# CITIBRIDGE PROJECT TRADE RECOMMENDATION SYSTEM BASED ON MARKET CAPITAL

#### **GROUP 8**

APURVA MIRASHI RASHMI SONAWANE SAMRUDDHI MALGE SHIVANI GHUGE SAKSHI CHOUGULE

**GROUP MENTOR: JUHI DUSEJA** 

### PROBLEM STATEMENT

• Construct a trade recommendation System based on user-selected market cap (from NIFTY stock)

#### INTRODUCTION

What is market cap?

Value of a company that is traded on the stock market.

How to calculate market cap?
 (Total no. of shares\*current share price)

Categorization?

Large market cap: Above 10 billion\$

Medium market cap: 2-10 billion\$

Small market cap: Below 2 billion\$

#### **Purpose:**

- The software is for trade recommendation system based on user-selected market cap from Nifty stocks.
- This software includes stock information of different companies from different market capitals and according to the user requirements, the trade is recommended.

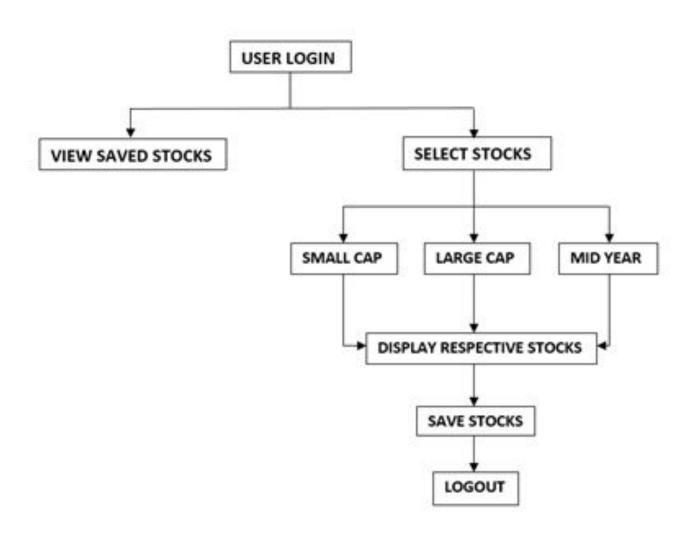
#### **Objective:**

• To recommend stocks accurately for the userbased on top 5 performing stocks from the market-cap selected by the user.

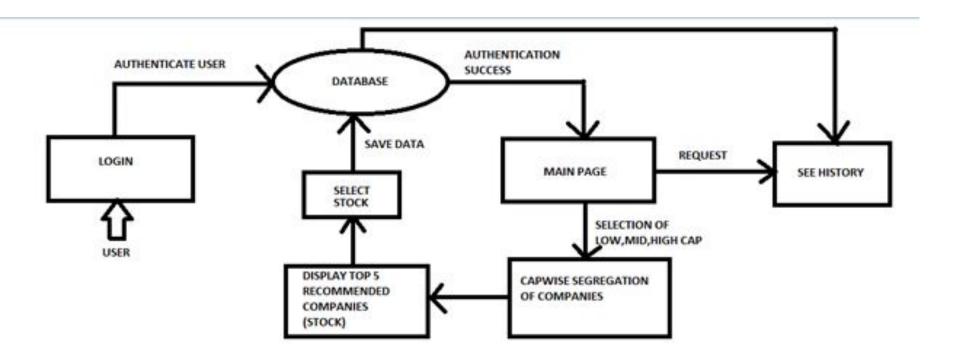
#### **Business Need**

- As the share market constantly fluctuates, user has to repeatedly check for the best stocks at any given instance of time by taking various parameters into consideration.
- The users require a convenient and secure platform to search for stocks according to the market cap that they desire.
- A system like this is easy to use, even for a new investor and is time-saving.

## System Overview:



# Working flowchart:



# Business logic

#### Market Capital Segregation

- Live Data fetching( http GET request) from IEX Trading API
- Data segregation based on the market capital field of the json object received from the API(response)

#### Recommendation of top 5 performing stocks

- Prediction of performance of a company will be based on High Low, PE Ratio, YTD Change
- For the user selected market capital these fields will be compared amongst the companies

# **Operating Environment**

#### **User Interface:**

- The software provides good graphical interface for the user which can operate on the system, performing the required tasks such as creating account and selecting the sector.
- Software allows user to view real time values of stocks.

#### **Hardware Interface:**

- Operating System : Windows Operating System
- Processor : Core i5

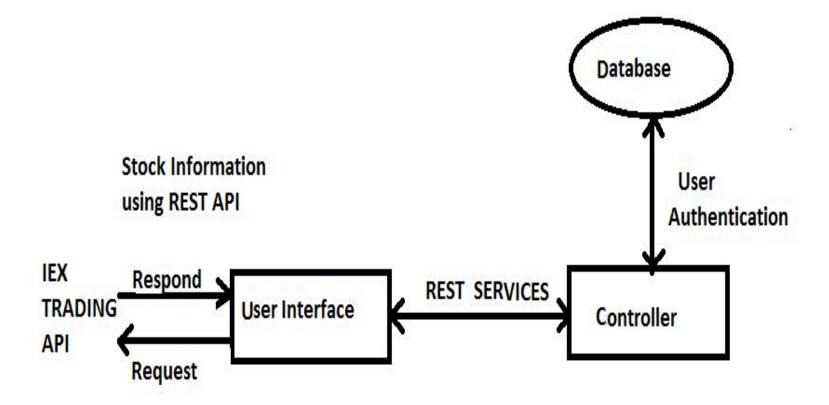
#### **Software Interface:**

- Spring framework
- mySQL Database
- Angular js

# Working:

- User logs in the system by providing username and password
- Home page of user is displayed
- User selects the market cap option of his/her requirement
- The stocks of companies in the above mentioned market cap is displayed
- User can get top 5 recommendations

#### Model-View-Controller



# Bibliography

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# **DEMO**

# Thank John