EE/SE/CPRE/CYBE 492 – sdmay24-17

Engineering Art

Biweekly Report #2

Report Period: Jan 27-Feb 9

Client: Dr. Rachel Shannon

Faculty Advisor: Dr. Rachel Shannon

Team Members:
- Alexandra Whitmer – Team Lead, Frontend Developer
- Karandeep Sandhu – Communications, Hardware Engineer
- Zheyuan Zhang – Lead Hardware Engineer
- Grant DeWaay – Software Developer
- Seyedehbahareh Hashemimovahed – Research, Embedded systems
- Austin Krekula – Lead Cyber Security Engineer

Past Weeks Accomplishments:
- Brainstorming of ideas on how we can implement Touche into our project.
  - Generated roughly 20 ideas on possible implementations ranging from ideas focused on ways to improve urban infrastructure and creating advanced personalized learning.
  - We have narrowed down the ideas to 4 which are the musical instruments where you can change the sound or pitch based on where on the fabric you poke. A set of interactive touche tiles that turn into a learning experience. A fabric map of a town which allows us to touch specific areas and through touche learn more about them. A solar power charging station that utilizes touche.

Tasks to Complete:
- Write pitches for potential projects.
  - Ally: Touch sensitive solar powered charging station
  - Austin: Banana music – Touche touch sensitive sound board.
  - Grant: Interactive block play for toddlers
  - Karandeep: Fabric Map – Uses Touche to interact with specific areas on the map and find out information.Decide with Client on project to work.

- Zheyuan – Debug Touche code and discover why it is stalling after a few seconds.
- Bahar – Research other touch capacitive methods

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Alexandra Whitmer	Created ideas and added them to our Figma board, parts pickup/dropoff, research on Touche/prototype ideas	3	6
Karandeep Sandhu	Created ideas for figma board and conducted research on touche implementation. Worked on weekly report.	3	6
Zheyuan Zhang	Order electronic components. Assembling electronic components. Develop Arduino programs. Develop a python program for serial communication and generate waveform graphs. The debug graph generates lag issues.	3	6
Grant DeWaay	Moved collection of tech items over to Coover's senior design room, created the figma page, played around with the tech	W1:6 + W2:6	12
Seyedehbahareh Hashemimovahed	Worked on idea generations for our next iteration on Figma board. Researched different touch capacitive methods we might be able to use for the project.	3	6
Austin Krekula	Brainstormed project ideas. Added project ideas to Figma.	3	6

Plans for Coming Week:

- Finalize a prototype with the client
- Play more with Touche
- Start implementation of Touche and hardware