

MapWrap

DESIGN BRIEF

Design an interactive museum navigation system that addresses the challenge of low engagement with traditional maps, seeking to enhance the user experience within the museum environment.

User Profiles

- Influencers (20-35 y.o.), like taking pictures and videos for social media, entertaining and social, detail oriented - like making lists of places to go, like showcasing content. Prefer following specific routes that people are interested in and showing them on social media.
- Tourists and cultural explorers (36-60 y.o.), cultural enthusiasts, enjoy travel experiences that go beyond typical tourist attractions, appreciates having detailed information about historical and cultural sites, appreciate technology for navigation but prioritize human interaction.

Alternative Ideas

- Haptic gloves
- Jacket helping with guidance
- Smart watch
- All of these combined with AR glasses to have an immersive experience

Key Ideas

- Transform the 2D map into a 3D representation to enhance the spatial experience.
- Dynamic map navigation through pinch and move gestures, voice commands, and interactive clicks and swipes.
- Social media connectivity and personalization.
- User-specific navigation modes and situational adaptability.

Key Functions

- Museum navigation.
- Personalized routes based on selected exhibits, and multimedia presentations for information about them.
- Normal mode for adults / child mode for children.
- Navigation through voice commands to points of interest (exits, restrooms).
- Sharing on social media

Critical Issues

- Some interaction methods (for example the pinch and move movement) were wrongly implemented in the beginning
- Issue of how to show personalized routes and how to integrate the social media connectivity (for the influencer)
- Situational issues, for example when the museum is too crowded how should the system respond
- 3D or 2D representation in specific situations

DESIGN CONCEPT

A 2D digital map which can transform into an interactive holographic 3D projection for museum navigation. Users can engage and interact with the map through simple, intuitive gestures, like grabbing and lifting the 2D map to transform it into a 3D experience. The system provides visual directions and enhances the user experience with multi-sensory feedback, integrating sound, light, and vibration for a dynamic and intuitive exploration.

Personas

- Peter is a 42-year-old history professor from Norway. He is not just a passive observer but rather an enthusiast for the exploration of world cultures, planning to visit the renowned museums of Paris, eager to experience the rich tapestry of art and history. He also enjoys creating modern learning content for his students.
- Inanna, aged 28, is a vibrant Instagram influencer who specializes in cultural and historical content, known for her vivid storytelling of museum visits across the globe through photos, videos, and anecdotes.
- Charlie is a spirited 6-year-old with a curious mind, often accompanying her father on his cultural outings, always on the lookout for something captivating and playful.

