Grandmasters

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User requirements:

* The user is able to start the game.
* The user will be able to move their own (white) chess pieces.
* The user will be able to choose whether to replace each white pawn that has reached the other side of the board with a rook, bishop, knight, or queen.
* The user is able to call a draw.
* The user is able to select their own (white) chess piece.

Functional requirements:

* A chessboard will be shown the entire time the program is running.
* The chessboard will be made up of buttons that can be pressed to allow chess piece selection and movement.
* The current selected chess piece will be indicated by the highlighting of the square it is on.
* Current valid moves for a selected chess piece will be indicated by one or more highlighted squares.
* The match will start with 16 chess pieces on the board consisting of each player’s 8 pawns, 2 rooks, 2 bishops, 2 knights, 1 queen, and 1 king.
* All moves will be in accordance with the rules of chess.
* All chess pieces on the board will be shown throughout the match’s entirety with white chess pieces representing the user’s pieces and black chess pieces representing the opponent’s pieces.
* The program will announce when a player is in check or when they are checkmated.
* Each completed game will end in a checkmate or draw.
* A draw button will be available for draw activation.

Non-functional requirements:

* All buttons on the chessboard will be disabled before the game begins.
* Certain buttons will be disabled during a user’s turn to prevent the user from making illegal or non-existent selections.
* Certain buttons will be disabled during a user’s turn upon selection in order to prevent the user from making illegal moves.
* All buttons will be disabled during the opponent’s turn to prevent the user from moving.
* All buttons on the chessboard will be disabled once the match has ended.

User stories:

| **Title: Turn Tracking** |
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| User story:  As a customer,  I want to be told whose turn it is at all times during a match,  So that I can know when to make my turn. |
| Acceptance criteria:  Given that I’m a player,  When the other player takes their turn,  Then I will be told that it is my turn. |

| **Title: Check Tracking** |
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| User story:  As a customer,  I want to be told when I’m in check,  So that I can know if my King is in danger and move it to a safer position if possible. |
| Acceptance criteria:  Given that I’m a player,  When my King is in danger,  Then I will be told that I’m in check. |

| **Title: Labeled Chessboard** |
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| User story:  As a customer,  I want files and ranks to be labeled on the bottom and left-side of the chessboard, respectively,  So that I can easily identify all locations in a match. |
| Acceptance criteria:  Given that I’m a player,  When I am trying to read a match,  Then I can use the file and rank to see where everything is located on the chessboard. |

| **Title: Calling a Draw** |
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| User story:  As a customer,  I want the option to call a draw,  So that I can end the match if needed. |
| Acceptance criteria:  Given that I’m a player,  When I want to end the match early,  Then I will be able to call a draw. |

| **Title: Blitz Mode** |
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| User story:  As a customer,  I want a blitz mode,  So that I can play a faster match. |
| Acceptance criteria:  Given that I’m a player,  When I want to play a fast-paced match,  Then I will be required to make my moves in a smaller time frame. |