Sprint 1 Retrospective

### Team 3-7: Xiaoyu Li, Andrew Smith, Jonathon Hinchley(SCRUM Master)

# Purpose

To reflect on the Sprint we undertook and identify possible roadblocks or bottlenecks to increase our productivity.

# Rights

The worked well together from the start. Jonathon assigned the team issues on GitHub based on each person’s interest in features. Everyone completed their issues in a reasonable amount of time. This left time to polish up features on Sprint 1. From our SCRUM meetings everyone thought that the work was evenly distributed. During Sprint 1, we demoed the future features in separate projects, to better understand the direction forward. From the beginning, we documented the images and tutorials we used in a text file under assets/credits.txt to allow easy source citation. We had three face-to-face meetings which worked out nicely, because it was often enough to stay on track and discuss upcoming features. No code was written during meetings, the focus was on status updates and suggestions from team members. We followed an outline for the meetings to keep them under 30 minutes, our goal was to do 15-minute meetings, so everyone could focus more time on their assigned issues. Our meeting notes our in a separate document to make this document cleaner.

# Wrongs

From our perspective everything went really well. There were not any problems that we noticed during Sprint 1. However, there are a few changes we plan to implement in future Sprints documented below.

# Changes

In regards to procedure, we are going to be more specific with labeling our GitHub issues and communicate better about large commits to the project. We have added the changes and additions made by the customer to the product backlog. We predicted most of the new features and our existing codebase is somewhat flexible which should minimize the amount of major changes we need to make.

# Product Backlog

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Product Backlog Item** | **Assignee** | **Priority** | **Difficulty** | **EST(Hrs)** | **Sprint** |
| 1 | Determine game states | Jonathon | HIGH | LOW | 1 | 1 |
| 2 | Text buttons as placeholders for seeds across the board | Xiaoyu | HIGH | MID | 3 | 1 |
| 3 | User sees a display of current board state | Xiaoyu | HIGH | MID | 2 | 1 |
| 4 | User gets response (invalid) if proposing an invalid move | Andrew | HIGH | LOW | 1 | 1 |
| 5 | User enters a move by typing position | Andrew | HIGH | LOW | 2 | 1 |
| 6 | User launches program and sees a title/introduction screen | Xiaoyu | HIGH | MID | 2 | 1 |
| 7 | Turn clock ticks by seconds | Jonathon | HIGH | MID | 2 | 1 |
| 8 | Round count | Xiaoyu | HIGH | MID | 2 | 1 |
| 9 | Ability to declare a player the game winner | Xiaoyu | HIGH | MID | 2 | 1 |
| 10 | Display current player turn | Xiaoyu | HIGH | MID | 2 | 1 |
| 11 | Simulate a "normal" match | Xiaoyu | HIGH | MID | 2 | 1 |
| 12 | Game checked to determine if max moves exceeded | Jonathon | HIGH | MID | 2 | 1 |
| 13 | User can click to indicate a move | Xiaoyu | HIGH | MID | 2 | 1 |
| 14 | Implement a seed class | Jonathon | MID | HIGH | 3 | 2 |
| 15 | Iterative deepening implemented | Jonathon | MID | HIGH | 10 | 4 |
| 16 | Alpha-beta pruning implemented across one level | Andrew | MID | HIGH | 5 | 3 |
| 17 | Alpha-beta pruning implemented across all levels | Andrew | MID | HIGH | 3 | 3 |
| 18 | Minimax tree used for AI | Xiaoyu | MID | HIGH | 5 | 2 |
| 19 | Computer looks ahead one move in tree | Xiaoyu | MID | HIGH | 3 | 2 |
| 20 | Computer can randomly select a valid move | Jonathon | MID | HIGH | 4 | 2 |
| 21 | Computer identifies all valid moves | Jonathon | MID | HIGH | 3 | 2 |
| 22 | allow user to select 1 human v AI, 2 human or 2 AI players | Xiaoyu | MID | LOW | 1 | 1 |
| 23 | separate GUI into screens | Xiaoyu | HIGH | HIGH | 3 | 2 |
| 24 | merge project into MVC framework | Jonathon | HIGH | MID | 2 | 2 |
| 25 | turn clock ends turn if expired | Jonathon | MID | MID | 2 | 2 |
| 26 | rules/tips documentation | Jonathon | MID | LOW | 1 | 2 |
| 27 | integrate client/server model | Jonathon | MID | MID | 3 | 2 |
| 28 | random distribution of seeds on start | Andrew | HIGH | HIGH | 3 | 2 |
| 29 | variable seeds | Jonathon | HIGH | MID | 3 | 2 |
| 30 | variable houses | Jonathon | HIGH | MID | 3 | 2 |
| 31 | pie rule | Jonathon | HIGH | HIGH | 3 | 2 |
| 32 | settings/pause menu | Xiaoyu | MID | MID | 2 | 2 |
| 33 | difficulty slider | Jonathon | MID | MID | 2 | 2 |

# Sprint 1 Burndown

# Product Burndown