CISC 3140

Lab 9

I picked the Khan Academy to study SQL because the website has a very clear structure of lessons similar to a process bar that shows how many lessons did you learn and provides mini-project exercises after each lesson.

I spent 8 hours learning the SQL basics, more advanced SQL queries, relational queries in SQL, and modifying databases with SQL. I learned how to create a table and insert data into a table, and query the results by using the Keywords like SELECT, WHERE, ORDER BY, GROUP BY, SUM, AVG, ROUND, AND, OR, COUNT, IN, HAVING, CASE, etc. Moreover, I learned how to split information into multiple tables and JOIN related tables. There are different types of SQL JOINs, such as CROSS JOIN, INNER JOIN, LEFT (OUTER) JOIN, SELF JOIN, RIGHT (OUTER) JOIN, and FULL (OUTER) JOIN. I also learned some operations like UPDATE, DELETE, DROP, or ALTER to update a database.

Project 1 – Design a store database (30 minutes)

One of my life goals is to create my own store. I created a database that stores the items in my store. The table has 5 columns (id, item, price, quantity, size, and color). And I used some select statements to order my items by price and aggregate the quantity with price about the items.

Here is my code:

https://www.khanacademy.org/computer-programming/spin-off-of-project-design-a-store-database/6110748357902336

Project 2 – Data dig (20 minutes)

The data set that I used is from http://www.boxofficemojo.com/alltime/world/. I picked this data set because I am a big movie fan and I wonder what are the most popular movies that were produced before 2000. I've used some complex queries like AND/OR, HAVING, CASE, etc. The query result showed that the most popular movies that were produced before 2000 are *Jurassic Park, Star Wars: Episode I – The Phantom Menace, and Titanic.*

Here is my code:

https://www.khanacademy.org/computer-programming/spin-off-of-project-data-dig/6127176423260160