

Homework 2 – Ben Joye

CPSC 2150

Requirements Analysis:

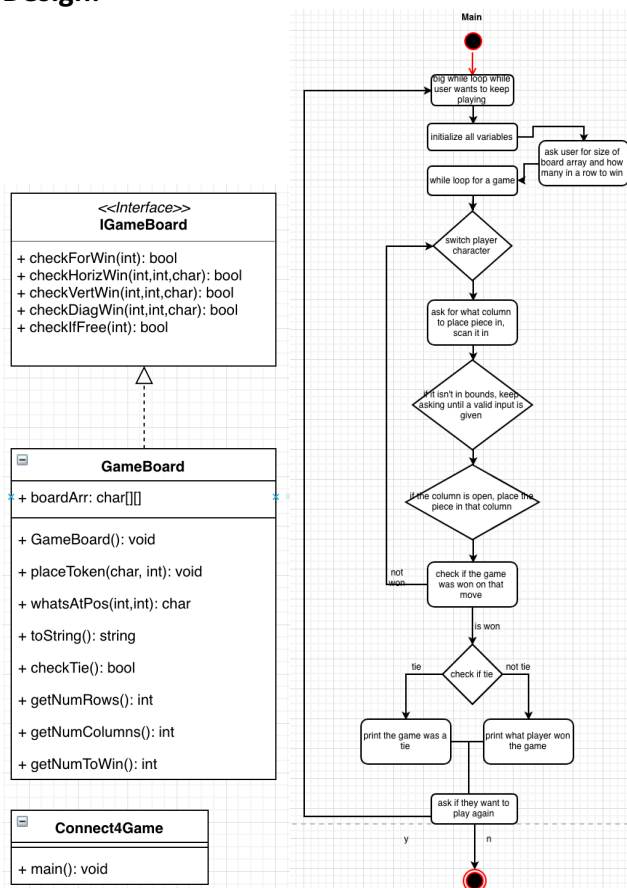
- **Functional**

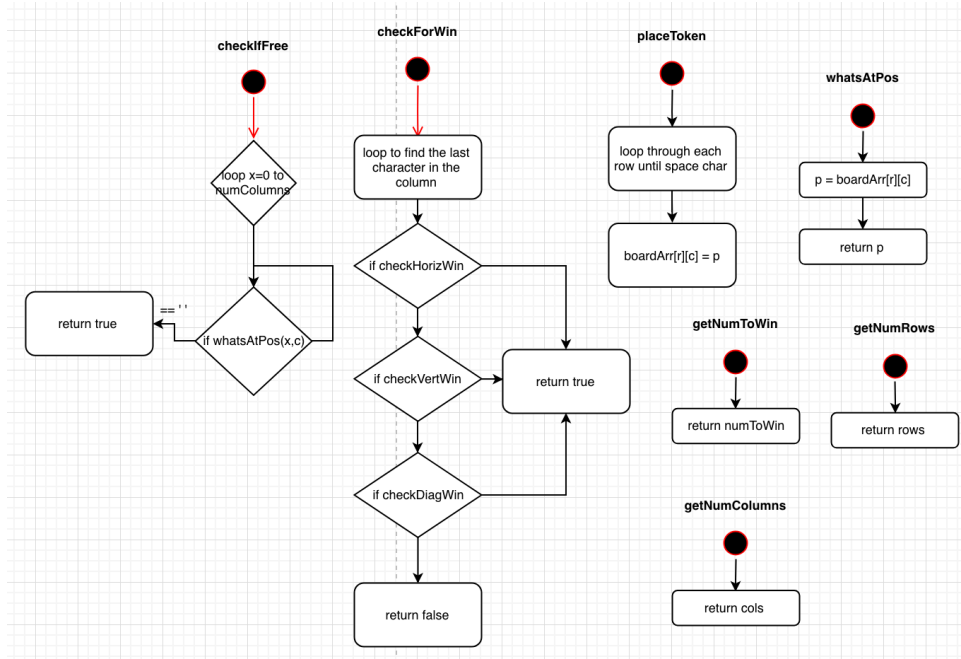
- As a user, I can input what column to place my piece into so that it is stored in the board array
- As a user, I can see the board array after every turn.
- As a user, both players will alternate turns.
- As a user, I can choose to play again so that the game will keep running.
- As a user, I can input numbers to decide the size of the game board.
- As a user, I can input numbers to decide the number of pieces in a row you need to win.

- **Non-Functional**

- The system must be able to detect when a player has won.
- The system must display which players turn it is.
- The system must keep track of every move and display the board after every turn.
- The system must handle a board size of up to 100 rows and 100 columns.
- The system only lets dimensions from 3 to 100 for the board array.

Design:





Testing:

- I tested winning with horizontal, vertical, and diagonal rows.
- I tested to make sure all the columns can be filled up.
- I tested only valid inputs can be put in.
- I can type y to play again after a round.
- I can type n after a round to end the game.
- If I input invalid board sizes, it asks again.
- If I input invalid in a row to win, it asks again.

Deployment:

- Type make to compile the program
- Type make run to run the program