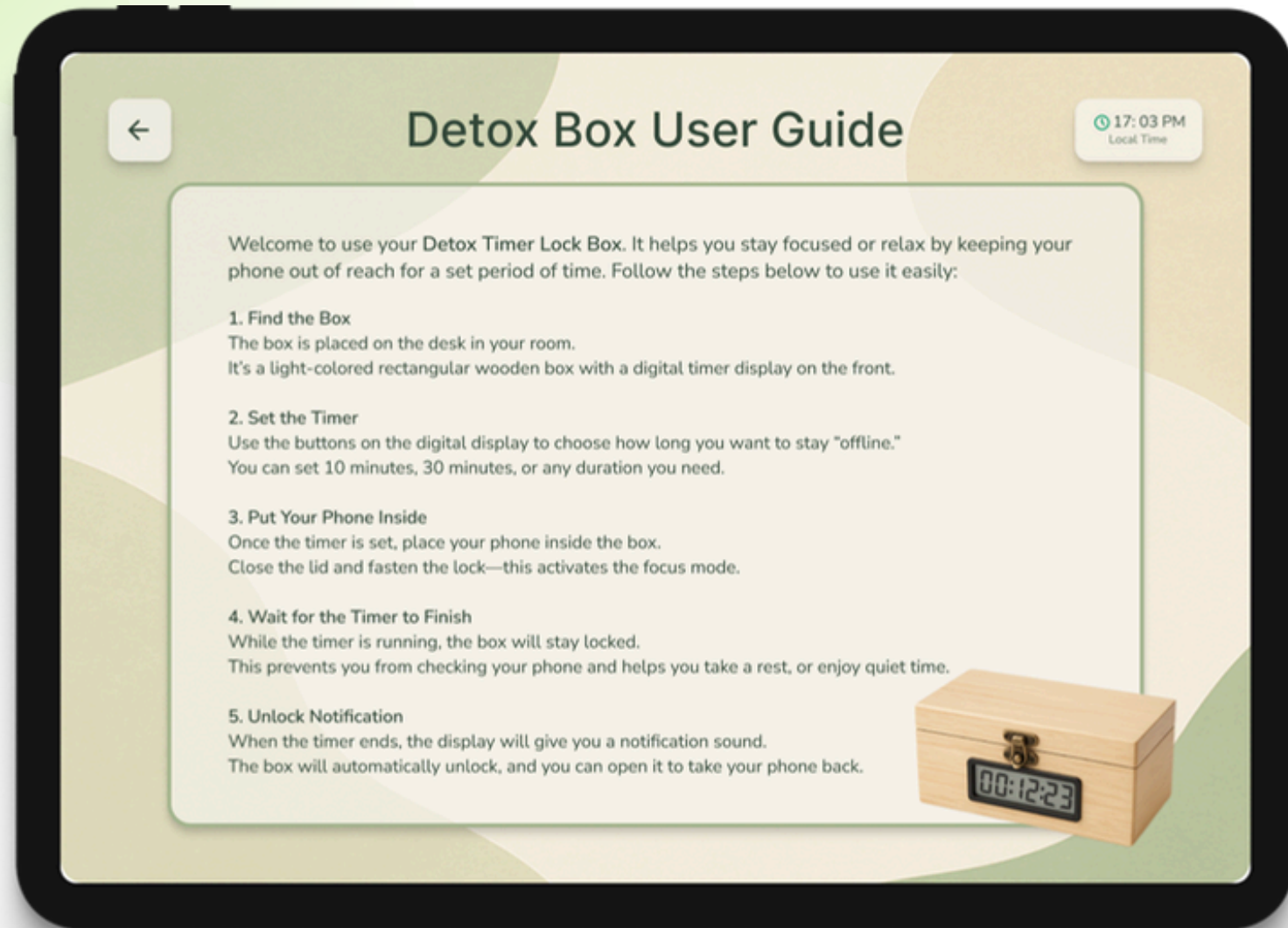
[Link to a sample guided meditation](#)



## Greenery Room

User research revealed that students frequently experience anxiety, cognitive overload, and emotional fatigue between academic transitions. Exposure to natural imagery and guided breathing has been shown to reduce cortisol levels, improve mood, and enhance attention recovery. Because many students lack access to real outdoor environments during long school days, especially in urban and winter conditions. The Greenery Room provides a restorative substitute that leverages biophilic design principles.

