COMP 1011: Advance Java Programming

FINAL-Term Exam (TEST 02)

Start Date: (8.00 am) Tuesday 14th Dec. **Marks/Weightage: 50/15%**
End Date: (10.00 am) Wednesday 15th December

Demonstration Date: Wednesday 15th December, during the virtual class. Everyone is required to be present. For No-Show, there will be 20% penalty. No Exceptions. If some one fails to upload, there will be 50% penalty.

References: Learning materials such as ppts, code examples, assignments, lab exercises and other internet references (if any).

IDE: eclipse Java Developer edition – 2021-09 and Windows 10 OS. You can also use intelliJ for this assignment.

Step1: At the start of eclipse, you must name your Eclipse workspace according to the following rule:

YourFullName_COMP1011SectionNumber_Test02
For Example: **JohnSmith_COMP1011Sec002_Test02 (if your section is Sec002)**

Step 2: And after that, you must name your Eclipse project according to the following rule:

YourFullName_COMP1011SectionNumber
For Example: **JohnSmith_COMP1011Sec002**

Step 3: And your package should be named as follows:

YourFullName_SectionNumber_Ex01
For Example: **johnsmith_sec002_ex01**

Submission/Upload Instructions:

After you complete, run and test your code, you need to do the following:

a) Close the eclipse, go to your **workspace** folder which you created in Step 1.
b) Zip it up. You should get a zip file like this– **JohnSmith_COMP1011Sec002_Test02.zip. You should only be submitting it in the .zip file format (and not .rar or any other format)**
c) Upload this zip file using the Test02 assignment link in e-centennial.

Apply the naming conventions for variables, methods, classes, and packages:

- *variable names* start with a *lowercase* character for the first word and uppercase for every other word
- *classes* start with an *uppercase* character of every word
- **packages** use only *lowercase* characters

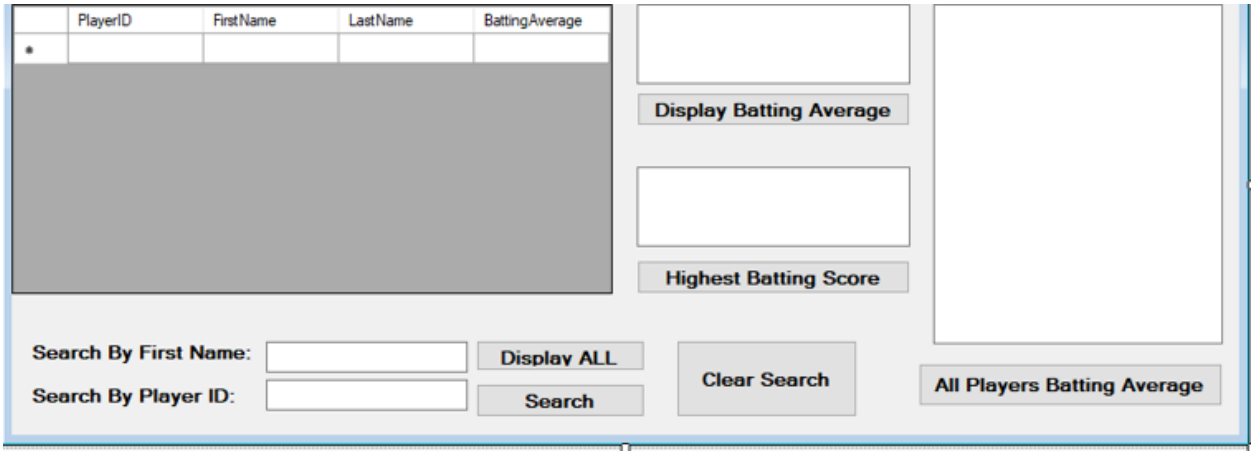
- *methods* start with a *lowercase* character for the first word and uppercase for every other word

Note: You need to maintain academic honesty and integrity. You are not allowed to email, copy, share, show your code to anyone. You must upload your test on or before the deadline, on blackboard using link – FINAL EXAM SUBMISSION LINK. You are allowed one upload only.

