

# JEREMY HOLLOWAY



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Technical Report

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# 1. REQUIREMENT ANALYSIS

## User Story:

- As a user, I can choose which column to place a token to win the game.
- As a user, I can visually choose which column to place my token because seeing is believing.
- As a user, I will be notified when it is my turn so I can place a marker.
- As a user, I will be able to choose a specific board size so I can have a longer game.
- As a user, I will be notified of a win so I can rub it in my opponents face.
- As a user, I will be notified if I make an incorrect move so I may take another turn.
- As a user, I will be able to choose how many players can play the game.

## Functional Requirements:

- A user will be able to choose which column to place their token.
- A user will be able to choose to play again after winning, losing, or drawing.
- A user will be able to choose the number of players.
- A user will be able to use a graphical user interface to play the game.

## Non-Functional Requirements:

- The program will automatically determine if a winning move is made after each turn or if a draw has occurred.
- Each game will start with player one(player X).
- The program will be implemented using a 2D character array or a hash map to represent the gameboard.
- The program will have an instant response time.
- The program is modular. If the client desires to remove certain functions, they may be commented out. These methods will work on any system with JDK8 installed.
- The program is written in Java. The system must have JDK8 installed.
- All interfaces between the user and the app will be displayed via the graphical user interface.

## 2. DESIGN

