Learning to play: using mini-games to educate children with Sensory Processing Disorder Christopher Wong (cwong@umbc.edu), Mentored by Ashley Hosler

Introduction

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

While the event is well-liked by both children and families, there are problems with limited engagement and interaction.

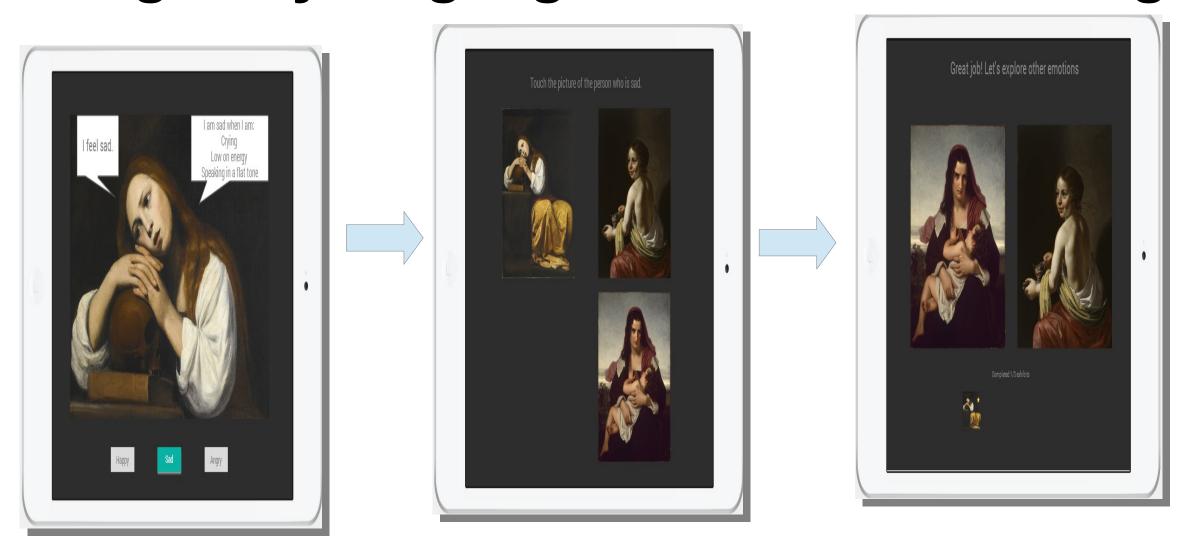
Current problems

- 1. Retention: less than 50% attendance, attendees do not visit the museum outside of the event due to lack of resources.
- 2. Validity of educational lesson: are the children learning anything while playing?
- 3. Limited interaction with museum: Activities are marginally related to exhibits

Introducing the concept/Scavenger Hunt mini-game



Explaining body language/Touch-based mini-game



Word-match mini-game



Proposed solution

The proposed solution will consist of three parts. The first part will introduce the concept of emotion. The user is asked to find the painting within the museum, and then figure out what emotion is being displayed.

The second part will explain the emotion as well as what body language might be associated with it. Then, the user is asked to touch the painting displaying these emotions.

The last part will explain what a person might say when they feel a certain emotion. The user will then play a matching game to reinforce the concept.

Current/Future Work

After conducting a literature review of design requirements, I created the prototype (left) with input from the Walters Art Museum.

I tested the prototype on Sensory Morning on December 14th, and it was received with mixed results. Additional refinement for multi-sensory stimuli and motivation is necessary.