GUIDE TO RUN AND TEST THE PROJECT

Nguyen Van Hung
Programming III C2406
James Cook University Singapore – SP51 2019

Please follow these steps to run the project on your local computer:

Recommendation: you should have 2 or more computers to fully experience the TCP/IP connection of this multiplayer game.

Step 1: Clone the project

Clone the project at https://github.com/nguyenvhung9420/CP2406_Assignment_13476253.git to a folder on your computer.

Step 2: Import the project into IntelliJ IDEA

1. Open the cloned project in IntelliJ IDEA.
2. In IntelliJ IDEA window, go to *File > Project Structure*.
3. In the *Project Structure* window, go to *Project Settings > Project* and set up the project's SDK by using the JDK available on your computer.
4. Go to *Project Settings > Modules* and click the *+ sign* on the top as illustrated below, and choose *Import Module*:
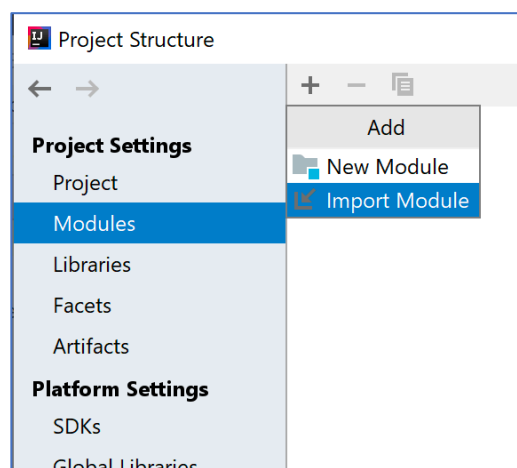
5. Choose the *.iml* file in the *.idea* folder that resides inside the project folder, as illustrated below:
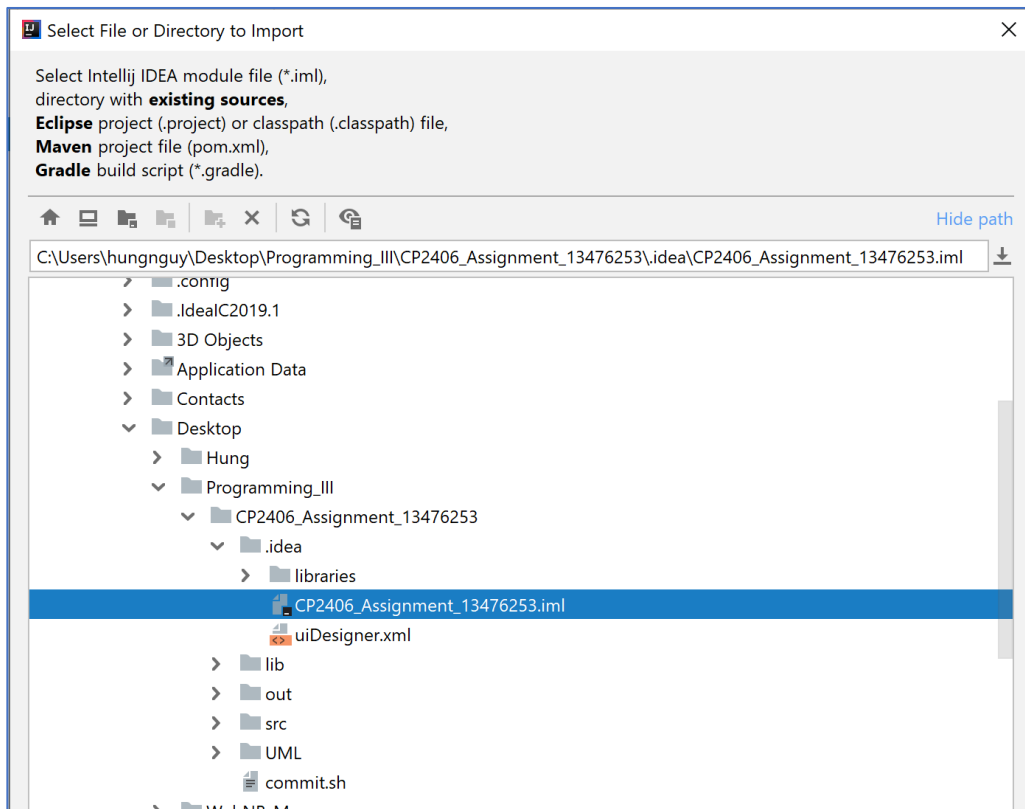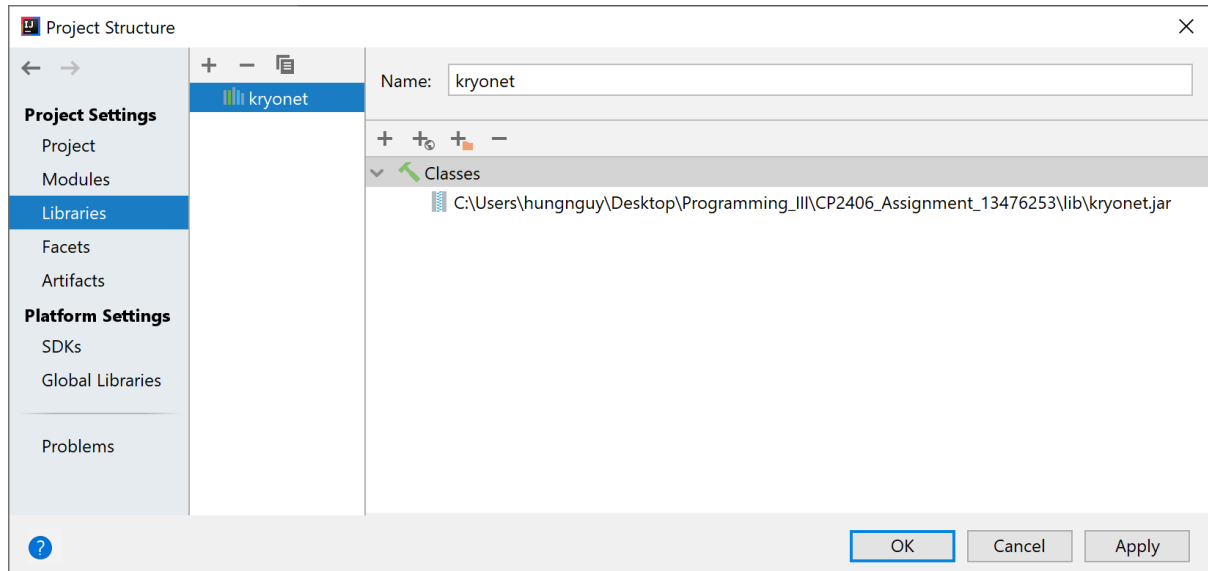
6. Then, click OK. Now the module is added into the project as imaged below.
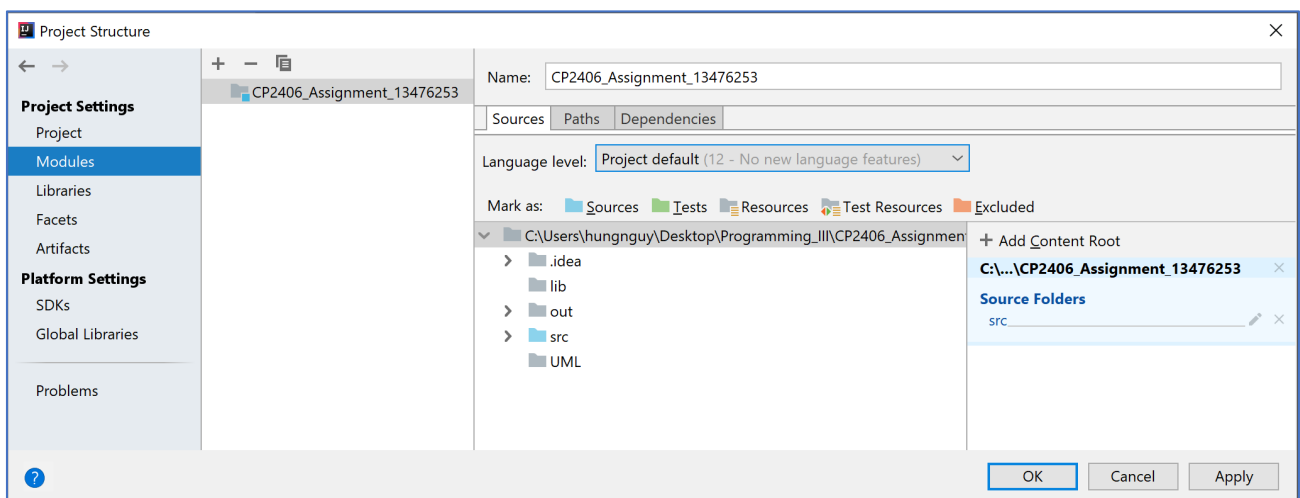
## Step 3: Add the attached library into the project:

