Matthew Selph

emStart Engineering Notebook CEC 420

Date: Sept 14th, 2021

Notes:

• Began work on section 6 of the System Design Document (SDD). Covered the beginning notes for external interfaces.

Date: Sept 21st, 2021

Notes:

- Worked with group to gather the materials needed to work on our first version of the product as per customer's descriptions.
- Ran a few different programs with python and generally looked at how it works, as I've never used it before.

Date: Sept 22nd, 2021

Notes:

Continued work on SDD and SRS.

Date: Sept 24th, 2021

Notes:

- Began work on the System Requirements Specification (SRS) document. Section
 3 was the portion I worked on, which covered external interface requirements.
- Completed portions of the User, Hardware, and Communications interface sections.

Date: Sept 27th, 2021

Notes:

Completed Version 1 of my sections for SDD and SRS.

Date: Sept 28th, 2021

Notes:

Worked with the group to complete the project demo presentation for sprint 1.

Date: Sept 30th, 2021

Notes:

Presented Demo for sprint 1.

Date: Oct 5th, 2021

Notes:

• Inventoried the initial hardware from Dr.Liu and began working with it to grow comfortability with it.

Date: Oct 15th. 2021

Notes:

- Began researching the functionality of the arm that will be used for the "earth".
- Start of the creation of very basic skeleton code.

Date: Oct 19th, 2021

Notes:

- Worked on the Test Plan with the group and had a scrum meeting.
- Start of Engineering Notebook documentation

Date: Oct 22nd, 2021

Notes:

- Added previous entries to the Notebook
- Worked on revisions given from the previous sprint documentation.
- Submitted Test Plan documentation.

Date: Oct 25th, 2021

Notes:

- Met with Dr Liu
- Weekly meeting with team

Date: Oct 26th, 2021

Notes:

- Submitted SRS and SDD V2
- Created project demo for sprint 2
- Discussed the planning of sprint 3 depending on the status of our hardware being delivered.

Date: Oct 27th, 2021

Notes:

- Received Hardware
- Worked on sprint 2 demo.

Date: Oct 28th, 2021

Notes:

Presented sprint 2 demo.

Date: Nov 1st, 2021

Notes:

- Weekly meeting.
- Continued researching set-up for robotic arm, for quick action once received.
- Found Githubs released by manufacturer on basic controls for the arm.

Date: Nov 5th, 2021

Notes:

- Created a basic skeleton code centralized around the movements of the robotic arm.
- Planned contingencies if the arm did not arrive in time.

Date: Nov 8th, 2021

Notes:

- Obtained the Robotic arm and started working with it.
- Start-ups seem more complicated and different compared to tutorials.
- Weekly meeting

Date: Nov 9th, 2021

Notes:

• Continued work with the robotic arm.

Date: Nov 15th, 2021

Notes:

- Weekly meeting.
- Possible configurations on how to attach components for the groundstation

Date: Nov 16th, 2021

Notes:

Worked on the robotic arm.

Date: Nov 22nd, 2021

Notes:

Weekly meeting.

Date: Nov 28th, 2021

Notes:

• Worked on SDD and SRS.

Date: Nov 29th, 2021

Notes:

- Assembled ground station and attached to arm.
- Arm ceased functioning.
- Meeting with Dr. Liu to aid in repairing the arm.
- Contact manufacturer.
- Weekly meeting

Date: Nov 30th, 2021

Notes:

- Met with Prof. Akbas about possible outcomes with the broken robotic arm.
- Turned in SDD and SRS.
- TJ fixed the robotic arm(still gonna find permanent repair or replacement)
- Redistributed the weight of the ground station to reduce load on the end of the arm.
- Add temporary cardboard support to the robotic arm to prevent swaying due to the momentum of the ground station moving.
- Took pictures and videos of system in function
- Worked on completing the presentation.

Date: Dec 1st, 2021

Notes:

• Rehearsed presentation.

Date: Dec 2nd, 2021

Notes:

Presented sprint 3 demo

Date: Dec 3rd, 2021

Notes:

• Turned in the engineering notebook.

Date: Dec 4th, 2021

Notes:

Work on test plan documentation

Date: Dec 6th, 2021

Notes:

Turn in the test plan

Date: Jan 19th, 2022

Notes

Meeting with Dr.Liu

• Used to discus plans for this semester and what direction the project will take.

Date: Jan 26th, 2022

Notes

• Meeting with Dr.Liu

Attempting to clear any miscommunication

Date: Feb 2nd, 2022

Notes

Updated portions of SRS and SDD

Date: Feb 4th, 2022

Notes

Submitted SRS and SDD

Date: Feb 6th, 2022

Notes

Worked on sprint 1 demo

Date: Feb 8th, 2022

Notes

• Sprint 1 Presentation