# Supplementary material for product and process.

## Process adherence and quality

The team maintained their assigned SCRUM roles throughout the course of the assignment. The SCRUM Master (CS student) worked with both the product owner and the development team to record progress and assigned tasks, help with any difficulties, assigned tasks fitting the other roles, and ensure quality and timely progress. Due to the SCRUM Master’s knowledge software development, they contributed heavily to the development of the application. As the SCRUM Master had this knowledge, responsibility for the product backlog was split with the product owner as the Product Owner was not as familiar with coding as the SCRUM Master

The development team (both CS students) worked to turn the product backlog into steps to be incremented and applied to the product. The Developers worked in tandem to discuss ideas, develop programming solutions, solve problems and merge their individual progress into a single project, ensuring a quality product that satisfied the Product Owner. Developer’s tasks were discussed and assigned based on the skill level required and the skill of the developers, with some developers having more knowledge of certain aspects of coding than others. All tasks however, would be discussed before they were concatenated to ensure that all developers understood how the task was accomplished. Completion of the sprint backlog was also completed by the developers ensuring that all tasks were complete and that the time taken to complete each task was recorded.

The Product Owner (IS student) maintained a predominant role in the design, requirements and quality of the application. The Product Designer outlined their requirements for the application to the Developers in the creation of the user stories and product backlog. The Product Owner ensured quality by testing the application for bugs or errors to be amended by the developers.

To maintain a clear image of the team progress on the project, the sprint burndown chart was updated weekly and uploaded to the shared git repository for the team members to view, and shown to the tutor each week for evaluation and feedback. The release burndown chart was updated with any new tasks that were added and at the time of the release.

While planning initial daily meetings, it became apparent that the team members would not be able to find a common time that all members could be present for most days. Therefore, to maintain a high level of communication throughout the project the team decided on three, one hour long (minimum) meetings each week rather than a fifteen-minute meeting each day. This suited the team much better than the daily meetings and allowed the members to complete more work between meetings. This not only meant that there would be more to discuss each meeting, but that each team member had the chance to complete some tasks.

Due to timetable conflictions and team member availability, no time presented itself as one where the team could physically meet to work on the tasks together. As a result, the team decided on a system in which members would choose the tasks they wanted to complete before an agreed upon deadline and upload progress to the repository. The completed tasks would then be discussed in the following team meeting. Developers especially did tasks that were separate from one another to avoid conflict in the repository.

## Customer engagement

The creation of user stories and acceptance criteria were formulated by the customer in a discussion with the developers to determine what they wanted from their application. These stories were then recorded, and a priority imposed on each by the customer enforce what was most important. The customer was then able to monitor and give feedback on the progress of the project through their access to the shared repository and meetings. The customer was encouraged to conduct testing of the website and check that the components matched the acceptance criteria and their standards. Before the final release, the customer was encouraged to extensively test and explore the entirety of the product to ensure that the project was working and ready for release.