**Weekly Status Report**

# Group

A screenshot of a cell phone

Description automatically generatedA screenshot of a social media post

Description automatically generated

# Sean Reddington

# Overview

For sprint 6 I worked more on the testing for the robot kit’s Camera module. While Sean had been working on the bug that prevented large byte strings from sending over the socket; I worked on generating test strings that I could test directly on the processing server’s program. I was not able to fully test too much due to the conflicts on schedules that I was able to work on the Raspberry Pi. I was only able to spend around 2 hours on the Camera module testing. I also worked on configuring our Raspberry Pi to the tusecurewireless network; however I was unsuccessful. I worked on the network configurations for about 2 hours this week. While I was only able to dedicate 4 hours to BinBot this sprint, I plan to work over the weekend after Thanksgiving to wrap up the Raspberry Pi’s software.

# Achievements in Last Week

* + User Story 486: TA110 (est: 5 hrs – act: 2 hrs)

- Generated test byte string of image for manually testing on server

# Issues in Last Week

I was unable to dedicate as much time as I planned this sprint due to every other professor cramming in assignments due before break. I also was unable to successfully configure the Raspberry Pi to the university’s network.

# Goals for Next Week

I plan to finish out the Camera module and image sending feed functionality for BinBot. I will also try the suggested method that Greg found online for setting the wireless up on the Pi.

# Sean Digirolamo

# Overview

* Robot now handles various status codes sent by server
* Fixed bug where data sent from server to robot was being cut off
* Images are now successfully sent, encoded, and decoded from robot to server
* Committed 10.0, spend 7.5

# Achievements in Last Week

* US486: Robot Sprint 6:
  + TA1113: Status code handling
    - Important for proper navigation to trash
    - Committed 4.0, spent 4.0
* US487: Server Sprint 6:
  + TA1109: Test Robot tread angling
    - Test algorithm which angles robot towards trash
    - Committed 3.0, spent .5
  + TA1114 Bugfix json length getting cut off when sent to python
    - Bug fixed which cause text sent to server by robot to get cut off when over a certain length. Important for communication
    - Committed 3.0, spent 3.0

# Issues in Last Week

* None

# Michael Savitski

# Overview

* Compilation of replacement dataset completed
* 13 hours committed in all tasks, 13 spent

# Achievements in Last Week

* Tasks completed las Sprint:
  + User Story 488: Task 1105: Create and augment new dataset. 8 hours committed, 12 spent.

# Issues in Last Week

* Tasks could not been complete last Sprint:
  + User Story 488 tasks 1106 and 1111 (Training the model and testing model) not complete due to amount of time spent on new dataset.

# Goals for Next Week

* Tasks moved from Project Backlog to Sprint Backlog:
  + Will move incomplete tasks 1106 and 1111 forward and complete training and testing the model.

# Jose Silva

**Overview**

* This week I completed the Arm class of BinBot that I was not able to complete in the last sprint. I developed multiple methods sush as openClaw which opens the claw of the robot, catch which closes the caw of the robot, home moves the arm of the robot into a standard position, and modified in/out method that control the arm movement of the robot so it can reach out and then bring the arm back in. Was also able to develop a sensor class which controls the ultrasonic sensor of the robot, this sensor returns the distance an object is from the robot. We plan on using this sensor to help the robot navigate to a specific object.
* Total working hours committed – 12 hours vs total working hours actually spent – 10 hours

**Achievements in Last Week**

* Tasks completed las Sprint:
  + User Story 486: Robot Sprint 6
  + Task 1206: Finish Arm movements (hours estimated - 2 vs actual hours spent - 4).
    - Was able to complete the arm class from last sprint, this controls the specific movements of the arm and claw of the robot. Allowing it to reach out, open claw, close the claw, and bring back the arm into a position that does not block the sensor or the camera. Ran multiple tests on an object testing various parameters for controlling the servos
  + User Story 486: Robot Sprint 6
  + Task 1112: Send proximity sensor’s distance result to server
    - The robot has an ultrasonic sensor which sends a pulse and receives the echo, if there is an objecct it will bounce back to the sensor. The robot will use this sensor to calculate the distance an object is from the robot. Using this distance the robot will then traverse over to the object.

**Issues in Last Week**

* Tasks could not been complete last Sprint:
  + The Sensor class was completed and tested by moving objects in front of it, then printing the results aka the distance and then checking to see if that distance was accurate. There was not enough time in the sprint to integrate it with the rest of the robot like we had planned. Still need to test with the transmissions/treads of BinBot to see if it will travel the distance and stop at the correct position.
  + Task: Pick up object via server instructions
    - Even though test were done on the arm class, still need to integrate these steps with the rest of BinBot and see if it is able to complete the movements with the server calling them

**Goals for Next Week**

* Tasks moved from Project Backlog to Sprint Backlog:
  + Finish integrating the sensor class with the rest of BinBot
  + Finish integrating the arm class with the rest of BinBot

# Kwamina Thompson

**Weekly Status Report**

# Overview

* Completion of prepping new datasets
* Total working hours committed 10 vs total working hours(20) actually spent on project

# Achievements in Last Week

* Tasks completed last Sprint:
  + Helped in the creating sets of new datasets for machine learning.
  + During this task I had to create augmented boxes around the image datasets we will need to recognize using Machine Learning. Over a 1000 images where augmented over the sprint time period.
  + For group report, estimate the maturity level of the features under development.

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# Issues in Last Week

* Tasks could not been complete last Sprint:
  + Due to the amount of work load UI of the app was not fully implemented.

# Goals for Next Week

* Tasks moved from Project Backlog to Sprint Backlog:
  + Work on UI of the app and translating server information to images