Project Proposal Saudi Stock Exchange

➢ **Abstract:**

Stock Market Analysis and Prediction is the project related to exploratory data analysis (EDA), data visualization and Predictive analysis using data, provided by **Saudi stock market companies. It is collected from Saudi Stock Exchange (Tadawul).** Tadawul is the Saudi Exchange is a fully owned subsidiary by Saudi Tadawul Group. As Saudi Arabia's dedicated stock exchange and the largest stock exchange in the Middle East. All data used in this project from https://www.saudiexchange.sa/ .

➢ **Question/Problem statement:**

We'll be answering the following questions along the way:

What is the change in each price of the stock?

What is the correlation between different stocks 'yearly returns?

What is the moving average of the various stocks?

➢ **Content:**

Data size (no. of rows, and no. of columns) 14 Columns. Each row in the database represents the price of a specific stock at a specific date:

symbol	Integer	The symbol or the reference number of the company
name	String	Name of the company
trading_name	String	The trading name of the company
sector	String	The sector in which the company operates
date	String	The date of the stock price
open	Decimal	The opening price
high	Decimal	The highest price of the stock at that day
low	Decimal	The lowest price of the stock at that day
close	Decimal	The closing price
change	Decimal	The change in price from the last day
perc _Change	Decimal	The percentage of the change
volume_traded	Decimal	The volume of the trades for the day
value_traded	Decimal	The value of the trades for the day
no_trades	Decimal	The number of trades for the day

➢ **Tools:**

- Programs: SQLlite, Spyder, DB browser Jupiter notebook.
- Libraries: Pandas, Matplotlib, Seaborn , NumPy, ts fresh and AutoTS.
- Functions: Group by, Join, count, and others functions in python.
- Plots: Bar graph, forecast, bar chart, and stock price prediction.

➢ **MVP Goal:**

The goal of this project is to better understand which factors are most important in Saudi Stock Exchange. Using data science in the stock market, especially in Saudi Arabia is an interesting study because it needs to be explored and studied deeply.