

## Using

Using terminal and cd to the scripts file. Run hw3.sh file. Details are in read\_me.txt.

## RULES

The program allows 2 users to play a local online Battleship game. Left board will be the ship arranged board and the right side board will be the guessing board. The player's name is on the Frame Label.

The program will generate a 10\*10 board. And there must be 1 5-grids-ship, 1 4-grids-ship, 2 3-grids-ship, 1 2-grids-ship. Users will arrange the ships by the buttons on the toolbar first, then when 2 players **both** clicked "START", the game will start to begin. Initial limit time for each player is 30s. If a player doesn't move in their turns, they will consider as losing. The first one who shoot all of other's ships win. Ships can be next to each other, but not allow to cross. The initial color of the empty board is white, ships are black, correct guesses grids are red and incorrect guesses grids are gray.

## Functions

**Battleship Game -> About Battleship Game:** pop up a window include the information of this program.

**Battleship Game -> Configuration -> Set Board Color:** Change the color of the empty board grids permanently.

**Battleship Game -> Configuration -> Set Ship Color:** Change the color of the ships' grids permanently.

**Battleship Game -> Configuration -> Set False Color:** Change the color of the incorrect guess grids permanently.

**Battleship Game -> Configuration -> Set Shoot Color:** Change the color of the correct guess grids permanently.

**Battleship Game -> Configuration -> Change Player Name:** change the name of the player.

**Battleship Game -> Configuration -> Change Time:** change time limitation of each round. BASE ON SERVER TIME!!!!

**Battleship Game -> Exit:** Exit the program.

SHIPS CANNOT REMOVE!

**Toolbar -> Horizontal Carrier :** generate a horizontal 5-grids-ship from the coordinate user inputs, must 1.

**Toolbar -> Horizontal Battleship :** generate a horizontal 4-grids-ship from the coordinate user inputs, must 1.

**Toolbar -> Horizontal Submarine :** generate a horizontal 3-grids-ship from the coordinate user inputs, must 2.

**Toolbar -> Horizontal Patrol Ship :** generate a horizontal 2-grids-ship from the coordinate user inputs, must 1.

**Toolbar -> Vertical Carrier :** generate a vertical 5-grids-ship from the coordinate user inputs, must 1.

**Toolbar -> Vertical Battleship :** generate a vertical 4-grids-ship from the coordinate user inputs, must 1.

**Toolbar -> Vertical Submarine :** generate a vertical 3-grids-ship from the coordinate user inputs, must 2.

Toolbar -> Vertical Patrol Ship : generate a vertical 2-grids-ship from the coordinate user inputs, must 1.

START : Start the game after arrange the ships.