

Team Retrospective

Team #4

The breakdown of the team consisted of a program manager and the rest of the members worked on mainly on the coding aspect of the project. The project manager had the responsibilities of maintaining the backlogs and burndown charts for each sprint and overall project. In addition, the project manager also served as the SCRUM Master, leading all the meetings, taking notes, and making sure everyone is on the same page. The other team members focused on the whole coding and implementation of the project. The coding aspect of the project most definitely took the most amount of work so we needed as many people working on it as possible. In the end, these were the give roles - Project Manager: Yuri Castro and Developers: Daniel Hartman and Srishti Kumar.

Since the project was divided into three different sprints, we divided the tasks based on what we wanted to complete within those sprints. For the first sprint, our goal was to make a basic GUI consisting of the chess board, playing pieces, and the menu buttons. Daniel worked on the timer and chessboard integration, fixing up the code to make more generic for multiple platforms. While Srishti was tasked in creating the chessboard interface and create functionality to move the chess pieces around as needed. For the second sprint, we focused on the overall gameplay of the project (i.e. valid moves, winning moves, etc.). For this task, Daniel worked on AI in assessing the board state, generate all possible valid moves, and creating the min-max tree structure. Srishti worked more on the utility functions such as making sure the proper AI functions are called when needed, maintain board state, and call proper GUI functions whenever each move is called. Finally, for the third sprint, we tied everything together with the client-server aspects of the project. For this sprint, Daniel worked on advancing the AI, fixing up the GUI bugs, and fixing up overall functions for gameplay. Additionally, he had to finalize the checkmate function for all pieces. Srishti worked on the client/server implementation of the project along with the multi-threading aspect of the project and more.

As for the problems we had during our sprints, we noted there were several. (1) For the first sprint: This Checkpoint was not very challenging since we had a basic GUI working. In hindsight, however, we should have stretched our goals further such that the basic Chess game (Time, move validation) was working by this point. We ended up spending our time on these features in Sprint#2 which took away from other parts of the project. (2) For the second sprint: This Checkpoint was challenging due to code integration. Because we were moving pieces with the mouse, there were many synchronization issues (GUI had 3 functions for the mouse) and debugging those was tedious. This impacted the AI quality, and we were forced to implement Checkmate logic in Sprint#3, which would have been better done in Sprint#2. (3) For the third sprint: This Checkpoint was challenging because of the client-server model. We had several

issues with communication – delays in message transfer, messages not being received/sent – which made the client-server aspect challenging.

There were occasional hiccups (e.g. coursework overload, sickness) when other team members covered for those absences, yet all extra work was done with a sincere heart and good intentions. In hindsight, while the PM is also responsible for the Spring documentation, it would have been better to delegate several coding-related tasks, as that would have helped ease the overall workload as we noticed Towards the end of the final sprint, the time crunch we were in.

Team Grading:

The work was split up evenly amongst the team members, and each person worked very diligently at his/her part. However, our team decided it would be in the best interest of both the team and team members to submit an individual report. As such, the multipliers are included within the Individual Reports.