EE/CprE/SE 492 BIWEEKLY REPORT 3 Sep 27th, 2023 – Oct 11th, 2023 Group number: sddec23-19 Project title: Bluetooth-Enabled Ingestible Capsule to Monitor Gut Activity Client &/Advisor: Santosh Pandey Team Members/Role: Chase Thompson, Cutler Thayer, Tucker Thomas, Robert Zukowski

o Weekly Summary

Ordered parts for the capsule and worked together on planning the vision prototype.

• Past week accomplishments

- **Chase Thompson**: Discussed the work we have been doing separately on the vision prototype. Planned out meeting together to begin working on the vision code together. Continued working individually on the vision code.
- **Robert Zukowski**: Continued working on bluetooth firmware. Currently unable to continue until parts arrive.
- **Cutler Thayer:** Attempted to find existing rapid reading repositories and code to no avail. Looked into AI frameworks to help ease computer vision development.
- Tucker Thomas: Scheduled meeting times, helped envision test environment.

• Individual contributions

<u>NAME</u>	Individual Contributions	<u>Hours this</u> <u>week</u>	<u>HOURS</u> <u>cumulative</u>
Chase Thompson	Discussed with Cutler when we can get together to begin working together on the vision code. Continued researching vision code on my own.	3	6
Robert Zukowski	Unable to do much work because of exams, but made some progress towards ordering parts & firmware dev.	1	8
Cutler Thayer	Exams, assignments, and stress levels have caused not much to be done. That being said I looked into repositories and frameworks.	1	7
Tucker Thomas	Scheduled meeting with advisor, awaiting parts to arrive.	2	6

• Plans for the upcoming weeks

- All Team Members: Come up with a shared goal for the final prototype.
- Chase Thompson: Meet with Cutler to work on starting the vision code and the desktop application.
- Robert Zukowski: Hopefully firmware stuff comes soon so I can fully get started on testing firmware. Also will start on devboard for the image sensor.
- Cutler Thayer: Meet with Chase to get a collective computer vision code.
- Tucker Thomas: Design test environment and begin implementation of hardware.