Group 9 - Deliverable E

Schedule:

Task #	Task Dependence	Group Member	Due Date	Task
1	N/A	All Members	Oct 24	Come up with basic design for the ROSS dashboard and the basic interaction between the QR Scanner and the software
2	N/A	All Members	Oct 24	Order materials
3	1	Michael D	Oct 30	Design the ROSS dashboard with all the buttons with basic functionality
4	**3**	**All Members**	**Oct 31**	**Prototype I Due (Basic, Proof of Concept)**
5	2	All Members	Nov 5	Materials Arrive
6	5	Michael P	Oct 30	Work with the raspberry Pi by wiring and programming the QR software
7	6	Gazi I	Nov 6	Connect the QR scanner to the ROSS dashboard; giving the ROSS dashboard full functionality
8	7	Liam K	Nov 6	Connect the QR scanner to a website/server to keep track of how many 3D printers are in use
9	**8**	**All Members**	**Nov 7**	**Prototype II Due (Less Basic)**
10	8	All Members	Nov 13	Create a testing environment for both the QR Scanner and the ROSS dashboard to ensure there are no errors

11	8	Michael P	Nov 13	Design a prototype enclosure for the QR scanner
12	8	Michael P	Nov 20	Design a finished 3D printable enclosure for the Raspberry Pi and Camera components
13	11/12	Michael P	Nov 21	Print and test fit the enclosure to the Pi and QR scanner, and adjust as needed
14	13	All Members	Nov 21	Create presentation for Design Day, highlighting the functionality of the QR scanner and how it helps the CEED
15	13	All Members	Nov 21	Practice with the QR scanner before presentations
15	**13**	**All Members**	**Nov 21**	**Prototype III Due/Project Due (Full Thing)**

Project Presentations November 23 - December 3
Design Day November 28

List of Potential Project Risks, and Contingency Plan:

- Reliability of QR scanner, how accurate it is at reading the QR codes
    - To minimize the risk of failure the code will need to have lots of error checking to ensure that the code does not crash. The scanner will need to be tested with QR codes that are in different conditions, meaning work on codes that are crumpled, folded or damaged. If the QR scanner is proven to be too difficult to use, then the idea may have to be scrapped and switched to a simple code based system.

- Failure to connect to possible server
    - Scrap that idea of the project and keep local logs as text or excel files through the Ross Software

Costs for materials:

Item	Cost ($)	Link
Raspberry Pi 0 W	16.50	https://makerstore.ca/shop?olsPage=products%2Fxn-raspberry-pi-zero-w-gu2l&page=2
Raspberry Pi Camera module	32.98	https://www.amazon.ca/Raspberry-Pi-Camera-Module-Megapixel/dp/B01ER2SKFS
Tactile Buttons	5.00	https://makerstore.ca/shop?olsPage=products%2Ftactile-button-switch-6mm-x-20-pack&page=1
Micro USB Cable	7.79	https://www.amazon.ca/AmazonBasics-Male-Micro-Cable-Black/dp/B07232M876/ref=sr_1_4_sspa?keywords=Micro+USB+cable&qid=1571326252&sr=8-4-spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUExODBZVkgyUUVWWVBEJmVuY3J5cHRlZElkPUEwNTc1MzUzM0lFNEFHSFYxTEs1ViZlbmNyeXB0ZWRB
LED Yellow Clear	0.60	https://makerstore.ca/shop?olsPage=products%2Fled-yellow-clear-t-1-34-th&page=1
Wire	1.60	https://makerstore.ca/shop?olsPage=products%2F5ft-hook-up-wire-22awg-black&page=1
3D Printed Enclosures	0.00	Free in the makerspace
Basic Prototyping Material	5.00	https://makerstore.ca/shop?olsPage=products%2Fmdf
10% Emergency Buffer	6.95	
		Total: $76.42