

Java 36A Final project
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My final project is a chess game. It supports two player gameplay with alternating turns, renders visual representations of chess pieces, and manages piece movement according to the rules of chess.

The MyWorld class serves as the fundamental chessboard implementation for the game. Players are encoded numerically, using a control statement. This numerical encoding is used to both determine the direction of pawn movement (forward/backward), as well as control which piece images are displayed on the board. It also tracks and enforces alternating player turns, visually indicates which player's turn is active, and prevents out-of-turn moves.

The ChessPieces class serves as the abstract parent class in the game's inheritance hierarchy. It establishes the core behavior and attributes that all specific chess pieces must inherit, providing a unified interface while allowing for piece-specific implementations.

The null class returns an empty List of ChessMovePosition objects. It exists primarily because I couldn't figure out a way to make it not exist. In practice, this class represents an empty square on the chessboard. But it eliminates null reference exceptions.

The legal moves class displays the boundaries for each piece's ability to move.

The class ChessMovePosition is used to represent a position on a chess board using x and y coordinates.

Conclusions

This was a fun and confusing project. I'm excited about the things that I have learned, and feel as if I still have a lot to learn. I would like to build off of this in some way, in order to make the game more complete.

Works cited

<https://distortedmirror.github.io/chess/>
<https://github.com/megamiii/JavaChessGame/blob/main/src/ChessBoard.java>
<https://github.com/GargAshwin/Java-Chess-Game-Implementation/blob/main/ChessGame.java>
<https://gist.github.com/ChrisMoney/e009ca8eee9da18dba4f>
<https://gist.github.com/skd1993/288fb21707263ae03799>
<https://github.com/topics/chess-game?l=java>
<https://github.com/LeeStephen/Chess/blob/master/src/Game.java>
<https://github.com/ctabin/jchess>
<https://github.com/bhlangonijr/chesslib>
<https://github.com/Leonardpepa/Chess-game>
<https://github.com/megamiii/JavaChessGame/blob/main/src/ChessBoard.java>
<https://www.greenfoot.org/scenarios/2899>
<https://www.greenfoot.org/scenarios/23166>
<https://www.greenfoot.org/scenarios/25919>
<https://www.greenfoot.org/scenarios/26942>
<https://www.greenfoot.org/scenarios/23827>
<https://www.greenfoot.org/scenarios/27188>
<https://www.greenfoot.org/scenarios/35137>
<https://www.greenfoot.org/scenarios/29882>
<https://www.greenfoot.org/scenarios/22850>
<https://www.greenfoot.org/scenarios/25006>
zyBooks: Java Programming Language