Bonus(optional) Assignment

(15% Bonus/Extra points toward the Final Grade)

You will Not lose points if you do NOT submit this assignment

Due Date: 6/6/16 by 11:59pm

<u>Deliverable:</u>

- Extend Assignment #2 or Assignment #3 and use MySQL to implement the functionalities listed below.
- Capture ALL 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 D2L with the name "BonusHW_YourLastName, FirstName"

<u> Important Notes:</u>

- NO IDE to be used in any shape/form in the implementation of this assignment
- NO hard-coding for any of the analytical queries in your implementation; it is a simple mix-and-match selection of the review fields that can be used in the queries to produce the results

Required Features/Capabilities:

- Extend Assignment #2 to add **Trending & Data Analytics** link on the left navigation bar that the user can use to see trends for sold products and can perform different analytics tasks on the product reviews submitted by different customers.
- Once the user clicks the Trending & Data Analytics, the user must be presented with different input and selection fields to perform different queries and data analytics tasks
- Trending & Data Analytics must allow the user to perform different analytical queries. The following are <u>queries</u> that your implementation must be able to answer (Please do NOT hardcode those queries in your source):
 - 1. Print the list of all products and their ratings
 - 2. Print a list of reviews where rating greater than 3
 - 3. Get a list of products that got review rating 5 and price more than thousand
 - 4. Print a list of how many reviews for every product
 - 5. Get the list of reviews for shoppers in Chicago
 - 6. Find highest price product reviewed/sold in every city
 - 7. Find highest price product reviewed/sold in every zip-code
 - 8. Get the top 5 list of liked products for every city
 - 9. Print a list of reviews grouped by City
 - 10. Print a list of reviews grouped by RetailerName
 - 11.Get the total number of products reviewed and got Rating 5 in Every City
 - 12. Provide a **Trending** button that shows a list of most liked product in every city
 - 13. Print the median product prices per city
 - 14. Get top 5 list of most liked and expensive products sorted by retailer name for every city
 - 15. Get the top 5 list of most Disliked products sorted by retailer name for every city
 - 16. Get the top 5 list of most Disliked products sorted by retailer name for every zip-code
 - 17. Get the top 2 list of zip-codes where highest number of products got review rating 5
 - 18. Get a list of reviews where reviewer age greater than 50 and the list is sorted by age in every city
 - 19. Get the top 5 list of most liked products sorted by manufacturer name for every city
 - 20. Search reviews text for keywords (pattern-matching) and print the list of reviews that have the matched keywords.

For example, print the list of reviews that have "XBOX overheat" keywords in the review text

No hard-coded queries will be accepted. Every requirement listed above must be demonstrated and documented by a screen-shot; so at least 20 screen-shots must be submitted in the PDF document.

For every requirement, state clearly whether it has been implemented or not. There is NO partial credit for these requirements in this assignment.

Product Review Form:

The product review Form has the following fields:

- ProductModelName: XBOX 360
 ProductCategory: Gaming Console
- 3. ProductPrice: \$499
- 4. RetailerName: GameSpeed
- 5. RetailerZip: 60616
- 6. RetailerCity: Chicago
- 7. RetailerState: IL
- 8. ProductOnSale: Yes
- 9. ManufacturerName: LG
- 10. ManufacturerRebate: Yes
- 11. UserID: whksa8
- 12. UserAge: 24
- 13. UserGender: Male
- 14. UserOccupation: accountant
- 15. ReviewRating: 4
- 16. ReviewDate: 12/15/2013
- 17. ReviewText: It has excellent clarity and motion refresh rate for Batman Game, however, it overheats after 2 hours of use

Consider the following Layout/Form in your design

Data Analytics

Simple Search			
✓ Select	Product Name:	All Products V	
Select	Product Category:	Gaming Console V	
Select	Product Price:	0	Equals Greater Than Less Than
Select	Retailer:		
Select	Retailer Zip code:	0	
☐ Select	Retailer City:		
Select	Retailer State:		
Select	Product On Sale:	○Yes ○No	
☐ Select	Manufacturer Name:	Microsoft	
Select	Manufacturer Rebate:	○ Yes ○ No	
Select	User Id:		
Select	Age:	0	Equals Greater Than Less Than
Select	Gender:	○ Male ○ Female	
Select	Occupation:		
Select	Review Rating:	1 ~	Equals Greater Than Less Than
Select	Date:		
Return Top:	All ~	Return Latest:	All V