EE / CprE / SE 491 – sdmay25-12
Pressure Sensor Patch
Week 1 Report

August 29th 2024 – September 19th, 2024
Client: BAE Systems
Faculty Advisor: Santosh Pandey

Team Members:

Aina Qistina Binti Azman - *Software Developer*
Bilal Hodzic - *Software Lead*
Nathan Turnis - *Software Developer*
Osaid Samman - *Scrum Master/Manager/Team Organization*
Sabrina Francis - *Hardware Developer*
Zane Lenz - *Hardware Developer*
Ivan Alvarado-Santoy - *Hardware Lead*

Weekly Summary

This week, the team focused on establishing foundational logistics for the project. All group members met to discuss their individual strengths and weaknesses, allowing us to form Software and Hardware subgroups to handle the app and device components separately. Roles were assigned within each group, and we collaboratively drafted a comprehensive team contract to guide our work. Additionally, a Discord server was set up to facilitate communication, and introductory emails were sent to both our faculty advisor and client to ensure alignment moving forward.

Past Week Accomplishments

This past week, the team successfully met to finalize the team contract and establish key roles and responsibilities. We focused on building a solid foundation for the project and facilitating communication channels for future collaboration. Each member contributed to establishing a clear path forward, setting the stage for more focused technical work in the coming weeks. In addition to general team activities, some members took on extra tasks:

- Osaid Samman:
    - Reached out to the faculty advisor and client.
- Ivan Alvarado-Santoy:
    - Research possible frictionless sensor types to choose from by reading peer-reviewed articles, https://ieeexplore.ieee.org/document/10175988.
- Nathan Turnis:
    - Did some overview research about pressure sensor patches - what they are & look like.

Pending Issues

We have sent out emails to both our client and our faculty advisor and are still waiting for a response. Until then, we cannot properly move forward with the project as we are missing critical details.

Plans For the Upcoming Week

- All group members:
  - Meet with the advisor and client so that we can begin our research on how to tackle the project.
- Software - Bilal, Nathan, Aina:
  - Look into wireframing/schematic tools that we all are comfortable working in. Look into version control systems that we all want to work in.
- Hardware - Sabrina, Zane, Ivan, Osaid:
  - Look into potential microcontrollers that would work for the scope of our project.