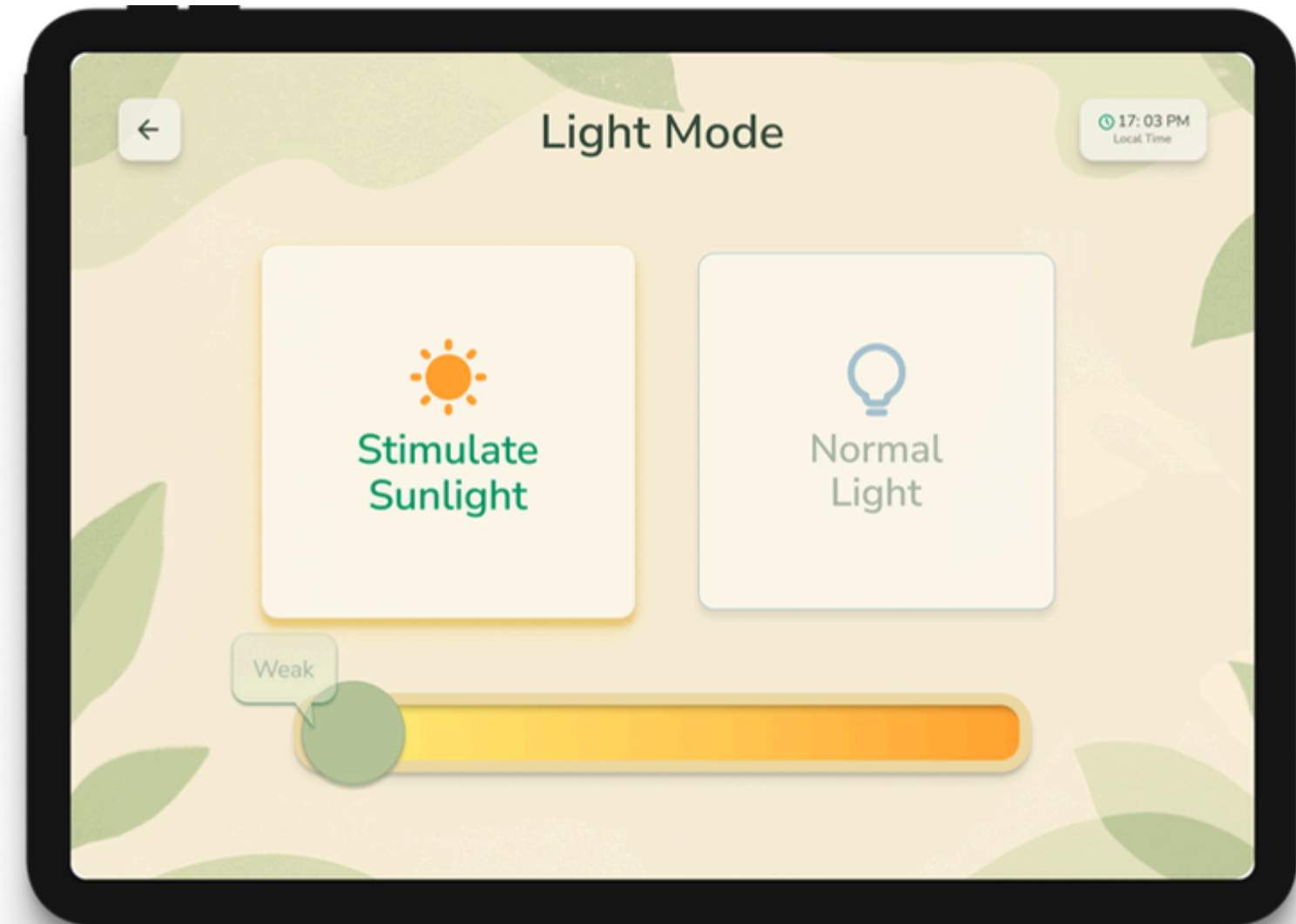
# KIOSK/TABLET INTERFACE: Digital detox and simulated light features



## Digital detox box

Digital detox box is located inside the cabinet, visually salient and clearly labeled. Research revealed that phone dependency is a significant contributor to cognitive fatigue, distraction, and anxiety. Usability testing also showed that users are more likely to commit to deep rest when the system physically reinforces separation from their device.

