**Lab Assignment – 1  
Total Points: 100**

**Due Date: Jan 20 (Tuesday), 11.59 pm**

**Create a NetBeans project named lab01 and ensure it is saved to a location like desktop or your flash drive. In project you would be doing the following:**

Create a user-defined class called **Player**. Each Player object will have the following attributes (instance variables): name, position played, whether the player is a starter?, and jersey number. Use appropriate data types to define these instance variables and use recommended naming conventions for the variable names. Provide a constructor and implement the accessor and mutator methods for each of the instance variables. Comment your code using the JavaDoc style comments using the instructions provided in *Page 50 – 51* in the textbook.

Implement a client class called Test with the **main( )** method. In the **main method** do the following:

* 1. Create an **array** or **ArrayList** of **Player** type. This **array/ArrayList** will store the player information of your favorite basketball team (NBA/WNBA or College Men/Women). Please note both NBA/WNBA and NCAA – basketball allows a maximum of 13 players to dress up for each game. If you don’t have a favorite team, you could use the NDSU Bison Basketball (Men/Women) as your example. Name the **array/Arraylist** variable using the team name.
  2. Populate the **array/ArrayList** with 13 Player objects. You could look up the player information by visiting the team website.
  3. Run a for loop on the array call all the getMethods( ) on each Player object and print them to the output window.
  4. Comment your code appropriately using single line commenting style. Include your name in a block style comment at the top of the program.

Next, create a **class diagram** of the **Player class** using **MS Visio** (installed on all the campus computers). You could use the example on *Figure 1.5* on *page 47* in the textbook.

***Please note your code has to be appropriately commented using the instructions provided for the commenting styles. Your comments will account for 10% of your grade.***

**Things to turn in:**

* Open a Microsoft Word document name using the following file naming convention
  + i.e. *lab01-LnameFM*
    - lab01 = assignment prefix
    - Lname = your last name
    - F = your first initial
    - M = your second initial
* Copy and Paste the source code of the user defined class Player (make sure to use   
  *Ctrl + A* to select all the source code of the program and *Ctrl + C* to copy).
* Copy and Paste the source code of the client program - Test
* Copy and paste the output of the client program
* Create a screen capture of your NetBeans IDE that includes the contents of the Output Window and paste it into your Word document below your source code.
  + To create a screen capture of your NetBeans IDE
    - Select, left-click in the NetBeansIDE
    - Use Alt-PrintScreen to place an screen capture image on the clipboard
    - Use Ctrl-V to paste the contents of the clipboard into your Word document
* Copy and paste the ***Class diagram*** of the Player class
* Next, zip the Project folder.
* Finally on blackboard, submit both your Word document and project zipped file.