**Agile Software Process Planning and Management**

With the timescale we had to complete our project, we planned our sprints to be 2 weeks long each and to have 3 sprints throughout the duration of the project. We thought this would be the most beneficial to us as we would have enough time between sprints to organise ourselves in order to prepare for the next sprint, whilst still allowing us to have enough time during each sprint to get a sizeable chunk of the project done.

Before the start of any sprint, we, as a group, addressed all the tasks we wanted to have completed by the end of the sprint and wrote them down on our sprint backlog. By doing so, it allowed us to easily hand out tasks and to clearly see what jobs still needed to be done. During each meeting during the sprints, we discussed if the work done had thrown up any new tasks to be added either to the product backlog or the sprint backlog depending upon its urgency and dependencies.

We tracked our sprints by using GitHub. GitHub allowed us to create an easy to use sprint progress tracker in the form of ordered lists. This includes a product backlog, sprint backlog, in progress, in review columns and more. Within these columns, we had tasks which were at varying stages of completion and allowed us to easily and visually track each sprint’s progress.

We managed the development of our requirements through thorough test plans and frequent checking over our list of requirements to see if we had met all the ones we had planned over the course of the relevant sprint. In our Scrum meetings, we addressed project risks and evaluated if any new risks had presented themselves. Our largest project risk developed during the project in the form of COVID-19. Due to the risk of any member of the team catching the virus, and due to the University going online mid-way through our project, we had to take all our meetings online. Whilst this made meetings less convenient and harder to communicate, we managed to make the most of the group face call feature of Microsoft Teams in order to continue our meetings as previously arranged. We managed to discuss our other risks and how we were able to reduce their impact if unfortunately, they were to occur.

Initially, we planned to have three, two-week sprints in our project. Alongside this, we planned to meet up on Mondays for a meeting and Thursdays for another. Once we had started planning our project, we realised that this wasn’t enough time per week in order to complete all the work necessary. To increase our contact time, we then decided to go to the lab session allocated to our group on Thursdays as well. Once COVID-19 prevented us from meeting in person, we still continued to have the same timetable of meetings, however, all contact was done online. Whilst this seemed to make proper collaboration more difficult at first, we then took advantage of the fact that each member of the group had a computer in front of them. This meant we were able to all see more clearly what we were referring to during discussions as everyone could access the materials more easily.