

EE / CprE / SE 492 – sdmay23-48

Arduino Hands-on and Design Resources / Tools for Designers

Week 3-4 Report

2/19/2023 – 3/3/2023

Client / Faculty Advisor

Dr. Mani Mina

Team Members:

Joe Kroeger – Client Interaction

Kyle Todd – Team Organization

Zhengyi Shen – Project Management

Tsung Hsuan Ho – Testing

Past Week Accomplishments

We have started the process of planning projects for Industrial Designers to familiarize themselves with using the Arduino. We established a format of four projects that will increase in difficulty ending with an open ended project for them to create. Each project will have tiers of difficulty depending on the user's comfort level.

We continue to help the 491 team to give them a stronger start than we originally had. Our advisor feels we are helping them to overcome the starting obstacles.

Contributions

Joe Kroeger – 6hrs

- Met with team and discussed projects to create.
- Met with advisor to discuss progress of our team and opinions of 491 team.
- Met again with students from 491 class who are working on the same project. Reinforced main ideas to focus on for their project.
- Worked on team documents.
- Worked on ideas that might interest Industrial Designers.

Kyle Todd - 6hrs

- Met with team to go over possible project topics to pursue with the ID Students

- Looked at a provided document from ID students that went over the learning process of ID students
- Played around with the Arduino figuring out different ways to teach these projects to ID Students

Zhengyi Shen - 5 hrs

- Met with team to discuss about project, what to do going forward
- Worked on some beginner / intro arduino coding documentation that could help the Industrial Design students on custom functionality with parts
- Tested out the Arduino more to see what exactly needs to go in code wise for parts to work starting from scratch vs. using provided template code

Tsung Hsuan Ho - 4 hrs

- Tested some entry level arduino projects/documentation hardware wise (where wires should go and how to organize/remember which wire is which).
- Writing down journals for how to simplify hardware connections so it doesn't overlap too much or confuse users when trying to debug.

Plans for Next Two Weeks

We plan to finalize the details of the projects we want to create. From there we should be able to start working on our main deliverable. We will also meet with more representatives of Industrial Design to get their opinions.