After the module is added into the project, the attached library below will be also added into the project structure, as captured below:
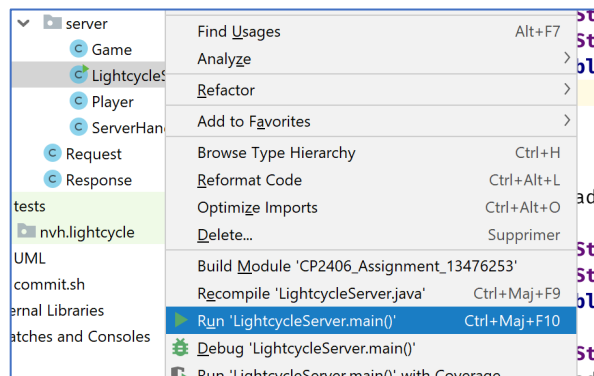

If the library cannot be added automatically, please add its **.jar** file from the **lib** folder of the project.
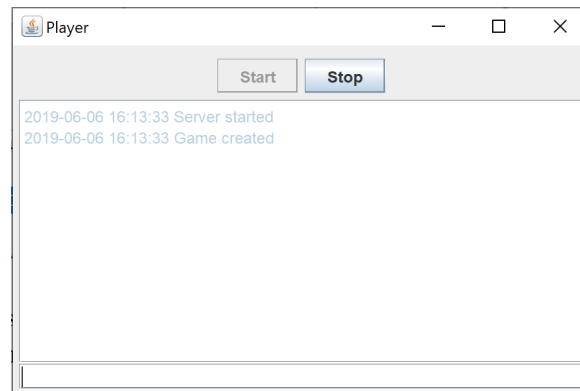
Step 4: Run the server:

In the project tree, in **src** directory, select the ***LightcycleServer*** as illustrated below:
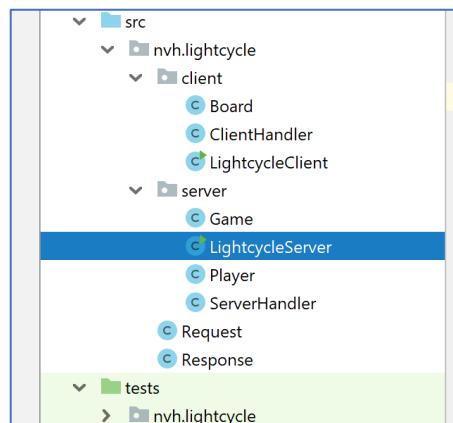
Right click on it and choose **Run 'LightcycleServer.main()'** as imaged below:

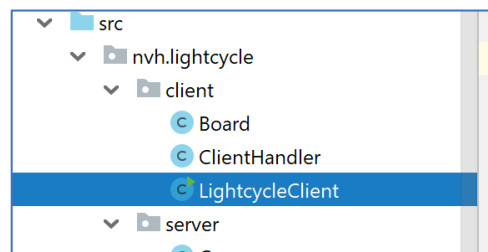

Wait for some seconds, then you can see the JFrame of server interface is running as imaged below. Then, click **Start** to start the game server:
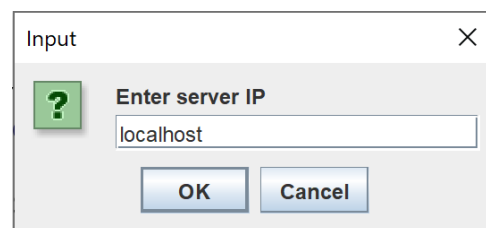

Step 5: Start the first player:

1. After having started the server, go to the project tree again and right click on the **LightcycleClient** as imaged below and **Run** it.
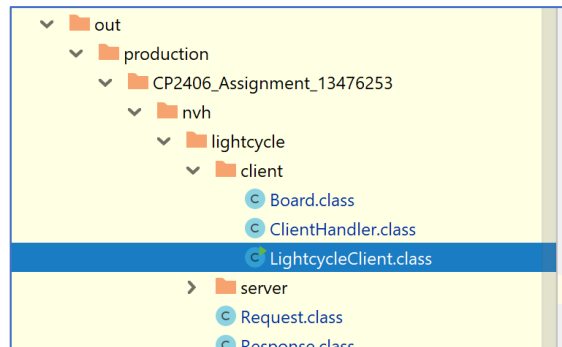

