



أكاديمية سدایا
SDAIA Academy

Exploratory Data Analysis Project Proposal

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Data Science Bootcamp

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Introduction

Tadawul is the main stock exchange in the Kingdom of Saudi Arabia and the largest capital market in the Middle East and North Africa region. Using data science in the stock market is not new, It needs to be explored and studied deeply, so we can cluster companies based on its behavior during the good and bad days. Also we can identify the companies with a very large number of trades.

Columns

The data are taken from the <https://www.kaggle.com/salwaalzahrani/saudi-stock-exchange-tadawul>. The following table explains the dataset in detail:

Columns	Description	Data type
Symb1	The symbol or the reference number of the company	Integer
name	Name of the company	object
trading_name	The trading name of the company	object
sectoer	The sector in which the company operates	object
date	The date of the stock price	object
open	The opening price	float
high	The highest price of the stock at that day	float
low	The lowest price of the stock at that day	float
close	The closing price	float
change	The change in price from the last day	float
Per_change	The percentage of the change	float
volume_traded	The volume of the trades for the day	float
value_traded	The value of the trades for the day	float
no_trades	The number of trades for the day	float

Tools

To explore and analyze the data, I will use the following tools:

Tool	Description
Python programming	commonly used for developing websites and software, task automation, data analysis, and data visualization
NumPy	Python library used for working with arrays
Pandas	Open source Python package that is most widely used for data science
Matplotlib	cross-platform, data visualization and graphical plotting library for Python and its numerical extension NumPy
PowerPoint	The program uses slides to convey information rich in multimedia
Jupyter Notebook	one of the ideal tools to help you to gain the data science skills you need

Questions

No.	Questions
1	What is the most sector in the Saudi stock market(Tadawul)?
2	What are the top ten companies in the Saudi Stock Market(Tadawul)?
3	What are the top ten companies which were the biggest exchanges?
4	What is the lowest and highest performance day in the Saudi Stock Market(Tadawul)?
5	In which sector was the most profitable in the Saudi Stock Market(Tadawul)?