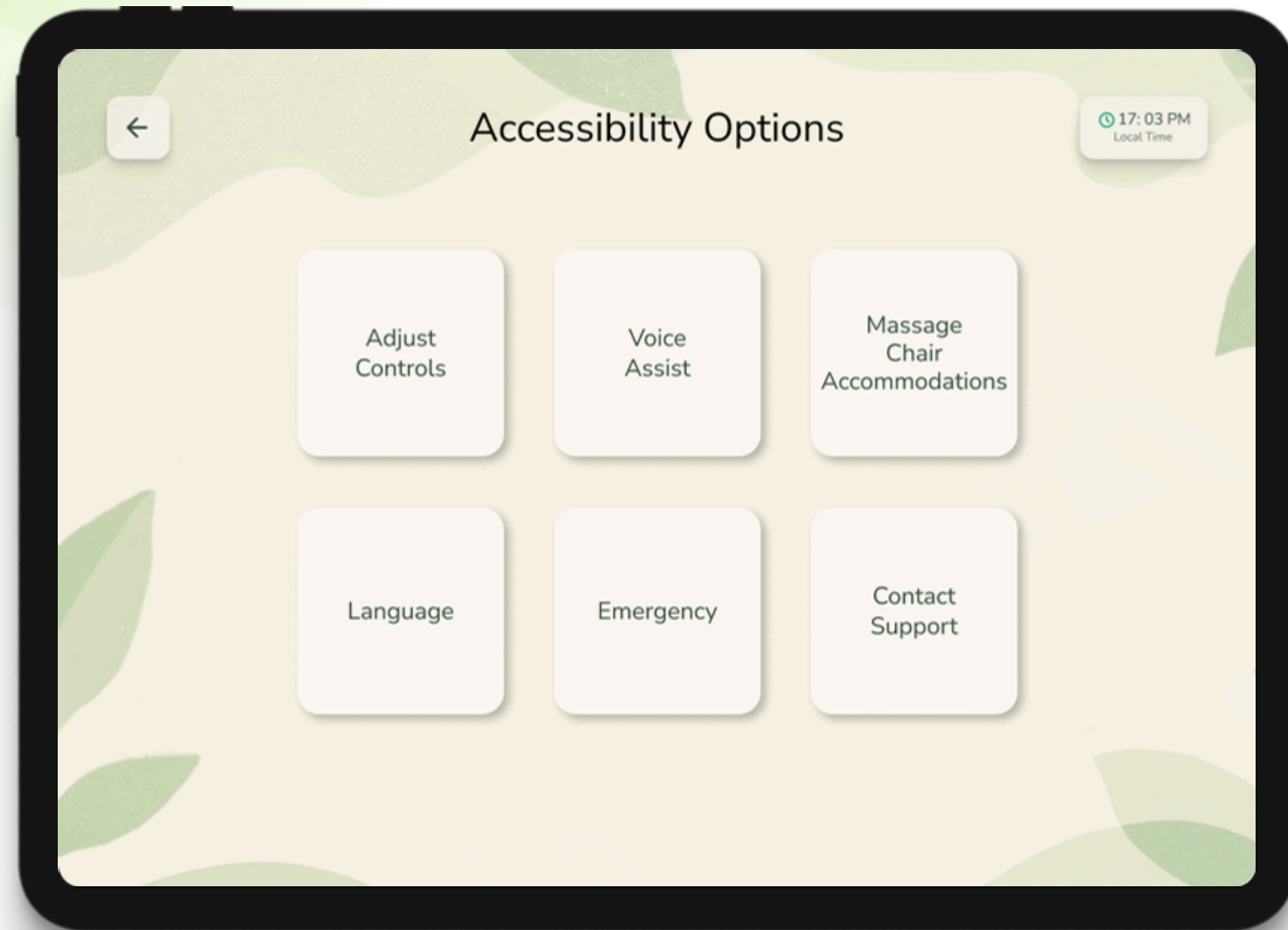
[Link to Figma Prototype](#)



