BATTLE SHIP GAME

MEET THE TEAM!

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PROJECT PROGRESS

CHATTING PLATFORM

```
(base) auliaazmi@192 Socket Prog
rt/Code/User/workspaceStorage/54
27c373b42444aa356c7b6bf451120/re
A new client has connected!
A new client has connected!
A new client has connected!
A new client has connected!
```

```
(base) fariz@farizmr:~/Desktop/py_develop
Socket successfully created
socket binded to 1234
socket is listening
Got connection from ('127.0.0.1', 45346)
Got connection from ('127.0.0.1', 45356)
Got connection from ('127.0.0.1', 45364)
```
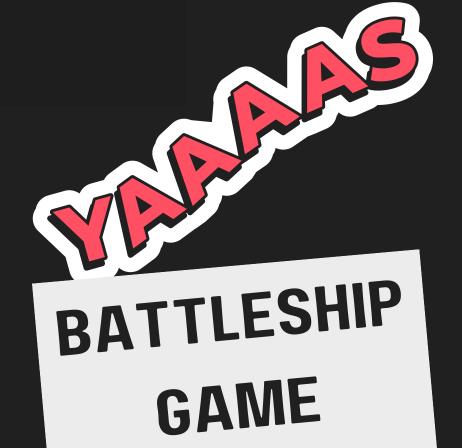
```
(base) auliaazmi@192 Socket Programming %
rt/Code/User/workspaceStorage/54c27c373b424
Enter your username for the group chat:
Adli
Azmi: Hi All!
Fariz: Hi There!
Dani: Yo Wassup!
U guys havin fun there?
```

YAAAAS

BATTLESHIP GAME

```
(base) fariz@farizmr:~/Desktop/py_development/socket$ python3 client.py
Thank you for connecting
('127.0.0.1', 45364): Say hi everyone!
('127.0.0.1', 45356): hi
hi
('127.0.0.1', 45364): My name is Fariz
('127.0.0.1', 45356): My name is also Fariz, what a coincidence!
No way, my name is also Fariz!
('127.0.0.1', 45364): Okay, byebye Farizs
('127.0.0.1', 45364) left the chat!
('127.0.0.1', 45356): Cya!
('127.0.0.1', 45356) left the chat!
Nice meeting you guys.
exit
(base) fariz@farizmr:~/Desktop/py_development/socket$ 
```
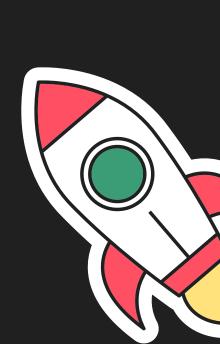
Server.java

Driver.java

Client.java

Game.java

BattleBoard.java

Player.java

ChatServer.java

ClientChat.java

ClientHandler.java

Driver.java

The Driver.java is the program that first interact with the user. It greets and asks for the user name and asking which role is the user taking (host or player). If the user chose to be a host then it directed to create server. else, the program will asks regarding the host ip and port to connect.

Server.java

The Server.java mainly handlingthe server side which is the host of the game. It automatically get the ip and port for the player in the player side to connect to the game.

Client.java

The Client.java mainly handling the client side which is the player of the game. It connect to the server with corresponding ip and ports inputted by the user and also it handle the turn to move until the end it close the connection.

Player.java

The Player.java mostly programs that define the player and also they activity during the games such as giving movements and waiting for the opponent movement.

Game.java

The Game.java is the program that create the battle board and also asking whether the board would be randomized or not.

BattleBoard.java

The Battleboard.java is the programs that handles the battle board. The programs inside of this program will filling up the board, printing the board, casting request, adding ships and randomize ships.

ChatServer.java

The ChatServer.java is a program that mainly handle the server for chatting.

ClientHandler.java

The ClientHandler.java mainly handle the client activity such as broadcasting messages.

