
EE/CprE/SE 491 WEEKLY REPORT 4

02/20/23 – 02/26/23

number: sdddec23-07

Project title: Arduino Hands-on and design resource phase II

Client &/Advisor: Mani Mina

Team Members/Role:

Member 1: Chin-Yen Liang, Project Lead

Member 2: Mark Sandstrom, Soft Research and Development

Member 3: Kyle Thompson, Technical Research and Development

Member 4: Mohamedelbashir Eltigani, Head of Communications & Scheduling

○ **Weekly Summary:**

This week, our team walked through the Industrial design building and took notes of our observations throughout the building. We discussed things like, their process, and gained a glimpse into what exactly industrial design is and who industrial design students are. We spent time coming up with definitions as a group. We also met with Joe to gain a grasp of what they went through as well as some of the challenges they faced. We also met with Rachel in order to ask some questions and gain more information regarding the project, industrial design, their class work, and the differences between engineering and Industrial design.

○ **Past week accomplishments**

- Kyle Thompson: This past week, I worked on doing primary and secondary research, I went and visited the Industrial Design building along with the team to do some more research on the student's work environments and what type of projects they produce. This helped us understand a bit more about what industrial design is and how industrial designers think. For my secondary research, I spent some time online researching specifically Iowa State's industrial design program and its curriculum. These things should help us create better and more substantial questions.
- Chin-yen Liang: I worked on doing some more research with the team, visiting the industrial design building and design building. We looked at the different types of projects they might be producing and went through some of their design posters to gain a better understanding.
- MohamedElbashir Eltigani: I worked with the team to find new ideas for the Arduino project; we visited the Industrial design building to learn more about what the students are working on. we had a team meeting with Rachele, and she was very helpful in directing our thoughts

because we were focusing on the technical aspects of the project without thinking about the client's needs.

- Mark Sandstrom: This week I contributed in multiple meetings, one with Joe from the phase one group and another with Rachel. We talked about many things as we progressed with our project. There we discussed better questions to ask and communication errors we have had with Mani Mina. I also began secondary research on incorporating Arduino into the industrial design curriculum.

○ **Pending issues**

- Kyle Thompson: Currently we are still waiting to be introduced to industrial design students so that we may begin our next step in primary research.
- Chin-yen Liang: N/A
- MohamedElbashir Eltigani: we are still waiting to get the contact information for the industrial design coordinator. we should get the contacts from Joe or Professor Mani Mina.
- Mark Sandstrom: N/A

Individual contributions *(Creating this section is optional)*

- Kyle Thompson:
- Chin-yen Liang:
- MohamedElbashir Eltigani:
- Mark Sandstrom:

| <u>NAME</u> | <u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i> | <u>Hours this week</u> | <u>HOURS cumulative</u> |
|--------------------------|--|-------------------------------|--------------------------------|
| Chin-yen Liang | Participated in the 3 team meetings + walked through design and industrial design building for notes | 8 | 20 |
| Mark Sandstorm | Contributed to meetings with different personel, continued soft research | 7 | 20 |
| Kyle Thompson | Met with team, other team and Rachel Shannon, also continued to gather primary and secondary information on Industrial Design. | 8 | 21 |
| MohamedElbashir Eltigani | team meeting with Rachel Shannon, walked through the industrial design building, and did some research on potential projects. | 8 | 29 |

○ **Comments and extended discussion** *(Optional)*

○ **Plans for the upcoming week**

This next week, we plan to meet again with Mani, as we bring better questions to him. Hopefully, these questions are closer to what he is looking for, and he may give us contacts in the industrial design building. We also plan to begin more research into different types of kits or education for

Arduino/circuits. We plan on asking questions like why or how people were interested in electronics in the first place and see how we can use that to motivate industrial design students.

o **Summary of weekly advisor meeting**

Did not meet with Mina this week; plans for a meeting Monday the 27th. We did meet with Rachel this week, however, and she gave us a lot of great ideas in terms of Arduino for education, industrial design thinking, and design thinking in general. We also discussed our end goal or primary goal in this entire project.

Use case diagram

Sunday, February 26, 2023 1:48 PM