## Artificial Sunlight

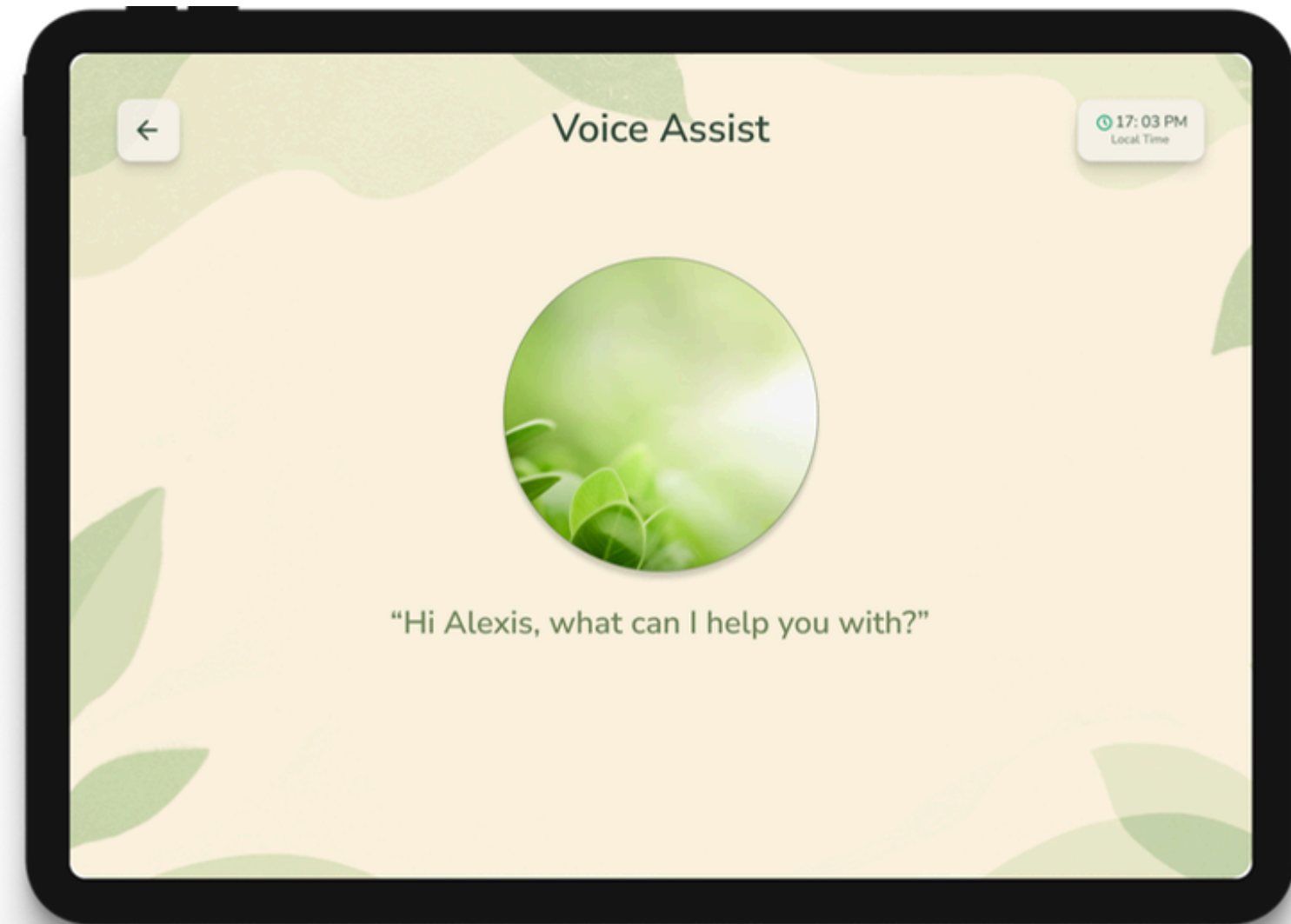
Seasonal affective disorder (SAD), fatigue, and mood swings are common in regions with long, dark winters. Especially among students with irregular sleep cycles and heavy academic loads. Artificial sunlight exposure has been widely shown to support serotonin regulation, alertness, and emotional stability. Users can control the intensity of the normal or artificial sunlamp with the toggle bar.

# KIOSK/TABLET INTERFACE: Accessibility and safety integration



## Accessibility Options

Accessibility was identified as a foundational requirement during early concept development and reinforced through persona creation.

