

## Phase 2 Progress Report

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### What each member has been working on for phase 2

#### Bryan Guo

I refactored and added new methods to classes to incorporate castling and en passant, two unique move cases that needed to be implemented in the makeMove method of GameManager. The Pawn class did not have a means of promotion at the start of Phase 2, so I implemented a state design pattern to facilitate this function. I added more unit tests for greater test coverage of use case and entity classes. I also updated the CRC cards to reflect the new state of our code.

#### Muhammad Ibrahim

For phase 2, I worked on dividing the BoardManager class into 2 different ones so that the move-checking logic was separated, making each class correctly abide by the Solid Responsibility Principle. In addition, I did extensive debugging for each of my group members and their parts to fix functionality issues, as well as testing aspects of classes and methods which can't be tested through unit tests.

#### Vala Jalalvandi

In phase 1, I was responsible for implementing the system that allowed the pieces to move on the board. For phase 2, I continued to work on this feature to polish out problems and bugs that were present. Another feature that I added for phase 2 was to show the piece that was clicked at any moment in the game. This was done by adding a light blue background to the clicked piece. I also worked to add an end screen that showed who had won the game, or showed if the game was a stalemate.

#### Juan Martin

I was mainly responsible for getting the multiplayer working and having the moves replicated to both players. I accomplished this by using the Firebase database and storing the moves in a separate collection. I coded a "game loop" that runs every second and fetches the database to check for new moves. When a new move is made by any of the players the boards update accordingly using the GameManager. I also worked on bug fixes and the SQLite database for the login info.

#### Jaren Worme

The aspect of the code I worked the most heavily on was the clock feature. This included the entity class 'Clock', and methods that call it in the class 'GameManager'. I also implemented methods in the 'GameActivity' class to interact with the gui, printing the clock to the screen. I also worked on a couple smaller aspects of the code, such as documentation and adding a forfeit button, and did a very significant chunk of the design document's content and formatting, and the accessibility report.

**Link to a Significant Pull Request you made (Include a sentence or two explaining why you think this demonstrates a significant contribution to the team)**

Bryan Guo

<https://github.com/CSC207-UofT/course-project-wildcats-1/pull/18>

In this pull request, I implemented a state design pattern for the Pawn class. This is significant because it gives the pawn piece the ability to be promoted and function as a queen piece.

Muhammad Ibrahim

Changes with correct description. Correct Pull Request with no desc. is below the 1st.

<https://github.com/CSC207-UofT/course-project-wildcats-1/commit/2113c89ab4dfb661f3046d8c7ca1fc00479a7fc5>

<https://github.com/CSC207-UofT/course-project-wildcats-1/commit/e0fb77ad378bdb30b2b22a75e3fc62b038049d4e>

Made key debugging changes to MoveChecking logic so that the program's pieces functioned according to the rule of chess.

Vala Jalalvandi

<https://github.com/CSC207-UofT/course-project-wildcats-1/pull/30>

In this pull request I added the functionality to show an end screen when the game is finished.

<https://github.com/CSC207-UofT/course-project-wildcats-1/pull/22>

In this pull request the feature to highlight clicked pieces was implemented.

Juan Martin

<https://github.com/CSC207-UofT/course-project-wildcats-1/pull/5>

Here I implemented the first version of our matchmaking algorithm and I also coded a basic game loop. This was the starting point for getting the multiplayer working. The other members and I built upon this code to get the game running smoothly between the two players.

Jaren Worme

<https://github.com/CSC207-UofT/course-project-wildcats-1/pull/21>

This pull request was my most significant, it logged my changes to the GameActivity class that allowed the clock timer feature to be displayed to the gui on our app. This was significant because the clock was our main new feature for phase 2 and adds a nice new element to the game, so the pull request where this feature was functional for the first time was important.