Leah Attai, Casey Rhodes, Rachel Fuller

February 25th

2:15 - 3:15: Introduction and setup of cosmo, exploring the phone app

February 28th

1415 - 1520: Debugging of cozmo SDK integration, successfully ran introductory code

March 2nd

1030-1200: Get imports working (pandas, cv2) and get the example code working

March 4th

1:00-3:00: Work on getting the code to run with Neller. Resulted in successful picture taking and panorama stitching.

March 16th

10:30-12:00: Got the data.csv file filled properly and the histogram graphed. Discussed potential Monte Carlo solutions.

March 17th

12:00-12:30: Met with Neller to demo what we have and discuss Monte Carlo solutions.

March 23rd

1030-1200: Deciphered last group's code and discussed how to implement the Monte Carlo solution talked about with Dr. Neller. Attempted to print out some of the arrays holding image data.

March 28th

1415 - 1530: Started to implement the code for our Monte Carlo solution. We are still trying to figure out the histogram from the group before us and to understand their code. Code is not commented very well and variable names aren't great.

April 4th

17:30 - 18:30: Creation of our own MCLocalize.py. This file uses code from original localize but uses our own picture comparison function, and with new localize method that takes the index of the minimum comparison value found, and uses that index to get the angle at which that picture that gave the minimum value was taken, and rotates the robot by that angle in the opposite direction to get back home.

## April 6th

1045-1200

April 12th

1115-1230

April 13th

1030-1200: Partial implementation of MCL based upon example MCL java code.

April 22nd

2:10-4:00: Met with Dr. Neller to discuss MCL implementation (explanation of PDF and CDF)

April 23rd

10:00-11:30: Worked on website, everything finished except for functionality portion

April 24th

8:00-10:30: Continued to work on MCL implementation. Did error testing.

April 25th

1030-1200: Further error testing on MCL implementation.2100-0000: Polishing in class presentation and doing more error testing. Got cozmo to localize.

April 27th

2:15-6:00: Further testing of MCL implementation and getting the CSV and histogram to work properly.

May 2nd

2300 - 2345: Finished up website.

May 3rd

10:30-1200: Commented out code with suggestions for next generation of students. Also added helpful comments to our code and previous groups' code. Uploaded website to public html.

Total Hours: 32 (roughly)

Website Deliverables

(40%) Accessible web documentation of project, including

 $\Box$  goal(s)

 $\Box$  necessary instructions to recreate the project (e.g.

- $\Box$  assembly instructions,
- $\Box$  software prerequisites and installation instructions,
- $\hfill\square$  code developed,
- $\hfill\square$  use instructions,
- $\hfill\square$  etc.), and
- $\Box$  assessment of functionality (i.e. how well did it work).

NOTE: This should be created within a single folder with relative links such that it can be **easily archived** within my web space and still work.