Looking back at the start of my project my skills have changed. To start my competency in report writing, grammar and overall typing have greatly improved. My ability to read and write code in python has developed. The ability to interpret other computer languages has developed also, as during research C++ was a language that was considered before choosing python.

My hands-on skills were not enhanced during this project as it was all relatively simple building using breadboards, and stripping wires there was also no soldering required.

My skills now match with the UK-SPEC (engineering council, 2020). I believe that A1 and A2 are fulfilled by the practical aspect of my project. In coding, I had to have a theoretical approach to how I completed the task. If there were problems with the code initially and there, I had to research python to identify and then correct the fault.

B1, B2 and B3 are skills that were developed during the initial design stage, where I had designed my own sensoring system and solved a potential safety problem with my design. My prototype build has shown that I was able to design and build by selecting the correct engineering methods to undertake a task.

C1, C2 and C4 competencies are met by my project as I had to plan my work and resources around my full-time job and ensure I had enough time to complete the testing evaluation of data and then write my report.

My report writing and poster show that I meet the competencies for D2 and as I was able to discuss with other pupils and my lecturer via email and meeting, I have shown competency in D1.

During my project, health and safety were paramount, the correct PPE was always worn. Tools and equipment were only used for their intended purpose. During the ordering of multiple parts and equipment. I made sure that I ordered in batches keeping items together and trying to mitigate the environmental effect. I believe these meet the competencies E1, E2 and E3.

During this project, I kept notes on what I have done to keep my professional PDP up to date. This meets the competency for E5.

Even though my project does not hit all the requirements as per the UK-SPEC engineering council, I believe that I meet the requirements to be a incorporated engineer and I will be apply to be one once I have my degree.