Learning Python & Research

From early group discussion we decided to focus on using the language python for our internal work on the robot follower vehicle system. I was familiar with the designing interface of Qt designer which helped me transition into working to design the desktop application server. However, I was not familiar with python itself and have never used it myself I was tasked with setting up a working version that was both compatible with Qt and working with the integral level on the vehicles themselves (version 3+). I started off by working through the entire w3schools learning documentation for python to get a basic grasp on the fundamentals of the language.

<https://www.w3schools.com/python/>

<https://sourceforge.net/projects/pyqt/files/PyQt5/PyQt-5.5/>

https://www.riverbankcomputing.com/software/pyqt/download5

From there, I worked to setup python itself where I ran into trouble getting a version compatible with Qt5+ on Windows without any workarounds. I ended up selecting python 3.4 as later version were not fully compatible with the latest Qt builds on Windows x86 and required workarounds to function normally as well as later version requiring self compilation. After setting up the software locally, I began to design the application itself for our purpose of controlling the leader vehicle. However, I ran into more trouble as I found out that interacting with python itself in the generated Qt files was somewhat different than I had expected, requiring myself as well as Eric to research basic functionality. From there, I worked through tutorial point’s walkthrough on PyQt (Qt for Python).

<https://www.tutorialspoint.com/pyqt/>

Ultimately, the two of us working on the application decided to transition to using c# as we both had more experience and would prevent any furthermore redundant research on fundamental topics and instead jump right into programming core features of the software.