Project 2: You’re Fired!

Retrospective Write-Up

Nolan Blankenau, Dawson Frick, Aaron Gearhart, Harry Heeb, Nick North

Meeting 1: 9/27/2019

Location: Spahr Classroom

Attendance: Everyone except Nick

* New additions
  + Sounds/music
  + Triple (3x3) shot
* Nolan and Aaron on AI
* Dawson has sounds
* Harry has tri-shot
* Nick has the scoreboard

Meeting 2: 9/30/2019

Location: Spahr Classroom

Attendance: Everyone except Nick

* Talk about scheduling
  + Meet once or twice before deadline
  + Choose to work alone most of the time

Meeting 2: 10/2/2019

Location: Spahr Classroom

Attendance: Everyone except Nolan

* Read over code
  + Decide to change GUI since there is a terminal implementation and GUI implementation

Meeting 3: 10/7/2019

Location: Spahr Classroom

Attendance: Everyone

* Decide to meet during lab today
* Won’t meet during fall break
* Assignments still stand
  + Nolan - Medium
  + Aaron - Easy/Hard

Meeting 4: 10/7/2019

Location Spahr 1320 Study Room

Attendance: Everyone

* Worked on getting started in the codebase together
* Discussed methods to edit for AI
  + Gui\_states.run\_place\_ships
  + Gui\_states.run\_game\_loop
  + Gui\_states.run\_start
    - This method should return 1 or two for the number of players
  + We are going to make the playerName be AI

Meeting 5: 10/9/2019

Location: Spahr Classroom

Attendance: Everyone

* Some sounds work
* Tri shot is appearing on screen
* Will meet tomorrow on Google Hangouts

Meeting 6: 10/10/2019

Location: Google Hangouts

Attendance: Everyone

* Dawson got sounds to work
* Nolan is working on adding option to have 1 or 2 players
* Aaron is implementing the AI as a player

Meeting 7: 10/18/2019

Location: Spahr 1320

Attendance: Everyone

* Switching to making a new ai\_game\_loop
  + Nolan and Aaron are making progress on AI
* Dawson is finished with music and sound effects
* Harry is almost done with tri-shot

Retrospective

Description on how work was split between teammates

The way we split up work for Project 2 was by giving each person in our group a different feature to implement. Harry worked on implementing what we call “triple shot.” It is a way for a player to fire a shot that is three grid lengths long. Nick created a scoreboard to be displayed at the end of each game. This scoreboard shows how many times each player has won against the other. Dawson added different songs to be played in the background of the game at different times. He also added sound effects to the game for common actions. Aaron and Nolan both worked on implementing the AI feature into the game. Nolan created the UI where the user selects to play with AI and then selects their AI’s difficulty level. Nolan also implemented the easy and hard levels of AI. Aaron created the medium difficulty AI which was the hardest one to develop.

Challenges we faced

Probably the most significant challenge we faced during this project was understanding the codebase of the team’s project we inherited from. Their code consisted of functions inside of functions that would return different things, causing us to scroll up and down the file to understand their logic. We overcame this difficulty by putting some comments in the code for reference if we needed to look back. We also discussed using the player logic for implementing the AI but instead we created a whole new functions specific to the AI so it wouldn’t interfere with what was already written.

Any features that did not make the demo version

There were a few features we wanted to put into project two that didn’t make it into our final version. We discussed the possibility of the triple shot being a 3x3 square or having vertical functionality, but we went with a horizontal 3x1 shot. We briefly talked about adding more variables to display to the scoreboard at the end of the game, such as total boats sunk, total hits, and total misses, but this idea came up rather late in development. Easter eggs for secret songs and power ups were also discussed early on, but these were scrapped in order to focus on more important aspects of the game.

Retrospective on what the team would have done differently

The biggest thing that we could have done differently is to spend more time working on the project in person. Most of our meetings just consisted of discussion of what we each had been accomplishing on our own. It also might have been better to implement some of our current features differently. We had a lot of cool ideas on what we could do for the tri-shot, so maybe we could’ve done multiple of those ideas given more time. Each of us had some difficulty finding time to work on the project due to various other homework, so a lot of it was completed within the last few days before the due date. Lastly, we could’ve been more cautious when pushing to GitHub. Some of our code had errors that we were unaware of until after it was committed.