ChatClient.java

The ChatClient.java handling the client side of the chatting server for the user that chose to connect to server rather than to be the host.

```
(base) auliaazmi@Aulias-MacBook-Air Socket Battleship % java -cp bin Driver
Welcome to BattleShip (Computer Network Final Project)
Please enter your name: Azmi
Welcome Azmi
Would you like to play or chat? (Enter 'play' or 'chat'): play
Would you like to host or connect to a game? (Enter 'host' or 'connect'): host
Would you like to randomize your board? (y/n)
y
Your Board:
  a b c d e f g h
1 ~ ~ ~ s ~ ~ ~ ~
2 s ~ ~ s ~ ~ s s
3 s ~ ~ s ~ ~ ~ ~
4 s ~ ~ s ~ ~ ~ ~
5 s ~ ~ ~ ~ ~ ~ ~
6 s ~ ~ ~ s s s
7 ~ ~ ~ ~ ~ ~ ~ ~
8 ~ ~ ~ s s s ~ ~
You have created a server at 127.0.0.1 on port 50647
Waiting for connection...
Dani connected from /127.0.0.1:50655
Waiting for opponents move...
Opponent's move: d1
  Your Board           Opponent's board

  a b c d e f g h        a b c d e f g h
1 ~ ~ ~ X ~ ~ ~ ~      1 ~ ~ ~ ~ ~ ~ ~ ~
2 s ~ ~ s ~ ~ s s      2 ~ ~ ~ ~ ~ ~ ~ ~
3 s ~ ~ s ~ ~ ~ ~      3 ~ ~ ~ ~ ~ ~ ~ ~
4 s ~ ~ s ~ ~ ~ ~      4 ~ ~ ~ ~ ~ ~ ~ ~
5 s ~ ~ ~ ~ ~ ~ ~      5 ~ ~ ~ ~ ~ ~ ~ ~
6 s ~ ~ ~ s s s        6 ~ ~ ~ ~ ~ ~ ~ ~
7 ~ ~ ~ ~ ~ ~ ~ ~      7 ~ ~ ~ ~ ~ ~ ~ ~
8 ~ ~ ~ s s s ~ ~      8 ~ ~ ~ ~ ~ ~ ~ ~
Waiting for opponents move...
Opponent's move: d2
  Your Board           Opponent's board

  a b c d e f g h        a b c d e f g h
1 ~ ~ ~ X ~ ~ ~ ~      1 ~ ~ ~ ~ ~ ~ ~ ~
2 s ~ ~ X ~ ~ s s      2 ~ ~ ~ ~ ~ ~ ~ ~
3 s ~ ~ s ~ ~ ~ ~      3 ~ ~ ~ ~ ~ ~ ~ ~
4 s ~ ~ s ~ ~ ~ ~      4 ~ ~ ~ ~ ~ ~ ~ ~
5 s ~ ~ ~ ~ ~ ~ ~      5 ~ ~ ~ ~ ~ ~ ~ ~
6 s ~ ~ ~ s s s        6 ~ ~ ~ ~ ~ ~ ~ ~
7 ~ ~ ~ ~ ~ ~ ~ ~      7 ~ ~ ~ ~ ~ ~ ~ ~
8 ~ ~ ~ s s s ~ ~      8 ~ ~ ~ ~ ~ ~ ~ ~
Waiting for opponents move...
```

```
(base) auliaazmi@Aulias-MacBook-Air Socket Battleship % java -cp bin Driver
Welcome to BattleShip (Computer Network Final Project)
Please enter your name: Azmi
Welcome Azmi
Would you like to play or chat? (Enter 'play' or 'chat'): play
Would you like to host or connect to a game? (Enter 'host' or 'connect'): host
Would you like to randomize your board? (y/n)
y
Your Board:
  a b c d e f g h
1 ~ ~ ~ s ~ ~ ~ ~
2 s ~ ~ s ~ ~ s s
3 s ~ ~ s ~ ~ ~ ~
4 s ~ ~ s ~ ~ ~ ~
5 s ~ ~ ~ ~ ~ ~ ~
6 s ~ ~ ~ s s s
7 ~ ~ ~ ~ ~ ~ ~ ~
8 ~ ~ ~ s s s ~ ~
You have created a server at 127.0.0.1 on port 50647
Waiting for connection...
Dani connected from /127.0.0.1:50655
Waiting for opponents move...
Opponent's move: d1
  Your Board           Opponent's board

  a b c d e f g h        a b c d e f g h
1 ~ ~ ~ X ~ ~ ~ ~      1 ~ ~ ~ ~ ~ ~ ~ ~
2 s ~ ~ s ~ ~ s s      2 ~ ~ ~ ~ ~ ~ ~ ~
3 s ~ ~ s ~ ~ ~ ~      3 ~ ~ ~ ~ ~ ~ ~ ~
4 s ~ ~ s ~ ~ ~ ~      4 ~ ~ ~ ~ ~ ~ ~ ~
5 s ~ ~ ~ ~ ~ ~ ~      5 ~ ~ ~ ~ ~ ~ ~ ~
6 s ~ ~ ~ s s s        6 ~ ~ ~ ~ ~ ~ ~ ~
7 ~ ~ ~ ~ ~ ~ ~ ~      7 ~ ~ ~ ~ ~ ~ ~ ~
8 ~ ~ ~ s s s ~ ~      8 ~ ~ ~ ~ ~ ~ ~ ~
Waiting for opponents move...
Opponent's move: d2
  Your Board           Opponent's board

  a b c d e f g h        a b c d e f g h
1 ~ ~ ~ X ~ ~ ~ ~      1 ~ ~ ~ ~ ~ ~ ~ ~
2 s ~ ~ X ~ ~ s s      2 ~ ~ ~ ~ ~ ~ ~ ~
3 s ~ ~ s ~ ~ ~ ~      3 ~ ~ ~ ~ ~ ~ ~ ~
4 s ~ ~ s ~ ~ ~ ~      4 ~ ~ ~ ~ ~ ~ ~ ~
5 s ~ ~ ~ ~ ~ ~ ~      5 ~ ~ ~ ~ ~ ~ ~ ~
6 s ~ ~ ~ s s s        6 ~ ~ ~ ~ ~ ~ ~ ~
7 ~ ~ ~ ~ ~ ~ ~ ~      7 ~ ~ ~ ~ ~ ~ ~ ~
8 ~ ~ ~ s s s ~ ~      8 ~ ~ ~ ~ ~ ~ ~ ~
Waiting for opponents move...
Your move was a Miss
```

```
Your move was a Hit:Sink
  Your Board           Opponent's board

  a b c d e f g h        a b c d e f g h
1 ~ ~ ~ X ~ ~ ~ ~      1 o o o o o o ~ ~
2 s ~ ~ X ~ ~ s s      2 o x o o x o ~ ~
3 s ~ ~ s ~ ~ ~ ~      3 o x o o x o o o
4 s ~ ~ s ~ ~ ~ ~      4 s ~ ~ s ~ ~ ~ ~
5 s ~ ~ o ~ ~ ~ ~      5 o o o o x o x o
6 s ~ ~ ~ s s s        6 x o ~ o x o x o
7 ~ ~ ~ ~ ~ ~ ~ ~      7 X o o o o o x o
8 ~ ~ ~ s s s ~ ~      8 x o x x o o o o
Congrats! You Win!
  Your Board           Opponent's board

  a b c d e f g h        a b c d e f g h
1 o o o o o o ~ ~      1 ~ ~ ~ X ~ ~ ~ ~
2 o x o o x o ~ ~      2 ~ ~ ~ X ~ ~ ~ ~
3 o x o o x o o o      3 ~ ~ ~ ~ ~ ~ ~ ~
4 o x o o x o x o      4 ~ ~ ~ ~ ~ ~ ~ ~
5 o o o o x o x o      5 ~ ~ o ~ ~ ~ ~ ~
6 x o ~ o x o x o      6 ~ ~ ~ ~ ~ ~ ~ ~
7 X o o o o o x o      7 ~ ~ ~ ~ ~ ~ ~ ~
8 x o x x o o o o      8 ~ ~ ~ ~ ~ ~ ~ ~
Azmi Wins. Better luck next time
```

PROGRAM DEMO

```
(base) auliaazmi@Aulias-MacBook-Air Socket Battleship % java -cp bin Driver
Welcome to BattleShip (Computer Network Final Project)
Please enter your name: Azmi
Welcome Azmi
Would you like to play or chat? (Enter 'play' or 'chat'): chat
Would you like to host or connect to a chat? (Enter 'host' or 'connect'): host
You have created a server at 127.0.0.1 on port 1234
Waiting for connection...
A new client has connected!
Waiting for connection...
A new client has connected!
Waiting for connection...
A new client has connected!
Waiting for connection...
A new client has connected!
Waiting for connection...
```

```
(base) auliaazmi@Aulias-MacBook-Air Socket Battleship % java -cp bin Driver
Welcome to BattleShip (Computer Network Final Project)
Please enter your name: Fariz
Welcome Fariz
Would you like to play or chat? (Enter 'play' or 'chat'): chat
Would you like to host or connect to a chat? (Enter 'host' or 'connect'): connect
Enter your username for the group chat:
Fariz
Please enter the information for the game you wish to connect to (ip:port): 127.0.0.1:1234
SERVER Dani has entered the chat!
SERVER Dumont has entered the chat!
SERVER Chalemet has entered the chat!
Hello! I'm Fariz! first one got here!
wassupp ?
Dani: Yeaa !! Hallo there!
Dani: My name is Dani
Dumont: Halooo  Bonjour!!
Dumont: I'm from Paris
Chalemet: Hi!! im from Paris too!!
Chalemet: I'm Dumont btw
```

```
(base) auliaazmi@Aulias-MacBook-Air Socket Battleship % java -cp bin Driver
Welcome to BattleShip (Computer Network Final Project)
Please enter your name: Chalemet
Welcome Chalemet
Would you like to play or chat? (Enter 'play' or 'chat'): chat
Would you like to host or connect to a chat? (Enter 'host' or 'connect'): connect
Enter your username for the group chat:
Chalemet
Please enter the information for the game you wish to connect to (ip:port): 127.0.0.1:1234
Fariz: Hello!  'm Fariz! first one got here!
Fariz: wassupp ?
Dani: Yeaa !! Hallo there!
Dani: My name is Dani
Dumont: Halooo  Bonjour!!
Dumont:  'm from Paris
Hi!! im from Paris too!!
 'm Dumont btw
```

```
(base) auliaazmi@Aulias-MacBook-Air Socket Battleship % java -cp bin Driver
Welcome to BattleShip (Computer Network Final Project)
Please enter your name: Dani
Welcome Dani
Would you like to play or chat? (Enter 'play' or 'chat'): chat
Would you like to host or connect to a chat? (Enter 'host' or 'connect'): connect
Enter your username for the group chat:
Dumont
Please enter the information for the game you wish to connect to (ip:port): 127.0.0.1:1234
SERVER Chalemet has entered the chat!
Fariz: Hello! I'm Fariz! first one got here!
Fariz: wassupp ?
Dani: Yeaa !! Hallo there!
Dani: My name is Dani
Halooo, Bonjour!!
I'm from Paris
Chalemet: Hi!! im from Paris too!!
Chalemet: I'm Dumont btw
```

PROGRAM
OVERVIEW

1 During the process we made several program some of them in python and the others are in java.

2 Created a program of a Chatting platfrom along with Battleship Game that the user are free to choose.

3 In terms of technical, the program is one server multiple clients for the chat and one server for two clients for the battleship game

HOW TO?
COMPILE & RUN?!

The compile command is 'java -d bin *.java' and the run command is ' java -cp bin Driver'

LINK
LINK & LINKS

https://github.com/Azmi0303/socket-programming

https://github.com/farizmr09/socket-programming

THANK YOU EVERYONE