

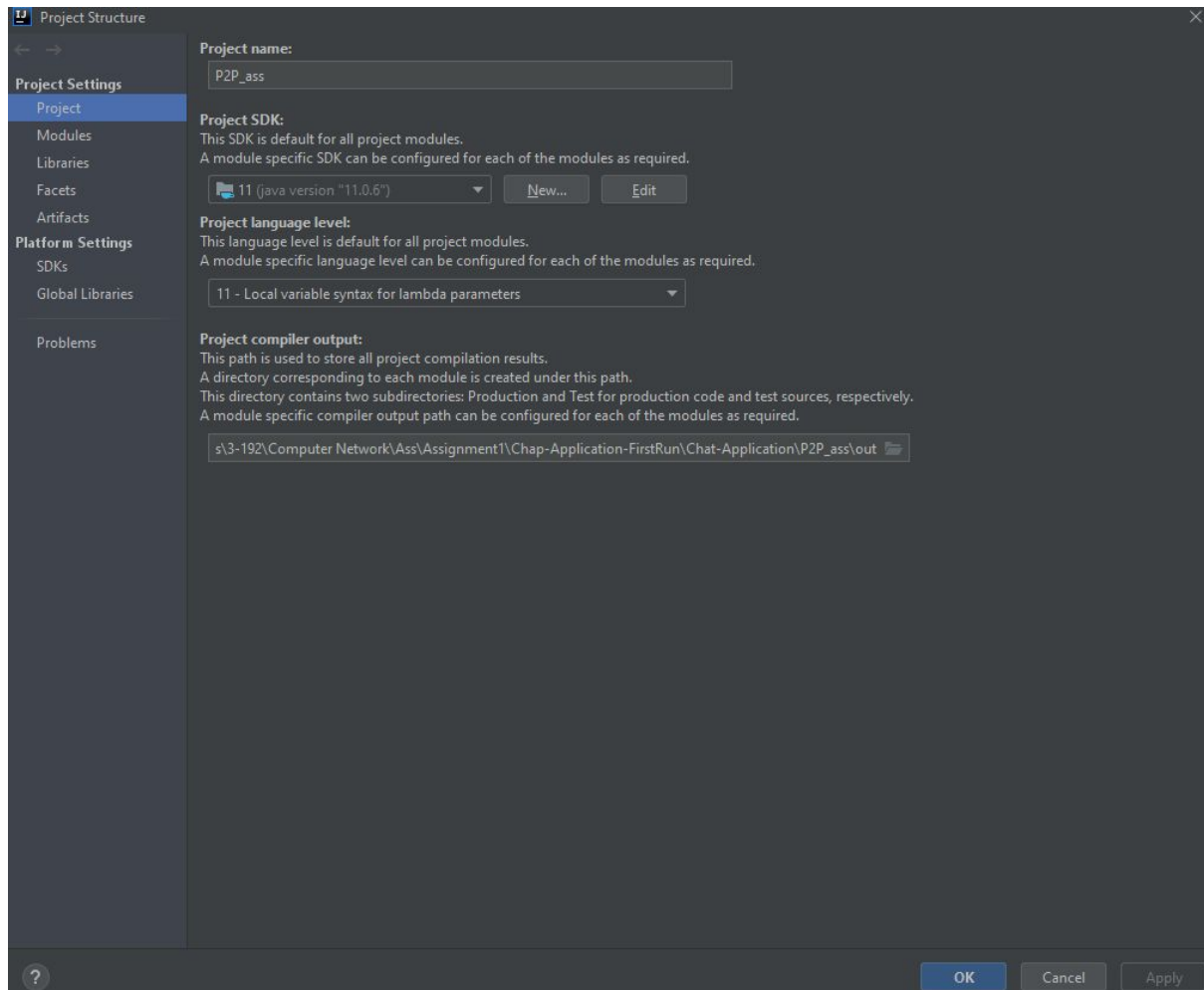
RUN ME with IntelliJ IDE

To run the project, please follow the steps below:

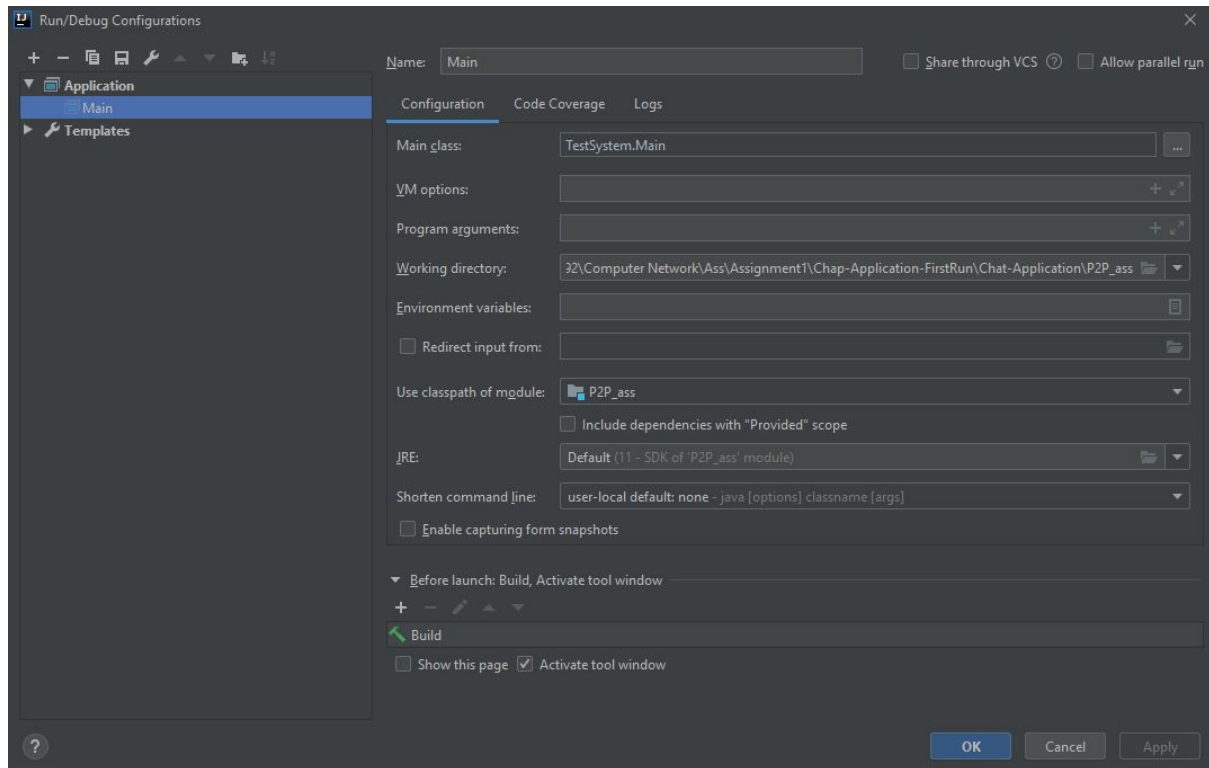
Step 1: There are two main directories: P2P_ass and internetServer. Open each directory in a new window respectively.

Step 2: Configuration for the P2P_ass:

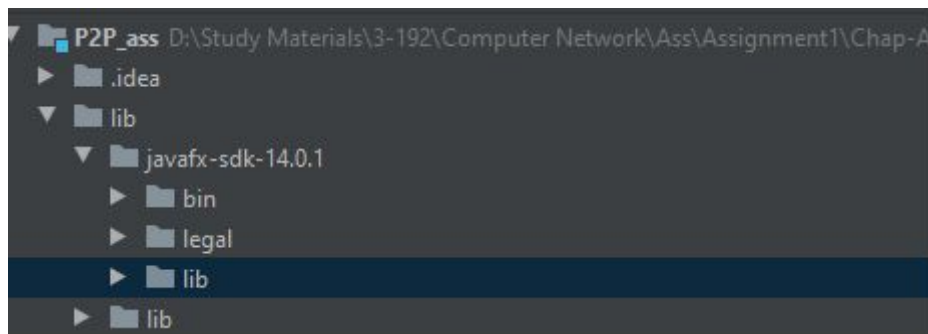
2a. Open File -> Project Structure -> Project. Choose the **Project SDK** with the same version as the **Project language level**:



2b. Open the Main.java in P2P_ass/src/TestSystem/Main then open Run -> Edit Configuration:



2c. Setup the **VM options** with the following command to add JavaFX library to run the program: `--module-path Path --add-modules javafx.controls,javafx.fxml` where **Path** is the location to the JavaFX lib in your computer:



The library has already been added to the P2P_ass, open the javafx-sdk-14.0.1/lib in **Show in explorer**, copy the full path in your computer and paste in the **Path**.

2d. Build to test if javaFX has been added successfully or not, if the chat application UI displayed on the screen then the configuration is completed.

Step 3a: And now there is two option: run the P2P_ass Main directly with the executable file with the already deployed server on Cloud - the requirement is the java-jdk must be at least 14 in order to execute the application. To check the version: Open command prompt line -> enter `java --version`

```
C:\> Command Prompt

Microsoft Windows [Version 10.0.18362.900]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\USER>java -version
java version "14" 2020-03-17
Java(TM) SE Runtime Environment (build 14+36-1461)
Java HotSpot(TM) 64-Bit Server VM (build 14+36-1461, mixed mode, sharing)
```

If the requirement is already satisfied, run the TKT.exe to run the application.

Step 3b: Alternatively if you want to test manually, run the internetServer from the code provided and replace the IP and PORT in P2P_ass/src/TestSystem/Main:

```
public static final String IP = "35.240.225.11";
public static final int PORT = 9999;
```

First open the command line prompt, enter ipconfig:

```
Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::d552:8ab5:a4fd:b4af%10
    IPv4 Address. . . . . : 192.168.0.154
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1
```

Next replace the IPv4 Address with the IP in the P2P_ass Main. Then open the main application in internetServer/src/testServer/ServerMain:

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

        int port = 8818;
        Server server = new Server(port);
        server.start();
    }
}
```

The port is 8818 and then replace the PORT in P2P_ass Main with 8818. Run the ServerMain and the the Main and now the process is completed.