**ENGINEERING JOURNAL TEMPLATE**

# Date

Nov 18, 2019

# Tasks

* Downloaded a painter example application from Qt website, this application is a basic GUI application that allows you to change the color and width of a pen and draw images, it also allows you to load images and draw on top of them as well as saving images. I downloaded this example and slowly commented all the code included in an attempt to understand how I will use Qt to draw the surroundings of the user via data from the LIDAR scanner.

# Reflection

* I managed to comment most of the code using the information about the example on the Qt website and using youtube videos on Qt tutorials. Doing this gives a little bit more clarity when it comes to how I will implement the part of the GUI that will handle the drawing as I will be doing something similar, except I wont be getting the position where the user clicked the mouse and drawing there, but will be drawing points depending on the information the LIDAR sensor returns to the application.

# Issues:

*Hardware:*

1. As of now I do not have the LIDAR sensor or microcontroller, I am still waiting for those to arrive. This restricts me to only being able to develop the front end of my application software.

*Software:*

* I have a basic GUI window for my project software, as I am still learning how to use Qt. I will need to start fleshing this out soon.

# Solutions

*Hardware:*

* No solutions yet, still waiting for arrival of parts.

*Software:*

* No solutions yet, still learning how to use Qt software.