CS3110: Final Project MS2 Report

Team name: The Ocamlists

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Vision

At the beginning of MS2, we had three pitches, a Chess game, an instant messaging system, and a healthcare prediction app. We decided to work on the Chess game as it was the best option considering everyone's common interest and skill set.

My vision is to develop a Chess game in OCaml. My current goal is to make one in the terminal and, if time permits, develop a GUI or front end. This will be a two-player game, where each player will make a move from the terminal against each other to win the game. It will have the rules and setup of a standard chess game.

Summary of progress

Since the objective of this project is to build a chess game, the first thing I focused on was to build a board and the pieces of the game. The first thing that chess needs is a board where we can place all the pieces and make moves. Right now, the entire game is played in the terminal. Here is the list of the functionalities that the game has:

1. Displaying the initial board

   Since chess is a two-player game and there is a certain way each piece is arranged before the game starts, our game begins by displaying the initial board with each piece in place for each player.

2. Accepting user input

As the game is terminal-based right now, it accepts the players' moves in the terminal. The players are prompted to enter the position of the piece they wish to move and the position they wish to move the piece to.

3. Displaying the updated board

   Once the player enters the current position and the new position, the board is updated with the change requested by the player. And, the updated board is displayed in the terminal.

4. Updating the pieces

   If a piece is conquered by another piece then the old piece disappears from the board and the new piece takes its position. There are no rules associated with it yet, but as the development moves further rules will be added.

5. Quitting the game

   As of right now, the game can be forced stopped or the player can end it by typing “quit”. Later, I will add functionality to determine the winner and loser in the game.

Activity breakdown

Since both of my team members dropped the class, I worked on all of the tasks alone. I had the following responsibilities:

- set up the git repository
- Set up the initial framework of the project
- Research on how to go about building the game
- Build the minimum functionality

- Write the report and gallery entry

I spent around 8 hours working on this project, excluding the time I spent on our initial idea. If my teammates had not dropped, these activities would have been even evenly divided among us and we might have been able to accomplish more than what I was able to do.

Productivity analysis

Working on this project has been a rollercoaster. After doing a lot of research on instant messaging ideas, the team settled on chess and decided to work on it after the prelim, because that was very important for all of us. However, after the prelim, things started to go south. With teammates being skeptical about whether they are gonna take the class, led by lack of communication did make it difficult for me to pull up MS2.

However, I did learn a lot in the process. I think it is important to check up on each other and have a backup plan early on if this kind of circumstance comes during a project life cycle. I don’t blame anyone for the current situation.