

Exercise 01: Build Win Form/WPF to execute a query against the **Players** table of the **Baseball** database (get it from Databases folder from e-centennial). You should be using ADO.NET Entity Framework.

- a) Build the GUI as shown below.

The screenshot shows a Windows Form titled "Display Players". At the top, there is a status bar with navigation icons and text "0 of {0}". Below this is a DataGrid with columns: PlayerID, FirstName, LastName, and BattingAverage. The DataGrid is currently empty, showing only the header row. To the right of the DataGrid are two empty text boxes, each with a button below it: "Display Batting Average" and "Highest Batting Score". At the bottom of the form, there are two search controls: "Search By First Name:" with a text box and a "Display ALL" button, and "Search By Player ID:" with a text box and a "Search" button. To the right of these are two more buttons: "Clear Search" and "All Players Batting Average".

- b) **Display ALL** buttons display all the records in the DataGrid as shown in the screenshot below.

The screenshot shows the same "Display Players" application window, but now the DataGrid is populated with three records. The status bar shows "1 of 3". The records are:

PlayerID	FirstName	LastName	BattingAverage
2	Jack	Blue	0.223
3	George	Green	0.344
1	John	Red	0.375

The "Display ALL" button is highlighted. The other controls and buttons remain the same as in the previous screenshot.

- c) **Search** button should let the user to search and display either by First Name or Player ID

Display Players

1 of 3

	PlayerID	FirstName	LastName	BattingAverage
▶	2	Jack	Blue	0.223
	3	George	Green	0.344
	1	John	Red	0.375
*				

Batting average of all the players
Batting Average = 0.314

Display Batting Average

Player with Highest Batting Average is:
Player Name: John Red
Batting Average = 0.375

Highest Batting Score

List of all Players and Batting Average
Player Name:
Jack Blue
Batting Average:
0.223

Player Name:
George Green
Batting Average:
0.344

Player Name:
John Red
Batting Average:
0.375

All Players Batting Average

Search By First Name:

Display ALL

Search By Player ID:

Search

Clear Search

- d) **Display Batting Average** button displays the results as shown in the screen shot.
- e) **Highest Batting Score** button displays result as shown in the screen shot
- f) **All Players Batting Average** button displays result as shown.
- g) **Clear Search** button should clear all the results in all the text boxes