2. As it required the address for the server, type `localhost`, and then press OK:

3. At this step, you can play alone as the only one player. However, you are still able to add more users to the game.

**Step 6: Add the second player and more into the game:**

1. In the *out* directory, select the *LightcycleClient.class* as illustrated below, right click on it and *Run* it:


2. As the dialog as below appears, you can change the Name *"LightcycleClient (1)"* into another name as you want, or you can just let it be the default:
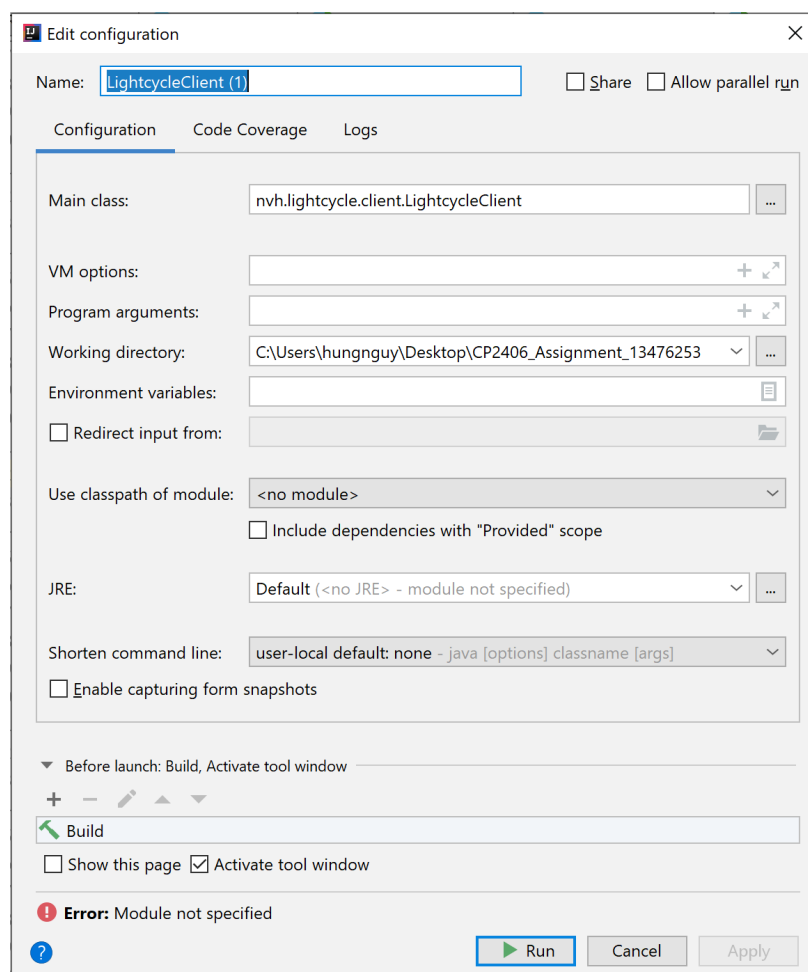
3. In the ***Use classpath of module***, choose the current project's module as imaged below:
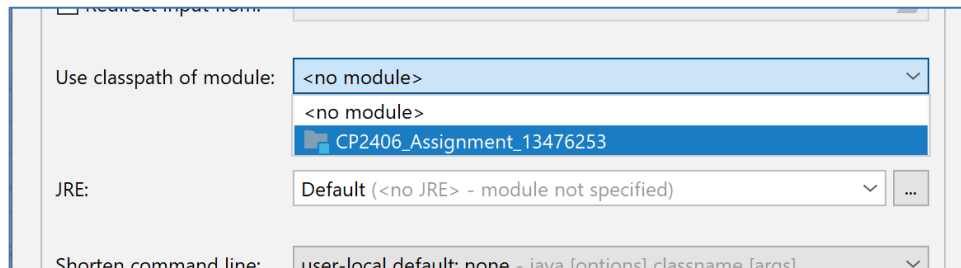
4. And then click ***Run*** at the bottom of the dialog box to run it.
5. At this step, you can see the dialog of IP address inputting is appeared, you have two options to continue:
   - If you are running this second player on the same computer as the server, just type the localhost in IP address input:
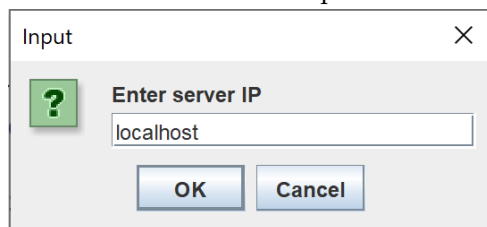
   - If you are running this player on the computer other than the server's one, you must know the IP address of the server, and then type it into the input box, for example as below:
     (Note: please make sure that the server and all players must be on the same LAN or Wi-Fi.)
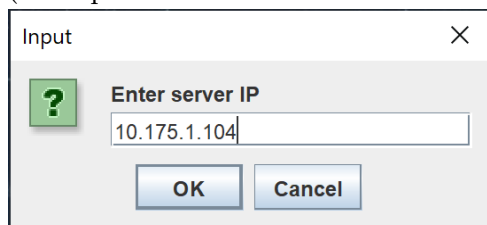
Repeat the steps above if you want to add more players into the game.

Each player can press space bar to start the game after all the players have joined the game.