**ENGINEERING JOURNAL TEMPLATE**

# Date

02/12/19

# Tasks

* Finish commenting example Qt code for understanding
* Start the main window for the GUI of the project

# Reflection

* For the first half of today I have went through Youtube videos and looked at the Qt API to understand exactly how the signals and slots system works in Qt, these signals & slots are hugely important as they deal with events such as button pushes and interactions with other widgets on the window such as the Qt painter widget that I will need to draw the 2D scan of the environment out.
* To my surprise I found that the signals and slots system is not too different form setting up events and actions in Java. Although the code might be different the concept is quite similar, so far in Java I have made bodies of code run if a particular button is pushed, but in Qt you can connect an event trigger (a signal) to a class function (slot). This means that whenever that trigger is activated the function associated with the slot will automatically run.
* I feel that I am ready to attempt to create the main window of my project, I have got to the point where I understand the basic structure of a Qt based application and I can start fleshing out a window based on what I have learned in the past few weeks.

# Issues:

*Hardware:*

1. I am still waiting on hardware to arrive, I will seek the technician ordering the parts to get an update on what the deal is with the parts that I ordered more than a month ago.

*Software:*

1. I must now start a main application window, I hope to have a basic GUI with a functioning Qt Painter widget and a welcome page ready for the project demo on the 7th of December.

# Solutions

*Hardware:*

* I must get in contact to the technician. I have already sent an email and have got no response so I have to find him in his office to discuss the status of the hardware.

*Software:*

* Referring to part one of the software issues in last journal entry I have finished reading and commenting the Qt example code that I had started before hand.