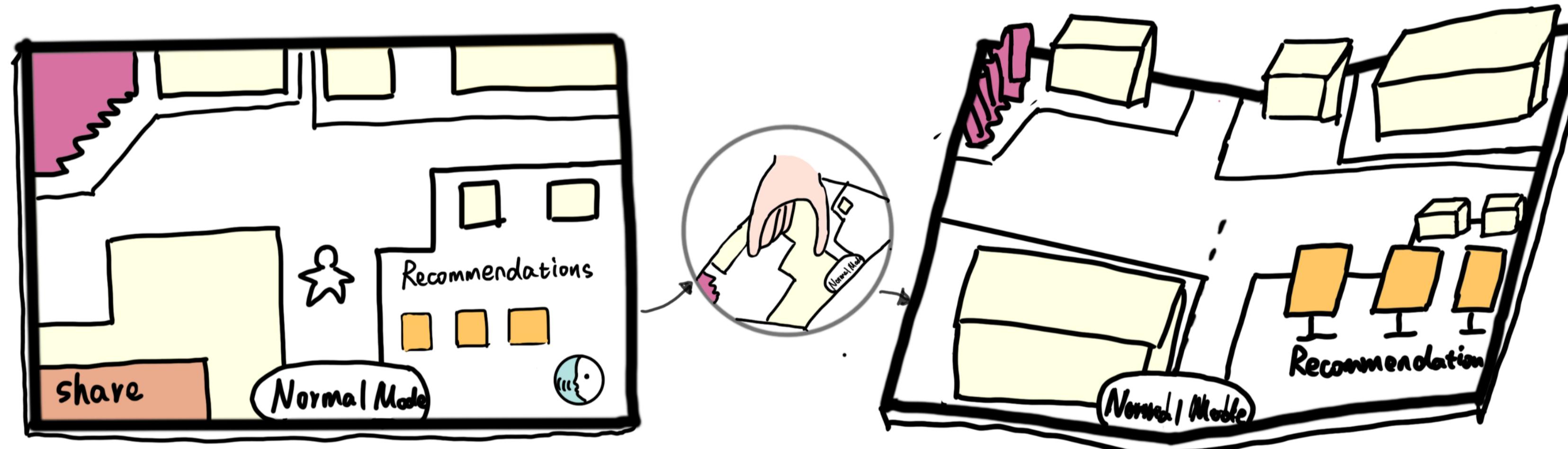
Key Interactions

- Grab & Lift: Transform the 2D map into 3D projection, enhancing the spatial experience.
- Pinch & Move: Rotate the map to view the layout from various perspectives.
- Zoom: Utilize zoom functionality to scrutinize the details of specific museum locations.
- Voice Command: Implement voice recognition for efficient navigation to commonly requested points of interest, such as exits or restrooms.
- Interactive Click: Select different exhibits on the map to bring up detailed information and add notes.
- Swipe to Share: Share your route and museum experience on social media with a simple swipe gesture.

Specific Improvements

- Pinch & Move: The map auto-rotates meanwhile keeping the structure fixed.
- Child Mode: A cartoon character pops up to show kids where to turn.
- Traffic Detection: The system not only warns of crowded areas but also explains why there's a delay.
- Personalized Routes: Tap on famous paintings to create a custom tour that ends at the nearest exit.
- Video Improvements: Zoom, voice commands, and make close-up shots.

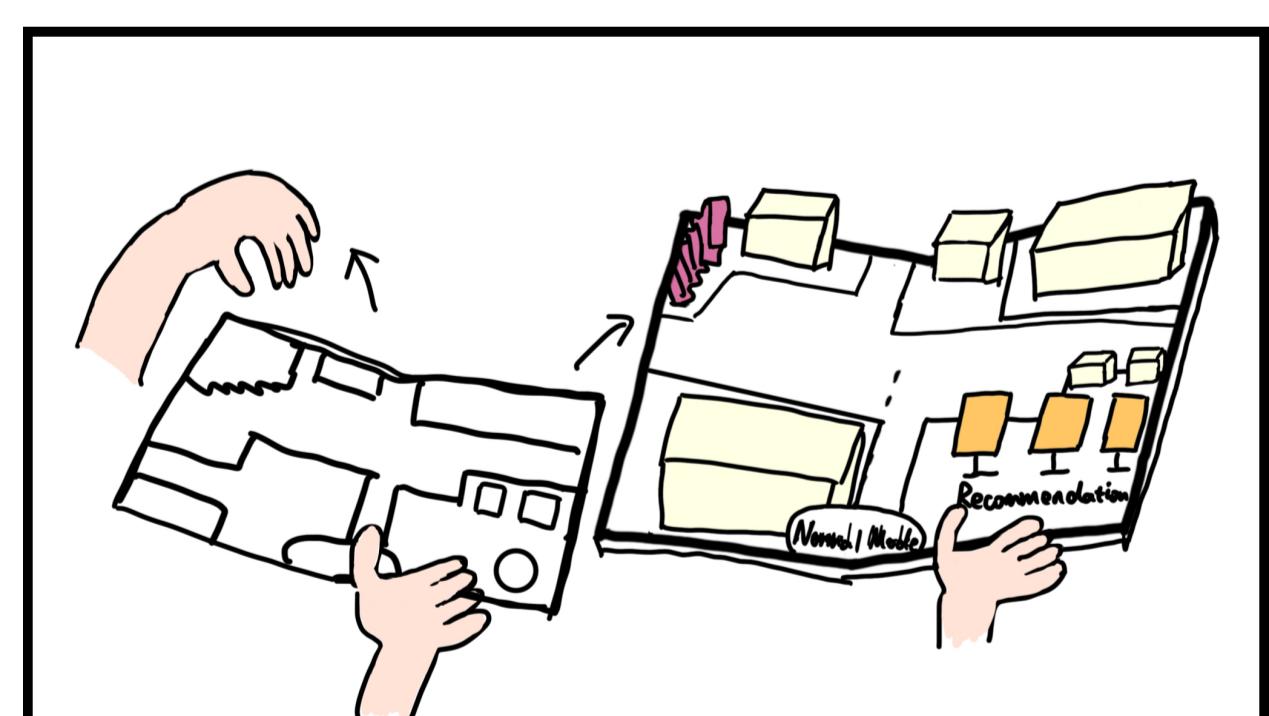
Design Diagram



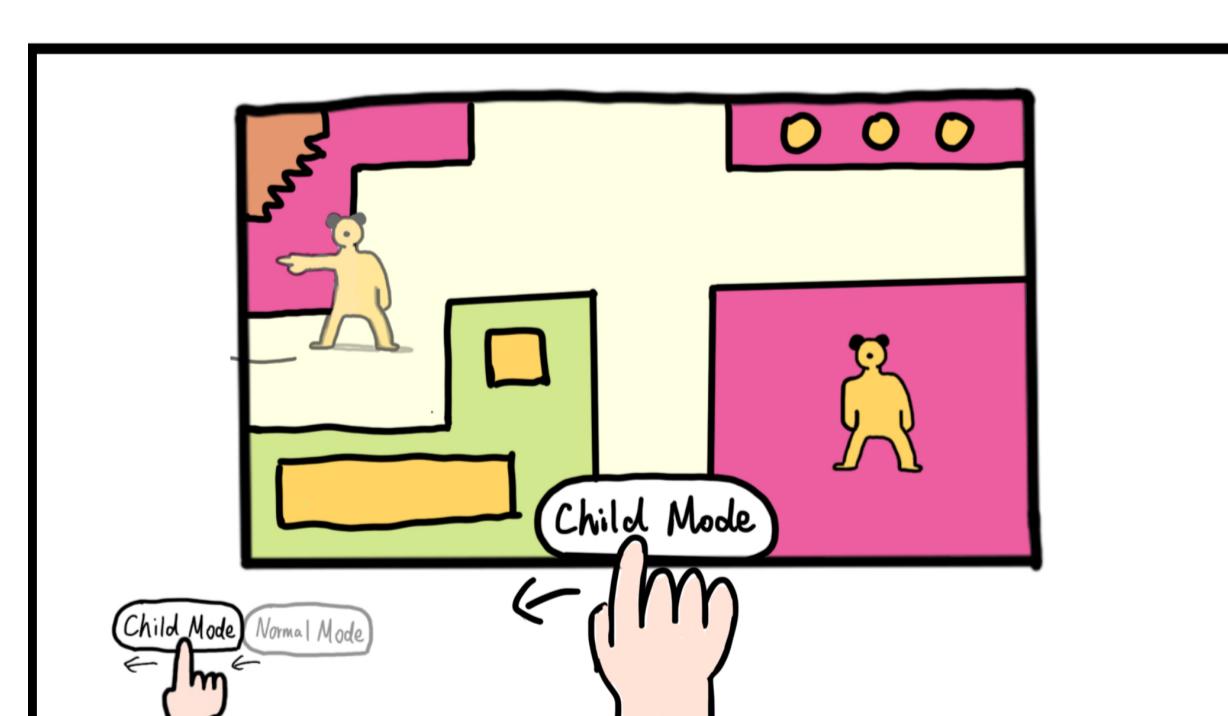
Storyboard

Time & Place:
Sunday afternoon at the Louvre

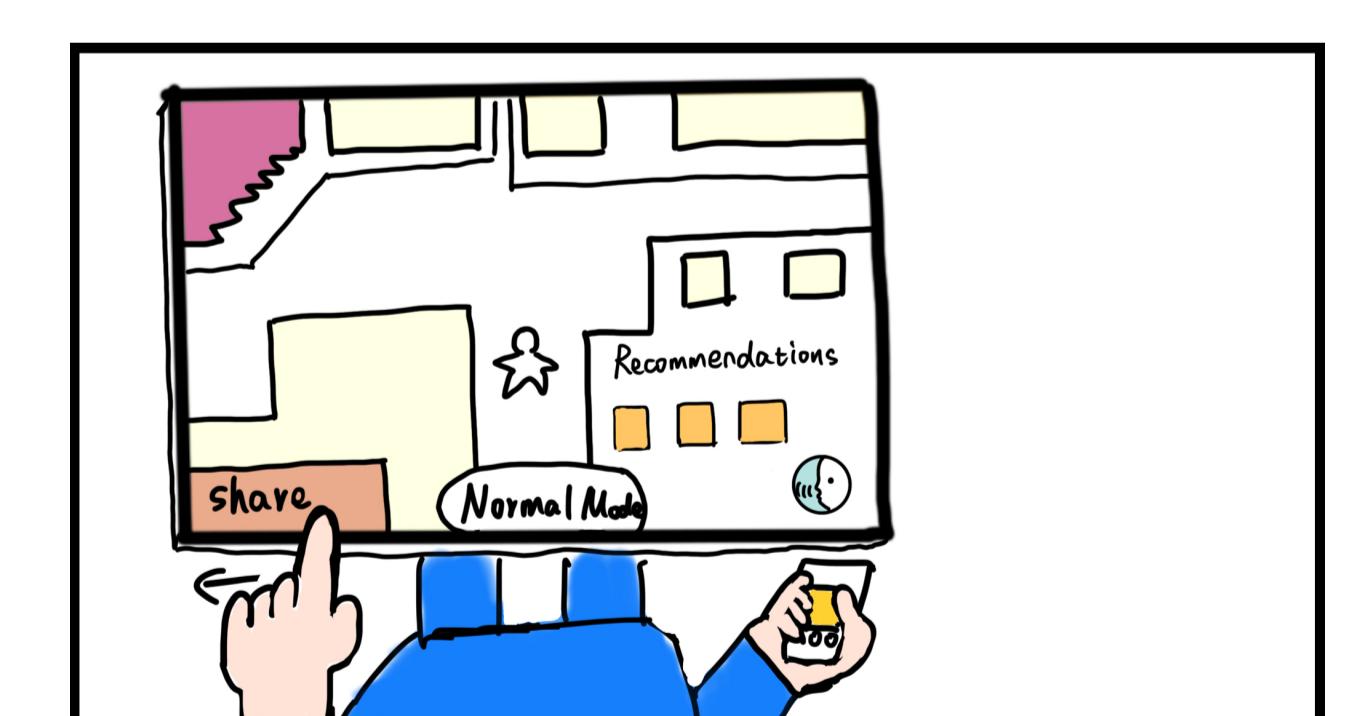
Context:
Peter and Charlie arrive at the Louvre and take a paper map to move around while Inanna is already inside the museum with a digital map in her hands



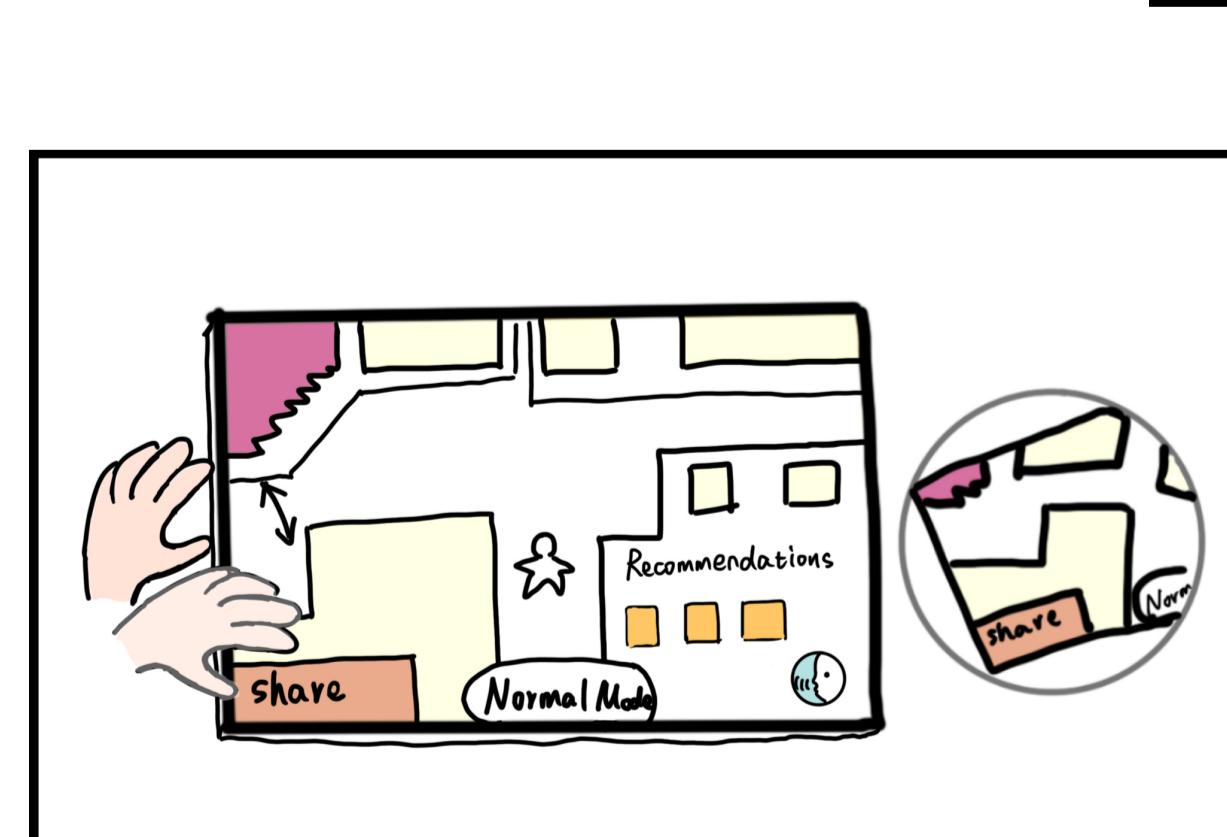
Inanna grabs and lifts to transform 2D into 3D Hologram map



