Bonus Assignment #3

Due Date: **11/30/20 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 "Bonus_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
- For this Assignment you must enter at least 100 transactions

High-Level Requirements:

Please note that this bonus assignment can be considered for grading ONLY if the functionalities listed in Bonus Assignment #2 are completely implemented.

Extend Bonus Assignment #2 to implement the following requirements.

Detailed Requirements:

- After you use the **PageRank** (https://neo4j.com/docs/graph-algorithms/current/algorithms/page-rank/) to find potential influencers of the customers
    1. Create a list of products that influencers liked but none of these products is listed in a disputed transaction
    2. Which product did the influencer share the most with other customers?
    3. Which product did the influencer like (highest rating) the most?

- After you use the **ArticleRank** to find potential influencers of the customers (https://neo4j.com/docs/graph-algorithms/current/labs-algorithms/article-rank/)
    1. Create a list of products that influencers liked but none of these products is listed in a disputed transaction
    2. Which product did the influencer share the most with other customers?
    3. Which product did the influencer like (highest rating) the most?

- Provide a comparative analysis for the effectiveness of **PageRank** and **ArticleRank** to find potential influencers of the customers and subsequently recommend liked products to other customers/friends.