	Instruction Manual	
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#### Goal

Missouri is a classical battleship game. Two players play against each other on ruled grids, guessing and attacking opponents' fleet of ships. The first one who destroys all the opponent's ships is the winner.

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#### **Basic Control**

- Press [TAB] to cycle through options.
- Press [Space] to confirm.

#### Game modes

- Single Player mode: Human player plays against the computer.
- PvP mode: Human players play against each other.

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# **Difficulty levels**

- By default, the map is a 10 x 10 ruled grid with no obstacles in it.
- Easy mode: Default map with no obstacles.
- Hard mode: Hard mode map with 5 obstacles on the player's board.

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## **Rules**

# • 1. Ship deployment

As mentioned in the previous section, players are provided with a  $10 \times 10$  ruled grid. The columns are marked with numbers 0 - 9 from left to right. The rows are marked with capital letters A - J from top to bottom.

First, players are asked to deploy the ships by choosing start points and then a heading direction.

The player is in charge of a fleet of 10 ships which will be deployed one by one:

1 Carrier ----- size of 5 blocks
2 Battleships ----- size of 4 blocks
3 Cruisers ----- size of 3 blocks
4 Destroyers ----- size of 2 blocks

## **Choose start point:**

Players can press [Tab] to cycle through rows from A to J and press [Space] to confirm the input. Column selection should be done in a similar way. If a player accidentally chooses a place where it has already been occupied, he/she will be asked to reattempt until an available place is selected.

Furthermore, there must be a gap between two ships, which means that players must place a ship at least one block away from others.

## **Choose heading direction:**

After a start point has been chosen, players can continue to select a heading direction for the ship. Similar to "Choose start point", the player shall use [Tab] and [Space] to decide a heading direction ("U", "R", "D", "L"), which are Up, Right, Down, Left, respectively. The program reminds the players if the ship overlaps with other ships or if there is not enough space for the ship, then players are asked to retry. Keep in mind that there must be at least a box between two ships.

# Battle

After deploying all the ships, the gameplay starts.

#### PvP mode:

- Players play in turns, and shoot at where they think enemy ships are.
- Program asks the player to choose the row and column of the desired coordinate. Players can press Tab to cycle through options, then press Space to confirm..
- ❖ The map is initially filled with dash lines. If a ship is found, it will be marked as X, and a missed shot will become an empty spot.
- If a player has hit a piece of a ship, they can launch attacks again until they miss.
- The one who sinks all the opponent's ships first is the winner!

## SinglePlayer mode:

Similar to PvP mode, but the player plays against a robot instead of against a human player.