

# Instruction of final year project

This project is based on the framework provided by TAG platform. More information about the TAG can be found in the cite.txt file. This is a large folder contains a lot of files. I will show you where is the file that this project covered.

FYP-master\src\main\java\games\blackjack. In side the folder, is the blackjack game environment.

FYP-master \src\main\java\players\reinforcement, follow this path is the source code of the reinforcement learning agent. The class RL\_player.java is the agent base on q-learning algorithm with a main method which can start the training episode. When training finish, "Training completed will" will be printed out. As well as a reward rolling average chart. In the main method, it can also provide a win-loss rate against the dealer. The other files such as rewardchart.java are classes that helps us build a plot to make a conclusion and improve.

FYP-master \src\main\java\core\Game.java. Following this path is the class that can observe the game going. Scroll down to the bottom, you will see the main method. There are a lot of comments.

```
//players.add(new HumanGUIPlayer(ac));
```

Uncomment this will add a HumanGUIPlayer in the game. This player is used to let the user join the game and play with the other forward model players. As you can see in the photo below. Player 2 is the humanguoplayer, you can choose hit or stand to join the game.