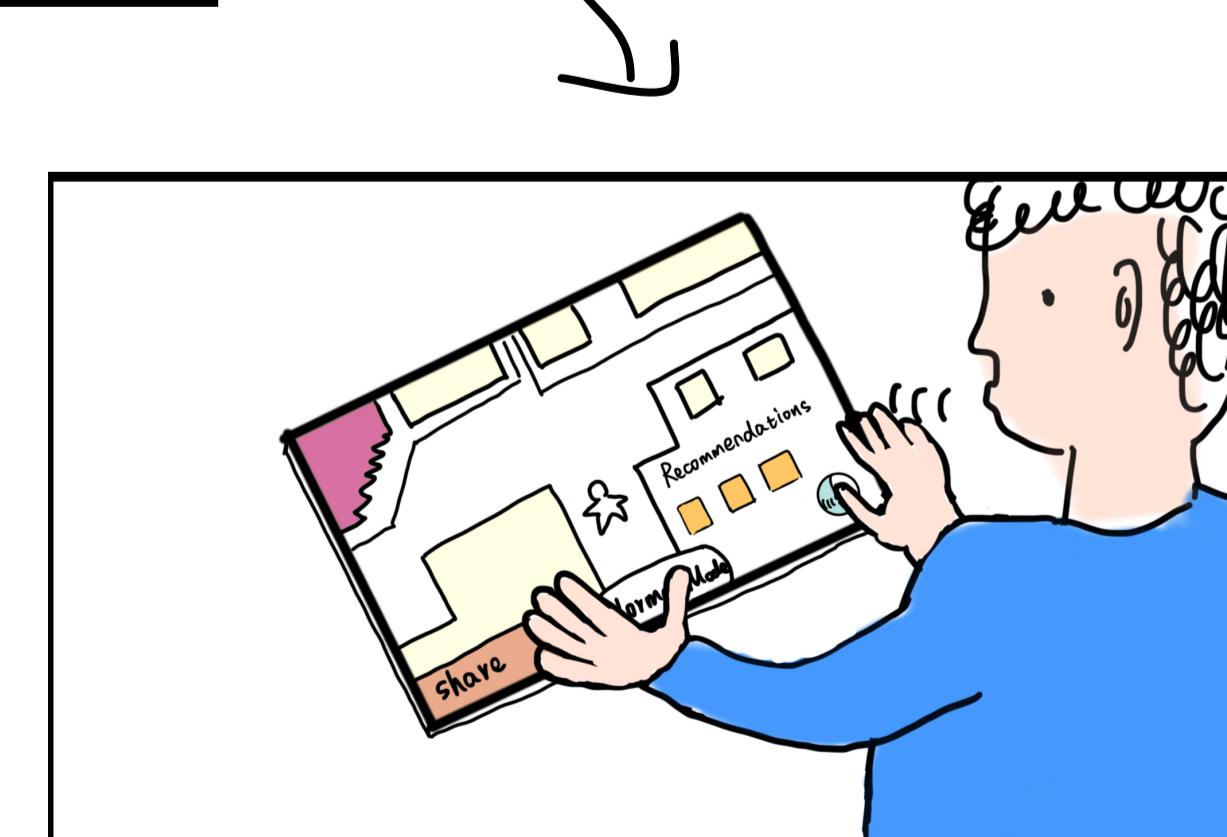
Peter swipes to change the mode from normal mode to child mode



Inanna swipes to share the routes and notes of exhibits in social media



Peter pinches and moves for the map to rotate and see different angles



Peter uses voice command for finding the way to a specific location