

# Product Requirements

## 2 Player Games

### Minimum Viable Product:

- Connection Between Server and Players
  - Creates lobby on player connect
  - Creates game when both players are connected
  - Keeps track of game state
  - Able to broadcast moves/game board to all players
- 1 functional Game (Checkers)
  - Knows game state
  - Know who is playing
  - Knows valid moves
  - Knows who's turn it is
- Frontend UI
  - Has a main page to choose a game
  - Checker board/tik tac toe board
  - Produces link to send to another player
  - Shows who's turn it is
  - Indicates valid moves (droppable feature)
  - Sends moves to backend (Web socket connection)
  - Receives game state from backend (Web socket connection)

### Demo 1 (October 30<sup>th</sup>)

- Basic UI
  - Displays game state for tic tac toe board
  - Connects to socket (doesn't have to send viable info yet)
- Server
  - Can create lobby between 2 connections
  - Sends default board to client

### Demo 2 (November 20<sup>th</sup> or 27<sup>th</sup>)

- UI
  - Can move game pieces
  - Sends moves to backend
  - Can display game state for checker board

- Server
  - Can receive moves from client
  - Can send updated board to other player

#### Demo 3 (December 11<sup>th</sup>)

- Working checkers game and tic tac toe
- UI looks nice
- Backend properly handles moves for both games (game logic correct)
- Frontend can create lobbies for either game and display either game board