Business Analytics and Decision Making Final Project

Course Code (DAB 203) Semester (Fall 2021)

Description: This project is worth 30% of the final grade.

<u>Objective:</u> The focus of this project is to help practice Data Analysis skills and to learn about real life situations where SQL concepts can be applied.

<u>Instructions</u>: Please read instructions carefully and remember to include your name and student ID.

Full project reports will be maximum five (5) pages for the body (not including the title page). The total pages include any graph, table, etc. used in the analysis. Format is single-spaced with 1-inch margins in a 12-point, times new roman font.

Graphs and tables must be embedded within the report itself and are included as part of the maximum five (5) pages requirement.

This project is worth 10 marks and consists of two parts:

- Part 1: Comprises providing SQL scripts and graphs (when required) for three given questions (5 Marks).
- Part 2: Present a brief analysis for the stock data provided. Marks are based on the approach used for the analysis (i.e., scripts, graphs, additional sources) and the quality of the insights provided (5 Marks).

Additional Instructions

- Submit ONE Word file to Blackboard containing all answers and analysis (Do Not submit additional files used during the process).
- Submissions with additional files or in a different format than Microsoft Word will receive a 10% deduction
- Projects that exceed the five (5) page count will receive a 10% deduction

Due Date: Monday, December 13th, 2021

Part 1

Q1. (1 Mark) For both stocks AMZN and FB, on what date (YYYY-MM-DDD) did they reach out their highest and lowest value.

Provide the SQL script used to obtain the answer and provide the final output in the following format, use two decimals for the final answer

	Date	High	Date	Low
AMZN				
FB				

Q2. (2Marks) For both stocks AMZN and FB, during 2015 what was the total volume traded for the whole year?

Provide the SQL script used to obtain the answer and provide the final output in the following format. Use comma (,) as a separator when providing the answer and do not provide any decimals. Generate a Pie chart that shows Total Volume % for each of the stocks, provide appropriate Title and labelling.

	Total Volume (2015)
AMZN	
FB	

Q3. (2Marks) For both stocks AMZN and FB, during the period 2012-2015 what Day of the Week represents the highest traded volume for each stock?

Provide the SQL script used to obtain the answer and provide the final output in the format below. For total Volume show the final answer using two decimals (1 billion=1000 million)

Generate a Combo chart that shows Total Volume by DOW for each of the stocks. Produce a line chart for FB and a Clustered column graph for AMZN (secondary axis), provide appropriate Title and labelling.

		Volume	
	DOW	(Billions)	
AMZN			
FB			

Part 2

(5 Marks) For the data provided for both stocks AMZN and FB provide an analysis that includes the requirements below.

- Introduction: Write an introductory paragraph that describes the nature of the data provided, and any relevant exploratory comment about the data (1-2 paragraphs)
- Body of the analysis: Provide any SQL query, tables, graphs etc. (Analysis and exploration must be different from the questions in Part 1, further analysis must be provided)
- Conclusion: Deliver analytical insights (not only descriptive comments) that you found while analyzing the data (1-2 paragraphs).