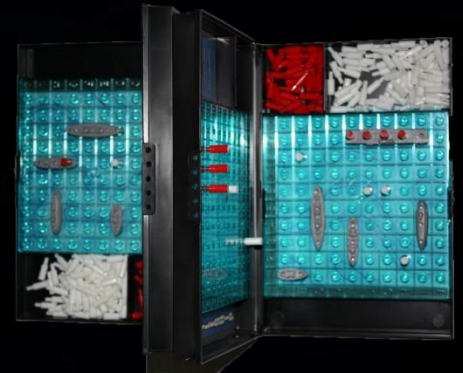By: Miguel Martínez

What is BattleShip?

- BattlesShip is a guessing game for two players.
- It was published by Milton Bradley Company in 1931 as the pad-and-pencil game "Broadsides, the Game of Naval Strategy"
- And as a board game in 1967.
- The 2012 film *Battleship* is an American science fiction action movie inspired by the board game.
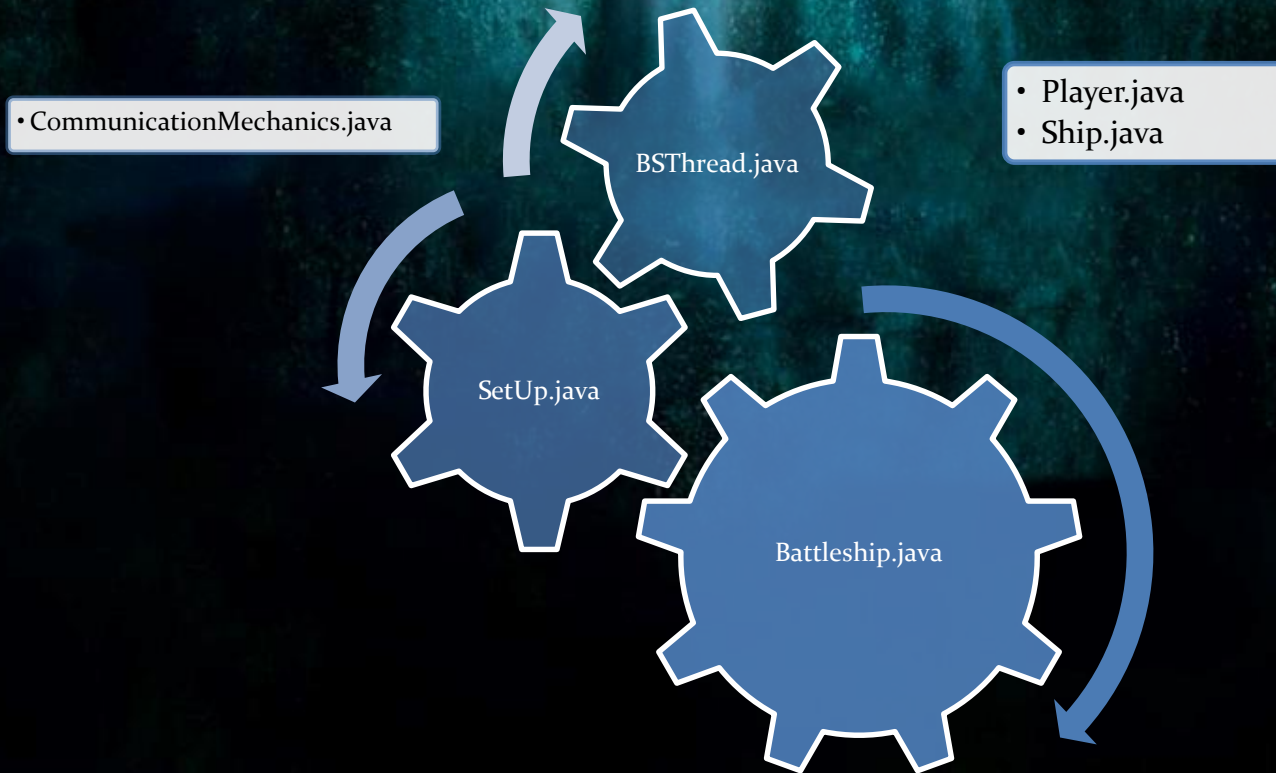
Objectives

- Build the game with similar mechanics
- Allow for PvP combat to play online
- Do all this in Java!

Future updates will include...

- 4 player matches
- *Gold shots* that allow to know in which direction is the closest ship.
- Rapid cannon fire – Fire up to 5 shots at a time.
- Save high scores for each player
- ...

Program tree

- CommunicationMechanics.java

BSThread.java

- Player.java
- Ship.java

SetUp.java

Battleship.java

Program tree (cont.)

