AC31007: Agile Software Engineering

Group 3

1 Actionable Items

At the end of the first sprint we held our sprint retrospective meeting to reflect on everything that happened in the past week. Even though all team members in general were very happy with the sprint and named many positive aspects, the list of things that could be improved was also quite long. We carefully revisited every point and discussed it together in order to select a few of the most important actionable items that we decided to improve on during our second sprint.

1.1 Plan sprint wisely

First and probably the most important issue was inadequate sprint planning. During the first sprint we made a huge mistake by not spending enough time on this activity. Some of the tasks were poorly described, lacked clarity or even duplicated. For the second sprint, we spent all of Monday morning making sure that every user story was split into atomic, well described, detailed and clear tasks. We also considered coherence so that a team member could work on tasks that are related and dependent on each other and would not have to wait for another task to be completed in order to carry out their one.

1.2 Keep daily stand-ups short & relevant

The next actionable item that we thought we could improve was daily stand-up calls. First of all, most of the time during sprint 1 our scrum meetings lasted for more than 30 minutes and involved many topics that were not relevant to everyone in the team. What we accomplished during this sprint was keeping daily stand-ups under 20 minutes long, only talking about things that focus on our goals and tasks, and the ScrumMaster making them more interactive by screen sharing the sprint backlog containing the burndown and progress chart so that team members can clearly see the overall view of sprint.

1.3 Set clear goals

Another item that we chose to work on was setting clear goals in the beginning of the second sprint. Naturally, the first sprint was harder in the beginning since we were not sure what we needed to implement and how it was supposed to look like. As we dived straight to product development we forgot to assign some time and sketch the design of the final product that we want to have so we know that all team members are on the same page. However, this sprint we learned from our mistakes and after the sprint

planning, team members that worked on the front-end had another meeting and created a design on a Miro board that was later edited and approved by other team members. By doing this we ensured that everyone agreed on the system's design early and there will be no confusion later.

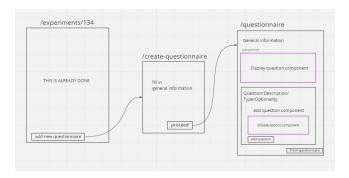


Figure 1: Product design sketch on a Miro board

1.4 Use more pair programming

The lack of pair programming was also outlined by team members during a sprint retrospective as a thing that could be used more often. Therefore during the second sprint, we increased our use of pair programming in some tasks and assigned specific tasks to more than one person to ensure this. The programming in pairs allowed us to decrease the amount of errors, as well as creating a more coherent product and increase product quality as issues in logic or implementation were recognized early. Another benefit of such practice was while pairing a stronger programmer with someone with less experience in a certain field, we encouraged rapid learning for the student.

1.5 Create test plans early

Lastly, testing was the 5th thing that we chose as an actionable item for this sprint. What we did not like during the first sprint was miscommunication between testers and developers, and in the beginning a lot of changes had to be made as people had conflicting ideas about how things should function. For this sprint we agreed that main unit testing has to be done by developers when they finish their task, however, since we had to apply test driven development we also had a couple of members assigned for test plan creation for manual testing. Team members were using a premade test plan sheet consistently throughout the sprint to ensure that right tests have been carried out.