

# Assignment #3

**Due Date: 10/25/18 by 11:59pm**

## **Deliverable:**

- Use the object-oriented design principles and utilize the MVC architecture discussed in the class to produce an object-oriented web-based enterprise application that is reusable, flexible, and extensible.
- Use **Servlets** to implement the functionalities listed below.
- Record 10 minutes demo of your assignment's run using screencast. The tool can be downloaded from this URL <http://screencast-o-matic.com/home>
- Capture most important 10 screen-shots of your output and save them in a file called output.pdf
- All source code and byte code shall be submitted.
- Readme text file that illustrates how to compile/install/run your application
- Post your homework as a single zipped file on Blackboard with the name "HW3\_YourLastName,FirstName"

## **Important Notes:**

- NO IDE to be used in any shape/form in the implementation of this assignment
- Do NOT communicate or share your assignment with others

# High-Level Requirements:

Extend Assignment #2 for the online retailer SmartPotables to add the following features:

- Inventory Report
- Sales Report

For the visual reports in requirement #2 listed below, consider Google charts documentation at the following URL:

<https://developers.google.com/chart/interactive/docs/gallery/barchart>

### Requirements:

- Add the **Inventory** and **Sales Reports** links that are accessible only to the Store Manager
- Under the **Inventory** link, the store manager shall be able to:
  1. Generate a table of all products and how many items of every product currently available in the store; list only product name, price, how many items of that product available
  2. Generate a Bar Chart that shows the product names and the total number of items available for every product
  3. Generate a table of all products currently on sale
  4. Generate a table of all products currently that have manufacturer rebates
- Under the **Sales Report** link, the store manager shall be able to:
  1. Generate a table of all products sold and how many items of every product sold; list only product name, product price, number of items sold, and total sales of every product sold
  2. Generate a Bar Chart that shows the product names and the total sales for every product
  3. Generate a table of total daily sales transactions; that is, you list the dates and total sales for every day-date