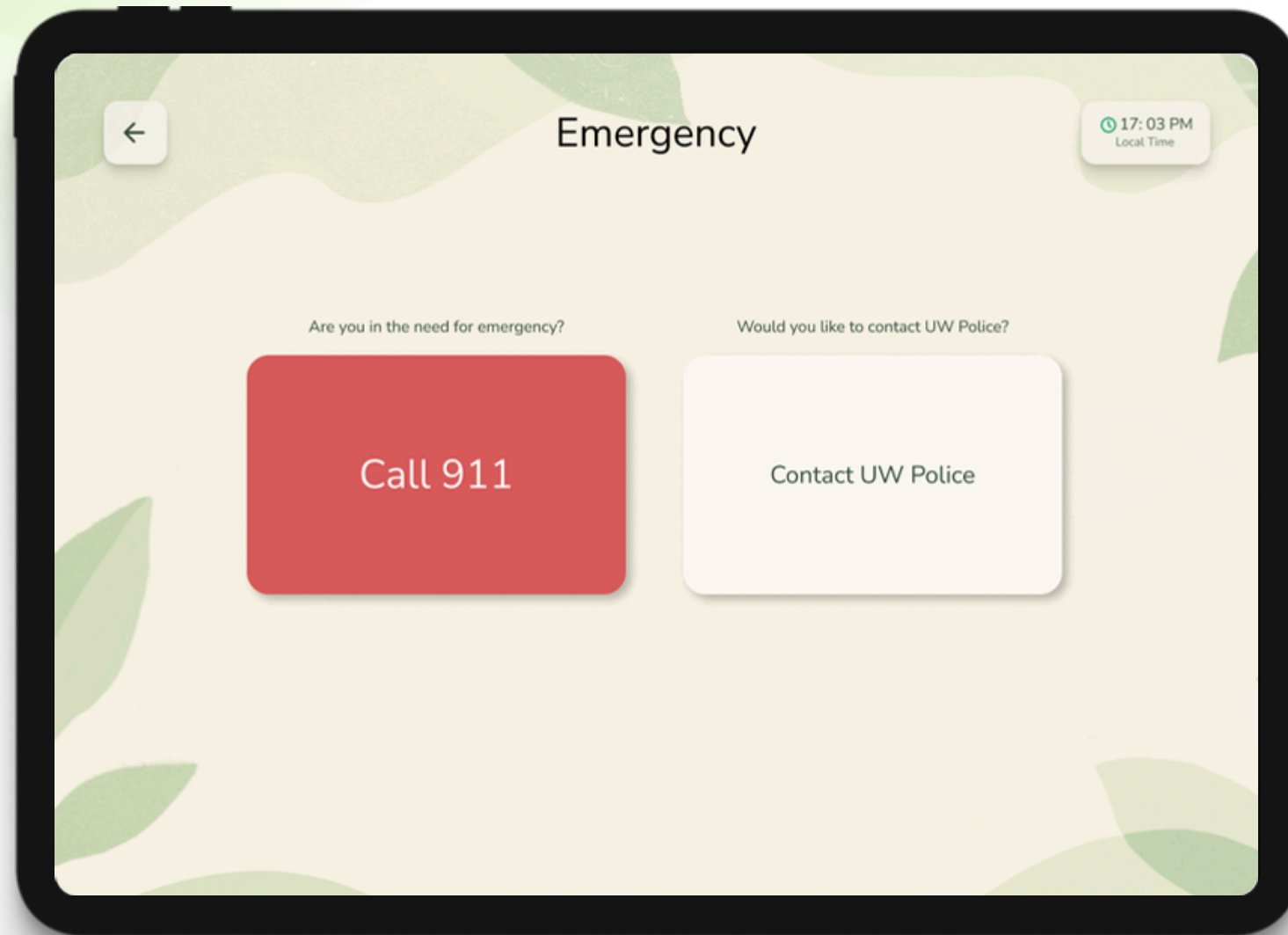


## Voice Assist

Voice assist directly supports users with visual impairments, temporary vision limitations, or users navigating the pod in low-light conditions. It also benefits users with limited mobility by reducing the need for repeated physical input.

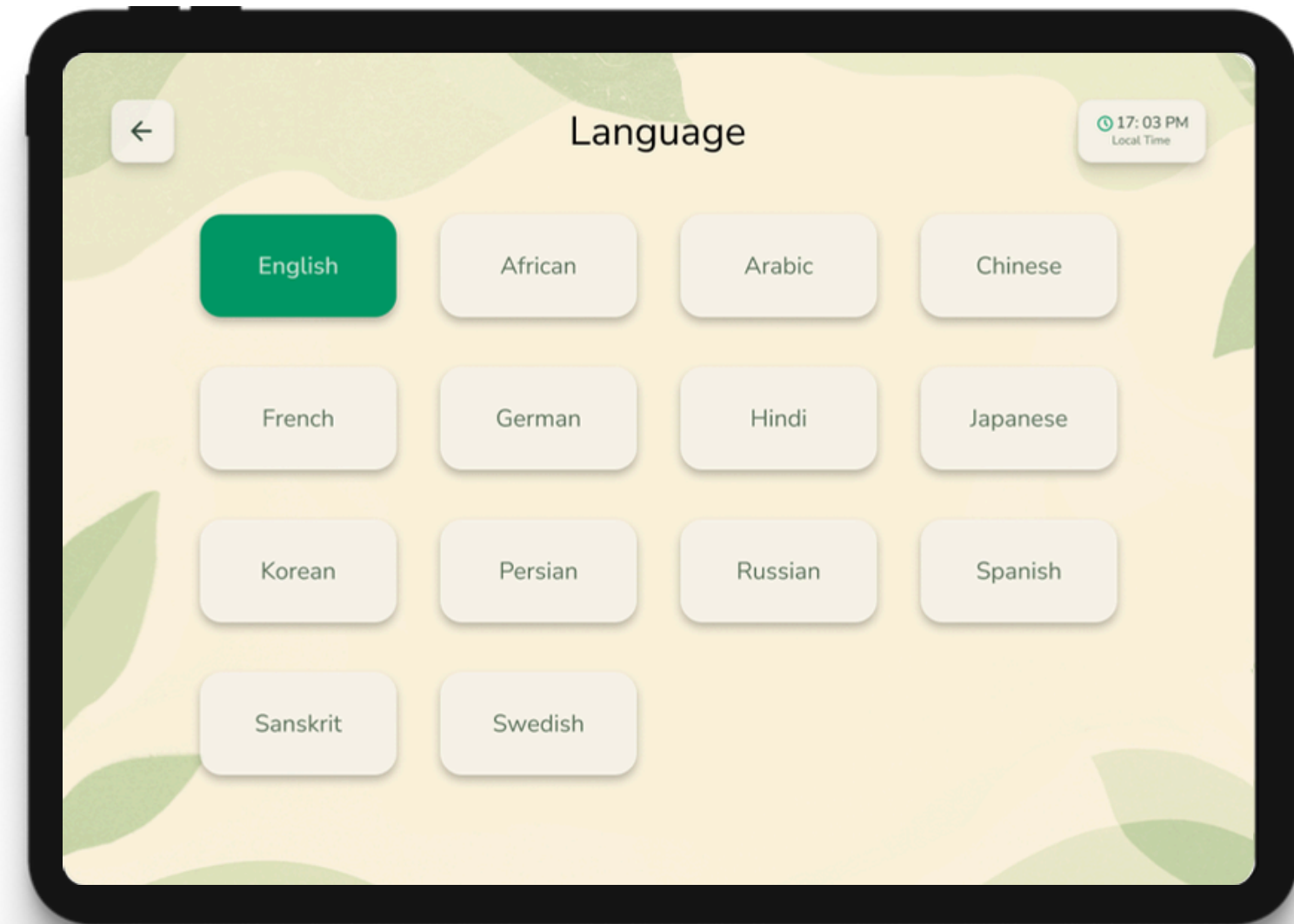
[Link to Figma Prototype](#)

# KIOSK/TABLET INTERFACE: Accessibility and safety integration



## Security and Emergency

Safety is critical in any enclosed, private environment. Usability testing revealed that users need strong emotional reassurance that they can exit at any time. Emergency features reduce anxiety and increase trust in the system, especially for neurodivergent users, individuals with panic disorders, and those using the pod alone at night.



## Language

Multilingual support ensures that non-native English speakers can understand safety instructions, pod rules, and interface options. The language panel allows users to select their preferred language for on-screen text and key audio prompts, reducing cognitive load and promoting equitable access for international and multilingual students.