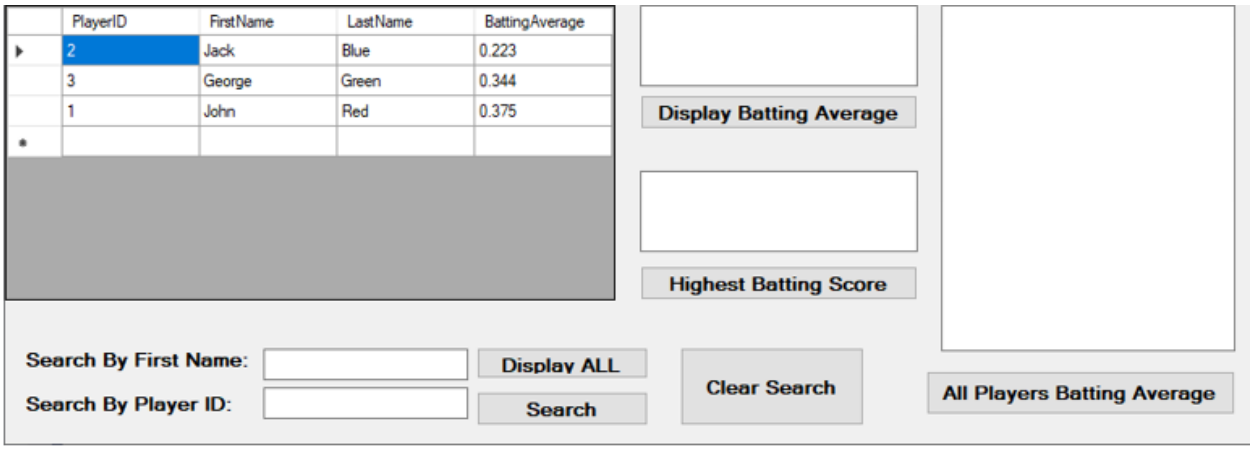
Exercise 01:

Build a Java application using JavaFx/Scene Builder and JDBC which allows the customer to search and display players information. (see the screen shot below). You need to create **players** table (either in MySQL or Oracle), having columns as shown in the screen shot. Populate the table with your favorite players (min 5 records)

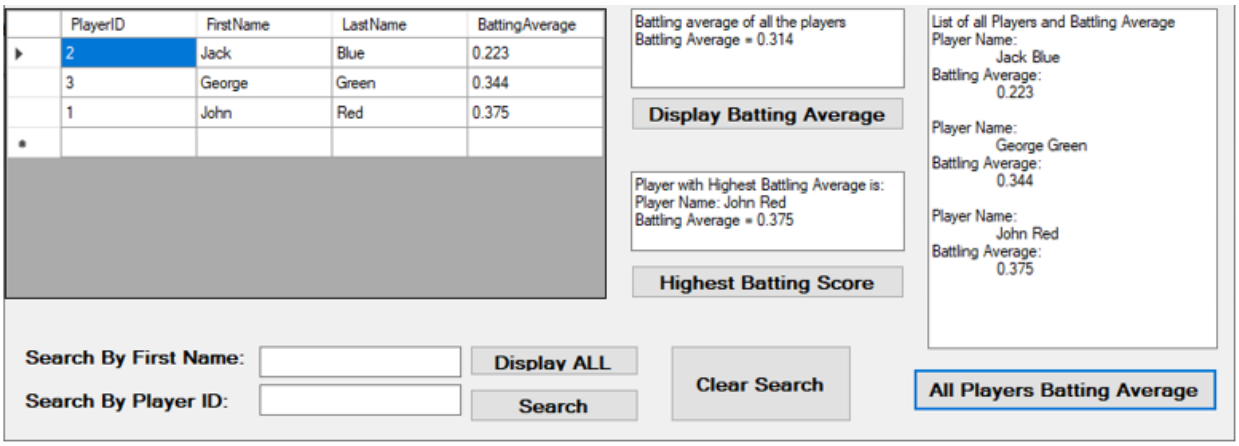
a) Build the GUI as shown below. ***[15 marks]***



b) **Display ALL** buttons display all the records in the DataGrid/TableView as shown in the screenshot below. ***[10 marks]***



c) **Search** button should let the user to search and display a player either by First Name or Player ID. ***[5 mks]***



d) **Display Batting Average** button displays the results as shown in the screen shot. ***.[5 marks]***

e) **Highest Batting Score** button displays result as shown in the screen shot. ***.[5 marks]***

f) **All Players Batting Average** button displays result as shown. ***.[5 marks]***

g) **Clear Search** button should clear all the results in all the text fields. ***.[5 marks]***

Note: You can use lambdas and streams to obtain the results in parts d) to f), can use collections to maintain list of players.

Evaluation/Rubric:

Functionality	
Correct implementation of UI	30%
Correct implementation of code logic, validations of values, event handling and display of results	60%
Comments, correct naming of variables, methods, classes, etc.	5%
Friendly input/output	5%
Total	100%