# **EE/CprE/SE 491 WEEKLY REPORT 2**

01/16/23 - 12/05/23

number: sddec23-07

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 group planned out meetings with not only our Client and Advisor, but also with the group who are currently working on phase I of this project. We met with the phase I group on Friday 2/10/23 where we asked them questions about getting started on the project and how to avoid certain mistakes.

#### Past week accomplishments

- Chin-yen Liang: This week i began my own research into the needs and exactly what industrial design is. Since the end goal here is designing a product for those people, we need to start to understand them first. If we don't have the customer in mind when designing projects and pushing technical knowledge, we might be quite lost. I mostly just looked at industrial design programs in the country, and looked at types of roles and jobs that industrial designers might be placed in. This research will continue on for the next few weeks.
- Mark Sandstrom: This week, I attended a meeting with the phase one group and determined that the students working on these projects are students that do not have much, if any, technical experience. When working with these Arduino and there projects, they may not be very interested or familiar with them. It would be better not to scare them with overly difficult projects at first but instead slowly make them feel comfortable coding. I began researching project ideas and the best ways to implement them.

- Kyle Thompson: This week I began to investigate some possible project ideas after
  we gained some insight from the phase I team about the knowledge level of those
  we are preparing these Arduino projects for. I investigated some basic servo projects
  that could help them in their design work, like making a crane arm to pick things up
  or making a swivel for a solar sensor that can help it move to a better sunlight
  position.
- MohamedElbashir Eltigani: This week, we conducted a meeting with the Aduino hands-on group phase I. The meeting let us learn more about what we should think in the upcoming weeks and what the other group has reached. I am researching potential projects that the industrial design students will benefit from. We learned from the meeting that the industrial design students are not familiar with Arduino, so we plan to make it interesting to them.
- Pending issues (If applicable: Were there any unexpected complications? Please elaborate.) Team Member 1: Worked on... Team Member 2:

Chin-yen Liang: N/AMark Sandstrom: N/AKyle Thompson: N/A

 MohamedElbashir Eltigani: we informed the other group to keep up posted on their upcoming meeting; we are waiting for the first meeting with the industrial design students.

## o **Individual contributions**

<u>NAME</u>	Individual Contributions (Quick list of contributions. This should be short.)	<u>Hours this</u> <u>week</u>	HOURS cumulative
Chin-yen Liang	Research on what industrial design is. Other research on arduino and it's capabilities	4	7
Mark Sandstrom	Research, Meeting with phase 1 group	4	9
Kyle Thompson	Research, Question generation for phase I group	4	7
MohamedElbashir Eltigani	communication, research	5	17

# Comments and extended discussion (Optional)

Feels like currently it's been hard to get a hold of prof Mina, also it seems that we will be spending the entire semester learning about industrial design as well as doing research on what kind of projects we might be doing. It seemed when we talked with the other team they have not done much either in terms of creating an actual project and it has mostly been research so getting that expectation is nice.

Plans for the upcoming week (Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.)
 Team Member 1: Work on...

- Chin-yen Liang: This week we will be meeting with prof Mina and continue to learn more about industrial design. I will also do more research the information we might need as well as the type of projects we should begin to think about. I'll start on the empathy phase of design.
- Team Member 2: After the meeting with Mani I plan on diving deeper into what and how these projects will be implemented. I also plan to give a better look at the phase 1 teams progress to see the steps they took along the way.
- Kyle Thompson: This week, we will be meeting with Mani, and the goal is to learn more about how we will be connected with Industrial Design students and their departments. Furthermore, I plan to do more research on possible projects and not only their teaching value but also their appeal.
- MohamedElbashir Eltigani: we have a meeting with Professor Mani on Monday morning; we would like to know more about the project and the expectations for the group deliverables by the end of the semester.
- o <u>Summary of weekly advisor meeting</u> (*If applicable/optional*)

N/A

# **Grading criteria**

Each weekly report is worth 10 points. Scores will be awarded as follows:

- **8 10**: Progress for your project seems to be suitable. Documentation and hours reported by team members are adequate.
- 6 8: There is scope of improvement both in your report and your project progress. Can consult with instructor/TA after class for further inputs.
- < 6: Please talk to instructors/TA after class hours about any difficulties that you/your team is facing.

Each weekly report should be unique in that they have a unique set of supporting details for your contributions. So please do not just copy your reports from the previous week. In addition, please avoid any personal pronouns (he, she, I, you). Try to keep your reports as neat as possible.