[Link to Figma Prototype](#)

# PRIVACY CONSIDERATIONS



The TRU Wellness Pods are designed first and foremost as a space of safety, dignity, and emotional privacy. For many students, meaningful moments of personal care, such as crying, pumping breast milk, praying, decompressing, or taking confidential Zoom calls, often need to happen while away from home. Yet suitable private spaces on campus are limited, inconsistent, or stigmatized.

By offering an enclosed, sound-insulated, and reservable environment, the pods empower users to step away from public spaces without judgment. Whether someone needs space to regulate their emotions after a difficult exam, pump in comfort, attend a private therapy session, or reconnect with family through a secure video call, TRU supports these deeply human needs in a respectful and inclusive way.

Ai generated renderings

# DESIGN DECISIONS AND RATIONALE

Artifact	Description	Design decisions	Alternatives considered	Final choice	Implications
<b>Physical pod specs</b>	Modular pods offering quiet, restorative spaces for students and staff. Designed for relaxation, meditation, or short naps.	Use acoustic insulation, calming colors, and modular furniture to support privacy and comfort. Use accessibility-first principles, in-line with our user research to make all features accessible.	Fixed relaxation rooms, outdoor pavilions, soundproof booths.	Modular acoustic pods with adjustable lighting and ventilation.	Provides flexibility in installation, ensures privacy, and encourages regular use in different campus zones.
<b>Digital interface</b>	Interactive screens and mobile integration enabling users to control environment and learn wellness techniques.	Touchscreen interface synced with a student booking app. We wanted to incorporate screen reader enabling, voice assistants, language accessibility, and sensory accommodations.	Wall control panels, voice-activated systems, or QR code access. We plan to integrate this with the MyUW portal for easier access.	Minimalist touchscreen with connection to kiosk in the pod.	Simple user experience improves engagement and personalization; reduces maintenance complexity; very inclusive for users.
<b>Booking system</b>	Ensures fair access and optimal use through a digital scheduling platform.	Integrate with existing campus app or student portal.	Standalone kiosk booking, staff-managed schedule, first-come access.	Integrated online booking through campus app with 30-minute time slots.	Streamlines use, prevents overcrowding, and gathers usage data for future improvements.
<b>Artifacts/ features</b>	Elements that promote sensory well-being and calm.	Include natural materials, ambient sounds, green elements, and mindfulness prompts without overstimulation.	Overly minimal décor or tech-driven environment.	Blend of natural textures, aroma diffusers, and ambient soundscapes.	Enhances multisensory relaxation and aligns with biophilic design principles.
<b>Accessibility friendly design</b>	Inclusive space ensuring access for all physical and cognitive abilities.	Universal design approach with adjustable furniture and tech accessibility features.	Separate pods for accessibility needs, limited size variation.	Inclusive pods with adjustable seating and screen-reader compatible interface. Accessibility features were implemented successfully.	Promotes equity and inclusivity, reflecting campus diversity and compliance with accessibility standards. We received feedback that language consideration was a great use-case.

# FUTURE SCOPE

## COMMERCIALIZATION

- The pod system has promising commercialization potential for universities, corporate campuses, airports, and healthcare waiting areas.
- The tangible benefits (stress reduction, privacy, sensory comfort) and positive usability findings support opportunities for subscription-based deployments or B2B leasing models.
- Modular pod designs can be mass-manufactured and transported for rapid installation.

## FEASIBILITY

The prototype demonstrates high feasibility:

- Components (massage chair, lighting, scent modules) are commercially available.
- Students understood and navigated the system easily, confirming adoption likelihood.
- Safety and hygiene requirements are manageable with existing protocols, such as simplistic 'gym'-based rules to clean up after use.
- The main feasibility considerations involve electrical load, ventilation, and campus safety compliance.

## LIBRARY COLLABORATION

Given that usability testing was partially conducted in library study spaces, future rollouts could involve:

- Pods placed strategically near quiet zones on the upper floors of the library for maximized user adoption.
- Co-design wellness-study hybrids (e.g., deep-focus pods).
- Library-driven booking integration with existing room reservation systems.

Libraries can become the central hub for academic wellness, with pods extending current services. We are excited to share that we are collaborating with an existing Odegaard library project to make it more accessible to sensory impaired individuals.