Class definitions:

- Player -> holds all of the player's information, such as his Board with the location of his ships, the enemy board, the places he has already bombed, etc

- Ship -> Ship class that holds the information of each ship, such as the coordinates of all of his positions, and the methods to operate with these coordinates

- BSThread -> Starts SetUp with new thread

- CommunicationMechanics -> allows for communication among the players

- SetUp -> Starts server and allows for remote & local connections through port 7777

- Battleship -> Where the game and its mechanics are implemented

Code

- Let's take a look at the code!

```java
this.printTo("\nChoose vessel: (Write full name) ", somePlayer);
if(carrier==1) this.printTo("Carrier (size 2)", somePlayer);
if(battleship==1) this.printTo("Battleship (size 3)", somePlayer);
if(cruiser==1) this.printTo("Cruiser (size 3)", somePlayer);
if(submarine==1) this.printTo("Submarine (size 4)", somePlayer);
if(destroyer==1) this.printTo("Destroyer (size 5)\n", somePlayer);

String shiptype = somePlayer.input().nextLine().toLowerCase().trim();

try{


    this.printTo("Choose position (From A to J)", somePlayer);
    String pos = somePlayer.input().nextLine().toLowerCase();
    this.printTo("Choose number (From 1 to 10)", somePlayer);
    String num = somePlayer.input().nextLine();


    if(validate(pos,num)){

        char letter = pos.charAt(0);
        int number = Integer.parseInt(num);



    switch(shiptype){

    case "carrier":

        if(carrier==1){
            Ship ship = new Ship(2, Character.getNumericValue(letter)-9, number);
            addShip(2, letter, number, somePlayer, ship);
            somePlayer.setCarrier(ship);
            carrier--;
            } else throw new InputMismatchException();

                    break;
    case "battleship":
        if(battleship==1){
            Ship ship = new Ship(3, Character.getNumericValue(letter)-9, number);
            addShip(3, letter, number, somePlayer, ship);
```

```java
public static void main(String[] args){



    System.out.println( "Attempting to start server, please wait..." );

    try{
        ServerSocket ss = new ServerSocket(port);


        while(clients < MAX_CLIENTS){

            Socket socket = ss.accept();

                Scanner input = new Scanner( socket.getInputStream() );
                PrintWriter output = new PrintWriter( socket.getOutputStream(), true );



                System.out.println( "\tUser connected:\t\t" + "Address: " +socket.getInetAddress());
                output.println("\nPlease enter your name below: \n");
                Player p1 = new Player(input.nextLine(), socket);
                players.add(p1);
                clients++;
                System.out.println(clients+" clients connected so far.");
                if(clients==1) output.println("Please wait for another player to join...");


        }

        run();


}catch(Exception e){


} //END OF CATCH CLAUSE

} // END OF MAIN
```
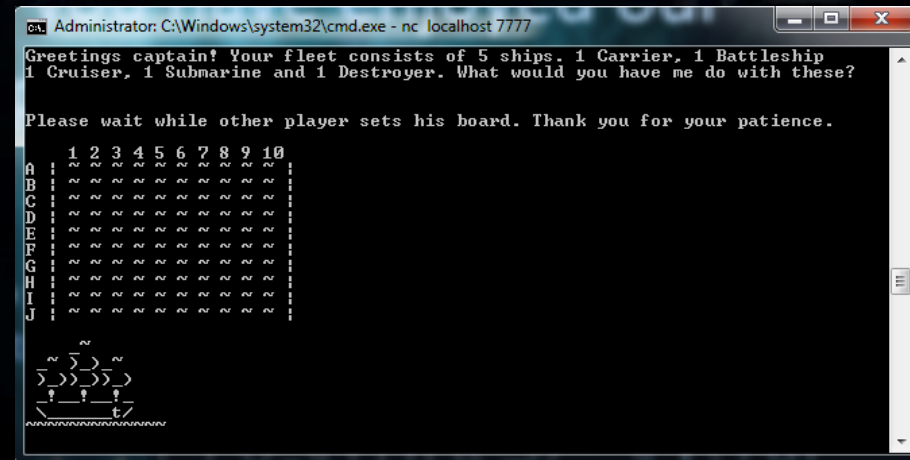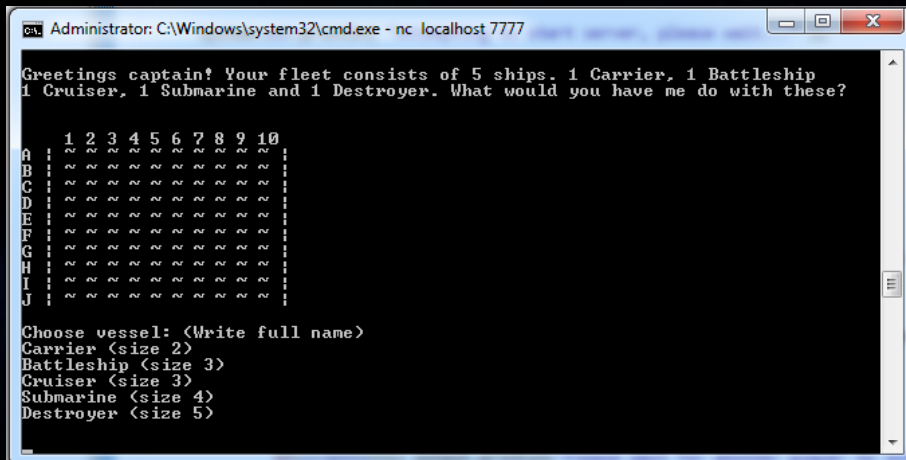
Note: The code will be made public in case you want to try out yourself, or see its implementation.
Check the Projects section in mike.theskyfall.com for the download link and more.

We hope you have enjoyed our presentation!

Last minute thought:

- We are always open to suggestions, if you have any idea that could help make it better, share it!

Thanks a lot for your attention!

Set sails, you scullywags! We have the wind on er side!

THANK YOU!