

## Introduction

Sensory Morning is a program developed by the Walters Art Museum to allow children with Sensory Processing Disorders experience the museum.

While the event itself is well-liked by both families and children, there are a number of problems when trying to get this audience to interact with the museum outside of this event.

## Current Problems

1. Low retention rates. 50% of registered participants do not attend the events. In addition, participants usually do not visit museum outside event
2. Validity of educational lesson: are the children learning, or are they just playing?
3. Limited interaction with museum: interacting with laminated plastic copies of exhibits vs surroundings

## Design requirements

After conducting a literature review, these are the requirements most applicable to the project:

1. Repetition of educational lesson using multiple methods
2. Incorporating specific examples into more generalized knowledge
3. Ability to toggle sensory stimuli on/off
4. Tactile feedback based on user input
5. Individualized play experience for user

## Proposed solution

The proposed mini-game solution will consist of three phases. In the first phase, the educational lesson that will be taught will be presented in a traditional text format.

The second phase will consist of testing the user's knowledge. Two mini-games will be implemented: one that tests the specific emotion that is displayed on a painting, and one which tests whether the user can understand which painting shows which emotion.

The last phase will consist of personalizing the user's play experience. In this, the user is asked to draw what they feel an emotion looks like. The user will draw what they think that emotion is, and then this face will be super-imposed on the painting. Then, the mini-game about identifying emotions will be re-played, but with the user's faces imposed on to the painting.

## Future work

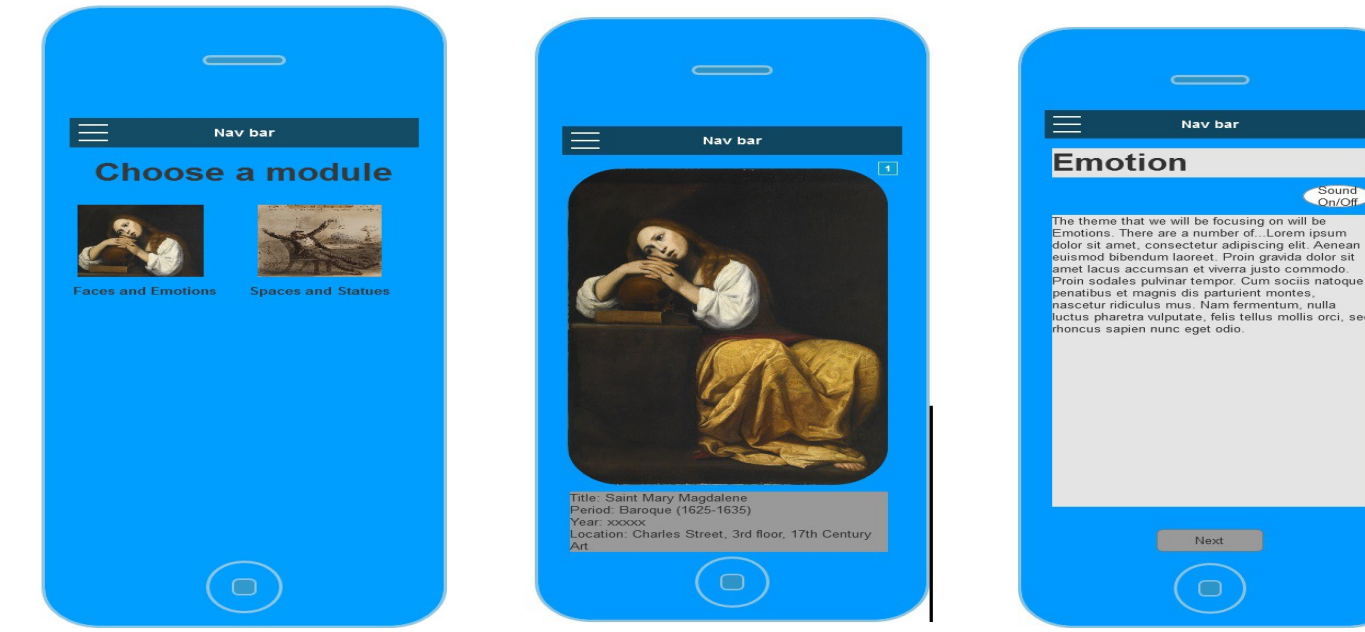
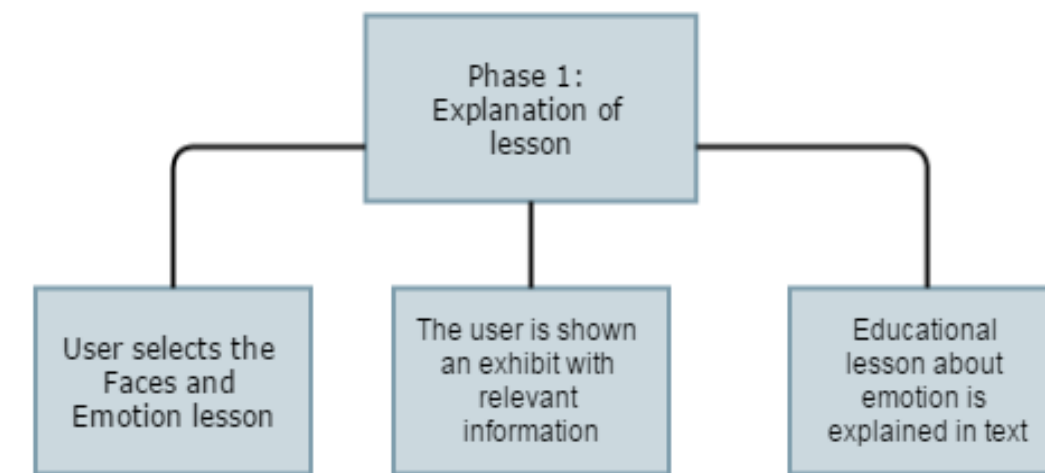
Major upcoming milestones:

- Polishing phase 1 and 2 of the project
- Assessing if Phase 3 can be implemented in a timely manner
- Incorporating ideas/experience from previous Sensory Morning into currently existing work
- Evaluate current design

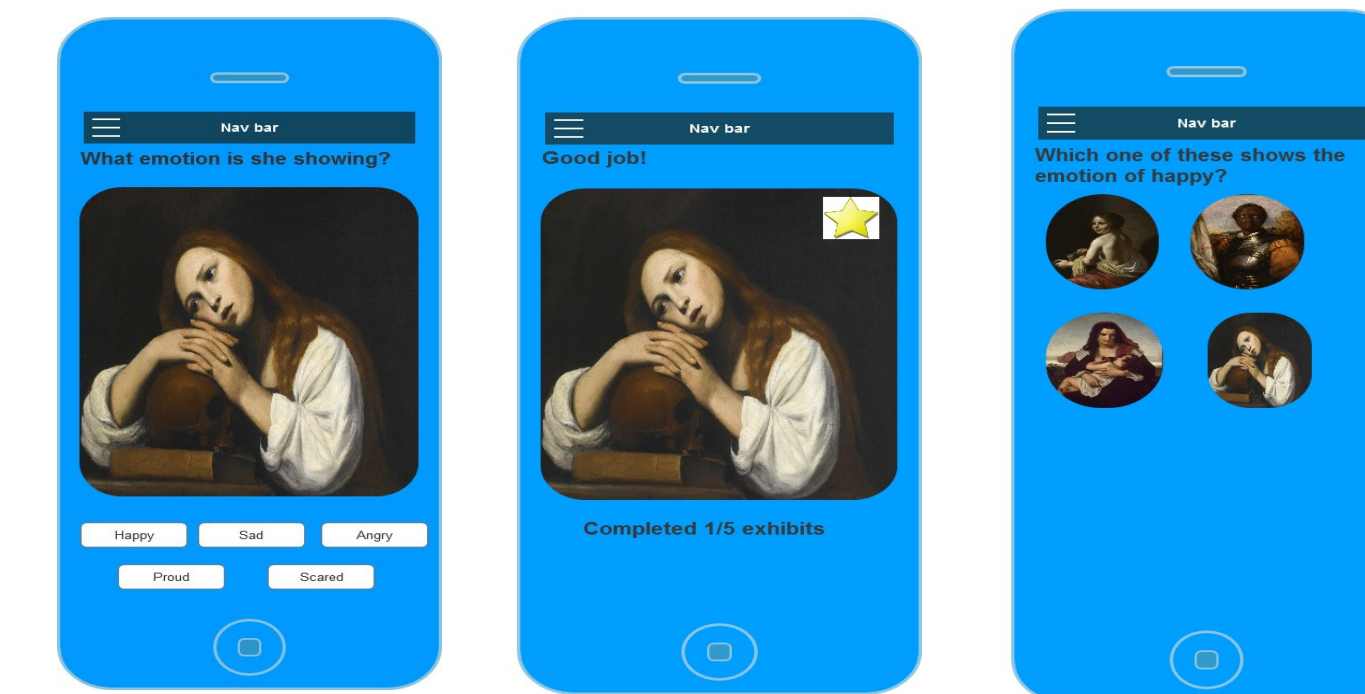
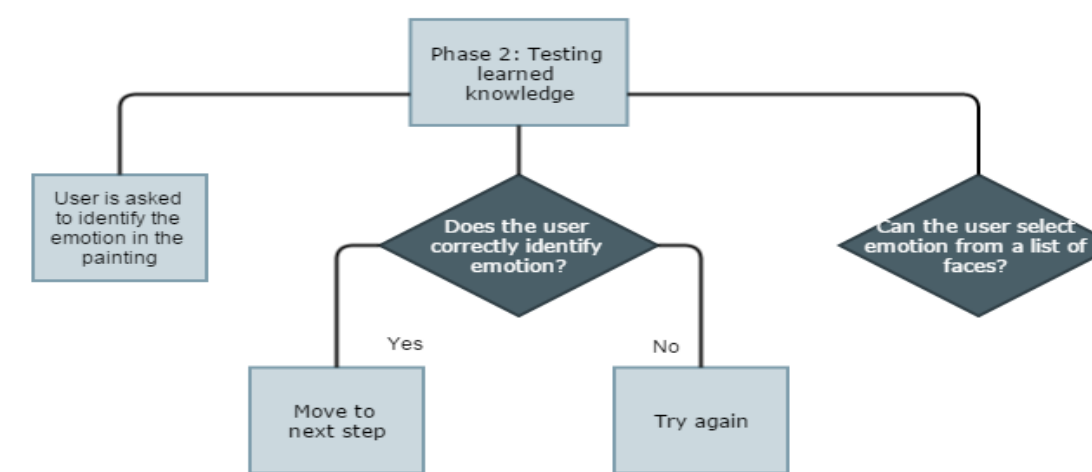
## Acknowledgements

I would like to thank both the Walters Art Museum and Ashley Hosler for providing me with both insight and a chance to volunteer for the Sensory Morning program. I would also like to thank the volunteers from Kennedy Krieger Center for Autism who helped me with strategies for game-based instruction.

## Phase 1



## Phase 2



## Phase 3