## SCALABILITY

The design can scale through:

- Modular pod architecture allowing replication across campus buildings.
- Cloud-based booking systems supporting multi-location management.
- Optional low-cost versions (e.g., no massage chair, lighter materials) for budget-restricted institutions.
- Variation in pod themes (Greenery Room, Sunlight Room, Quiet Nap Room) to meet diverse mental wellness needs, subject on budgetary constraints.

## FUTURE DESIGN IMPLICATIONS

As the wellness pods grow in adoption, we believe that, as designers, we must anticipate concerns around privacy, safety, data security, and misuse of enclosed spaces. These are some concerns that we plan to address in future work:

- Fully private pods without windows can raise anxiety around personal safety, monitoring, and emergency access. To address this, we could integrate non-invasive presence sensors, emergency overrides for staff during true emergencies, and transparent policies on when staff can intervene.
- Digital interactions (e.g., booking history, wellness mode usage) should follow strict privacy practices. Using anonymized session data and limiting access to personal information, or UW-based usage would be ideal.
- Additionally, safety protocols need to address the risk of prolonged sessions, inappropriate use, or medical emergencies through timed alerts or wellness check-ins. We plan to limit booking only to 1 hour per user to address this issue.
- Finally, for scent, lighting, and sound modules, allergy-sensitive and neurologically inclusive alternatives must remain available to ensure universal accessibility.

Together, these considerations will ensure that the pods remain both safe and trustworthy while maintaining user comfort, autonomy, and wellbeing.

# DESIGN APPENDIX

## LOGO



## TYPEFACE

Nunito Sans Regular

Nunito Sans Semi-bold

Nunito Sans Bold

## COLORS

### Primary color



B4C59A



A5B690



71855D



D8E4C8

### Background color



F7F4ED

### Neutral



E3E9DD

### Functional color



009966



F8AB58



D85A5A



A7B4AC

### Text color



344A3B

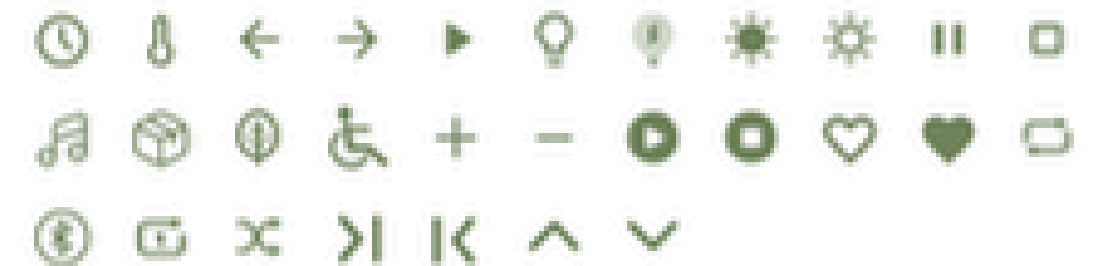


5B715B



A9B7A5

## ICONS



# REFERENCES

- Competitive product survey from google reviews and generic web-scraping.
- General well being is linked to sunlight exposure
- Research on nap pods
- Studies by NASA on nap pods

Other articles for academic references, which informed our early user research:

- <https://www.growup.green/blog/extensive-guide-to-biophilic-design>
- [https://academic.oup.com/intqhc/article/33/Supplement\\_1/37/5928348?login=false](https://academic.oup.com/intqhc/article/33/Supplement_1/37/5928348?login=false)
- <https://pmc.ncbi.nlm.nih.gov/articles/PMC11638186/>
- <https://pmc.ncbi.nlm.nih.gov/articles/PMC6315266/> <https://adaptoregon.org/news/news/pieces-of-prevention/spotlight-on-seasonal-depression-in-the-pacific-northwest/>
- <https://dl.acm.org/doi/10.1145/2348144.2348183> <https://humanfactors.jmir.org/2025/1/e66558>
- <https://pmc.ncbi.nlm.nih.gov/articles/PMC8204720/>
- <https://www.ncbi.nlm.nih.gov/books/NBK568745/>

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## UNIVERSITY OF WASHINGTON

HCDE 518 A instructor: Douglas Pyle  
Teaching Assistant: Hyewon Suh

## OUR TEAM

Ranjitha Rangaswamy  
Grace Huh  
Willa Wei  
Maxine Tang

TRU, Team 8: HCDE Section A  
December 10<sup>th</sup>, 2025