**Sprint 1 Retrospective**

**What Went Well**

The feedback we received on the client meeting was positive, and it was clear that we engaged with the client well and asked the right questions. Our daily scrums were managed and directed well, decently structured though improvements can be made. The project in its current form is a good prototype, implementing basic features to a good standard. Notes were made on the client’s requests, allowing sprint 2 to be planned in detail.

**Improvements for Sprint 2**

While pair programming has been productive and generally carried out effectively, the process can be improved by making sure only pairs are programming and not a group, as it can be an inefficient use of time. In pairs, the ‘driver’ needs to be explaining the code to the ‘navigator’, and if the navigator is doing more of the coding and speaking, it would make sense to swap the driver and the navigator, especially when working on a piece of collaborative code. The navigator needs to make sure that they are listening carefully to what the driver is saying so they understand how the code is working correctly. A burndown chart was kept last sprint but its updated status was not recorded properly. This tracking of progress would be improved if the burndown chart was updated to the repository on a daily basis; this would also help team members keep track of how they are progressing and make adjustments to their scheduled tasks as necessary. The burndown chart may use a template but if this is the case the source of the template must be referenced. Daily scrums have been consisted and information has been communicated effectively, but scrums should be recorded for maintaining a progress log and making sure that team member are on track to completing their tasks. This would also help identify when a team member is struggling, so that pair programming and more help can be offered to make sure the task is completed on time.

The GitHub repository was used and branches were made for each feature, however this was haphazardly done; there needs to be a better structure and plan to GitHub repository branches, and branches should be all eventually merged into the main branch. Redundant branches should be cleaned up and deleted. It is advisable to use features of GitHub such as peer reviewed pull requests to make sure code is being merged correctly and a second opinion could help prevent erroneous code being merged. User stories were made but not all of them were in the standard formal format. This made it quite confusing as user stories became indistinguishable from set tasks. User stories have to be redefined according to the client feedback and broken up into tasks, and kept separate. These user stories should be fully written in the formalised format.

**Aims for Sprint 2**

Every daily scrum will be recorded with notes being taken during the scrum and minutes taken down. These notes will be typed up and updated on to the GitHub repository on a daily basis (Arran has been assigned to do this). This would be helpful for team members which may not have been present for the scrum to keep updated on the progress of the project. The burndown chart will also be updated and committed on a daily basis (Melvin has been tasked with doing this). Team members should be comfortable with asking for help and sharing concerns during a scrum, and pair programming sessions can be set up to aid them. Pair programming sessions will be checked to see if they are effective and swaps between the driver and navigator will be made if necessary. (Every member of the team has agreed to do this). To make sure the GitHub is in order, the standard GitHub procedure will be made sure to be followed. Every member working on a feature will make a new branch, but if that branch has to be integrated with another branch, the new branch will be branched off the other and the member will update it, avoiding conflicts. A pull request will then be made, reviewed by another member of the team, and if it is suitable, it will be merged into the other branch. (Jason will make sure the GitHub procedure is followed).