

anchormen - Programming Assessment Twenty-One

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1 Implementation

The 21 Game should be built using Java, Scala or Python possibly in conjunction with Angular according to the requirements. My first idea was to build a Play framework + AngularJS application. Since I am not an Angular expert and I did not have time to go into it (because of the one working day time constraints) I have decided to build the application entirely in Java. The UI is realized using JavaFX; however, since it was my first JavaFX application, there is still room for improvement. From an architectural perspective I tried to apply the MVC pattern as much as possible.

The application is (should be) compliant to the requirements specification. Some points of the requirements were not really clear to me like the 'split' option or the value of the ace. In these cases I made some assumptions: for example, in my app, the value of the ace is 11 by default; if the player holds an ace and the total points of the player are greater than 21 then the ace is converted into 1.

Along with the game some unit tests have been implemented as well.

2 Deployment

2.1 Requirements

- Java 1.8
- Maven

2.2 Run the game & tests

For packaging the application run the following command from the main project directory:

```
mvn package
```

In order to start the game run the following command from the main project directory:

```
java -cp target/21-1.0-SNAPSHOT.jar GameApp [number of players]
```

If no parameter is passed to the application the game will be executed with a default number of players equals to two.

For running all the JUnit tests, please, run the following command from the main project directory:

```
mvn test
```

3 Conclusions

A simple and playable 21 game has been developed and some tests have been performed. I hope the client wants to continue with the further development.