

## Functional Requirements:

- As a player, I can indicate a row and column in order to place my player marker at a specific place on the game board.
- As a user, I can check if a particular board location is part of a horizontal line of positions with the same character that is five or longer to see if the game has been won.
- As a user, I can check if a particular board location is part of a vertical line of positions with the same character that is five or longer to see if the game has been won.
- As a user, I can check if a particular board location is part of a diagonal line of positions with the same character that is five or longer to see if the game has been won.
- As a user, I can check if a given Board Position is in bounds and not already occupied to see if that position is valid for a player to make a move in.
- As a user, I can check if the board is completely filled with player markers to determine if the game has resulted in a draw.
- As a user, I can check if a given board position has a given player marker inside to try and determine what is in that position.
- As a user, I can look at a given board position to see which player marker, if any, is inside of it.
- As a user, I can display the current state of the board, with spaces representing empty spaces, and characters representing the markers of players one and two.
- As a user, I can check a specific board position's row number to see where it should be located on the board's vertical axis.
- As a user, I can check a specific board position's column number to see where it should be located on the board's horizontal axis.
- As a player, I can choose to play again if the game has ended in order to reset the board for a new round.
- As a user, I can see how many rows are in the board to see how wide the board is.
- As a user, I can see how many columns are in the board to see how tall the board is.
- As a user, I can check how many aligned markers a player needs to win to determine what the win condition is.
- As a player, I can enter a new position in the event that I enter an invalid position to insure that I do not miss my turn for choosing an invalid spot.

## Non-Functional Requirements:

- The system must run on Java.
- The system must be able to input integers.
- The system must run on Unix
- The origin of the GameBoard must be at [0,0]