Battleship Legends Fleet Setup Scenario

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Battleship Legends is based on the popular board game *Battleship*. The board game revolves around the idea of 2 players competing with each other, using strategy and information gathering to find where their enemy ships are placed. The winner is whoever destroys all the opponent's ships first.

Battleship Legends takes this a step further and brings in the ability for more than just two players to compete against each other in this reimagination of a classic board game.

A key feature for this scenario is the UI which allows the player to visualize the board and gather information about the player's own board and the opponent's board. Another key feature is the implementation of the board at the backend. Having the board setup will allow us to use the board to place ships and attack in the future releases.

Scenario "Create Fleet"

The player will be able to "connect" to the game by inputting a port number or code and clicking the submit button. Connection to a real match will not be implemented in this release but the button will take the player to a game where they can see the board and see what it would be like if an actual match was starting.

The player will then be able to see their own boards along with their opponent's board. We have not yet decided if it will be one big board, or four separate boards. There will be options in the UI that will allow the users to place down ships and there will be a button such that if the players have placed all their ships down and all the players are ready, they can press the button to show that they are ready to begin the game.

For the first release, we plan on displaying a grid representing the game board, we plan on mimicking the board on the server where the game logic will be handled. We want to allow the player to place their ships on their own grid and include a "Ready" button that will report to the backend that the game is ready to commence.

For the backend we want to simulate a connection to a game by generating and storing player information in some sort of array or cyclic queue to create a 'turn-based' dynamic in the game. We need to store each player's board and locations of their placed ship. Additionally, we'd want the player to input the ships on the frontend and reflect their choices to the backend application to handle the logic. We may also want to track the state of the game, for example if all players are ready to begin.

Class Diagram:

