Zhiyu Ning’s Java project  
Setting up  
  
This project contains two part: A graphical GamePlay Panel and a user history backend System.  
The GamePlay is compsed of JPanel, swing, and some graphics technology. The backend would mainly be spring framework.  
  
**Start the server:**  
Extract the zip file, and use eclipse to import the folder “Final project”. You will find two sub-folders: One is backend, which is the user backend, and one is the files for gameplay.  
  
First you need to start the server, by setting up another window or terminal. The most convenient way to do this is by right click “GameuserApplication” in eclipse and select run. It will run the spring app in the background. If there are no error, the log will ended up shows two pre-fit test data: one is called Garen with 2 game history (score 1 and 2), and Lux with 2 history(score 1000 and 340)

You can login into the two account:, I have prepare two accounts.  
**username**: Garen **password**: 123123  
**username** Lux **password** sassword

**Start the game:**After the server running, you can run the game by starting **files/src/breakout /Main.** It will start to run, the UI would be like this:  
  
A screenshot of a computer

Description automatically generated

Left hand side is the Gameplay board, right hand side is the score board that display the highest score from each play in the database. This would be default message at the beginning.

Make Sure server Is running without error, or you might get the following message:

A screen shot of a computer screen

Description automatically generated

Also If you are not login, the score would not be saved. So, make sure to login if you want to share your score.

If you are the first time user, just use the login field to create the Panel, if your username has been used, it will say that your password / username is wrong. Indicate that the username has been used.

A screen shot of a computer screen

Description automatically generated

Otherwise you will get this window.

A screenshot of a video game

Description automatically generated

Note that the Field above Logout button displays your current username, and the Score board display all user high score based on the score ranking.  
  
Since Garen (You) has 2 as the high score, so you can easily break this record. The score board will update the record righty now t reflect the changes:  
A screenshot of a video game

Description automatically generated  
  
After click the ENTER, It will becomes:  
A screenshot of a video game

Description automatically generated  
note that the score has changed  
  
  
  
multiplayer:  
  
You can also run two or more instance of breakout game, the server just need to be one, and the score will shared across all the player  
  
Screens screenshot of a video game

Description automatically generated   
  
Above image I create another user called newuser123, and the score can be reflect on all scoreboard  
  
  
**Some important notes:**  
**The DATABASE that I designed will reset after each start. So that means current I have 3 players, Garen, Lux, and newuser123, then after I stop the server and rerun, it will contains only the 2 default user (Garen and Lux), the newuser123 that I create later would not be saved in the database. This is convenient for debug and functionality showcase.**