

Chess Royale: Complete Single Player Mode

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So far, the game is limited to single player in the sense that there is only one active piece on the board. There are three other pieces in fixed locations, and all pieces, including the player, are kings. Red tiles will destroy a piece, but green tiles do not yet give the player an option to teleport or upgrade their piece. Movement for pieces and player rotation are not yet fully implemented. UI elements include the main menu, game board, and status bar. In short, the program is not a playable game.

For this scenario, all features currently present will be polished and refined to make a fully playable and enjoyable single player experience. In addition to improving current features, upgrade tiles will be fully implemented in addition to capturing, general UI and user feedback, board shrinking, difficulty options, and UI. A player will be able to play with up to seven other AI-controlled players on randomized boards that can have their difficulty adjusted in various ways. The overall user experience will be enhanced by new, more attractive menus, art assets, and mechanics.

Scenario “Single Player”

Tile upgrading is needed to allow players to compete for better movement. It also creates a point where players can gather and possibly win more points since they have an opportunity to capture them. Teleporting could also be implemented to allow players from being captured or possibly create an opportunity to capture another player. This gives the player a dynamic play style which they can play to their liking.

A Single player game requires a form of winning and this can be done by capturing pieces in chess. Capturing pieces is essential to playing chess so creating a feature that captures enemy pieces is needed to allow player progression.

A Side menu stating the current stats of all the players is needed for player feedback and also to see who is winning. It then will also be used who is the overall winner based on points. Giving the player an end to the game and also showing how one did compared to their opponents is needed for a single player game.

The goal of this per the scenario title is to have a working single player mode of the game. So for that, we would need to have some kind of simple AI serve in place for the other players. The AI to start off with can be really simple to ensure that all the game mechanics are working as intended and that the game can come to an overall end with a definitive winner. The simple AI

could be applied to all other players other than the one that you control and would randomly select a tile to move to on their turn as long as it is legal for that piece to move to. For example, if it is the AI's turn and the AI is currently a king, the AI would check for all valid moves that it can take and then randomly select one to move to.

Part of the single player mode would be adding some difficulty settings before loading into the game. This can control multiple aspects of the game to allow for a better game experience as it would have a different feel for each difficulty. Some variables that we can change for the project would be the overall board size, so for harder difficulty settings we can start off with a smaller board. We can also change the amount of red and green tiles generated depending on the difficulty. For easier difficulty we would have a lot more green tiles compared to red tiles. For harder difficulties we would change that to slowly have more and more red tiles compared to green tiles. The difficulty selection as stated would be in the main menu before loading into the actual game.

We also would need to implement the royale style of the game by having the board shrink over time for the game. After each player/AI has made their move twice, the board would shrink dependent on the selected difficulty. So for easier difficulties the board would shrink a small amount by 1x1 at a time per two rotations of the players. For harder difficulties this can be increased to decrease the board by 3x3 making the game go by quicker and harder to play.

Another aspect to continue to develop the single player mode would be to add some better graphics and feedback on interactions. As stated, the game is in its rough development, and the graphics and user feedback is almost nonexistent, so we would add features to make the game experience better. Some things to include would be adding a better background image or a 3d background or border to the actual game. We would also need to work on some player feedback so they would receive confirmation that certain actions have been done. Like where a piece is able to move on the board, if a death tile was landed on, if an upgrade tile was moved to. Giving players feedback on the game state so that they are more interacted with the game overall.