

# Real-Time Analysis of Stock Market Segment

DBDA – Group 6

Guide – Mr.Sunil Kumar

Team Members - Neha Fadke

Rushikesh Patil

Gyaneshwari Deshmukh

# Contents

- Introduction
- Problem definition
- Scope of project
- Technologies Used
- Workflow Diagram
- Use case diagram
- Advantage
- Disadvantages
- Application
- Future scope
- Conclusion



# Introduction

In today's interconnected and data-driven world, the stock market remains a focal point for individuals seeking financial growth and investment opportunities. However, the complexity of stock trading, investment strategies, and market dynamics can be overwhelming for newcomers. To bridge this knowledge gap and provide a transformative learning experience, we propose the development of a cutting-edge Real-Time Analysis of Stock Market Segment Platform.



## Problem definition

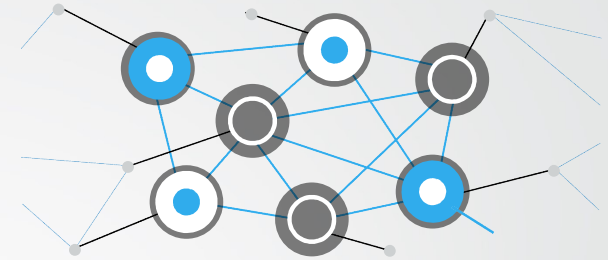
As stock market has been very popular among the people although it has been very difficult to understand newcomer's. If a layman searches any stock value of any company it's been difficult to get the right value or decision for him to invest in future.



## Scope of project

- In this fast growing and busy world where investor have less time to take right decision and right value of stocks they need a platform like real time analysis where they can get right values and can able to take right decision.
- Hence we are building a dashboard which will help out a new person to know easily what is trading.

# Technologies Used



- **Public API (Alpha Vantage):** This API returns raw (as-traded) daily time series (date, daily open, daily high, daily low, daily close, daily volume) of the global equity specified, covering 20+ years of historical data
- **JavaScript:** JavaScript is the programming language of the Web
- **HTML:** HTML is the standard markup language for Web pages
- **XAMPP:** XAMPP is simply a local host or server that is used to test clients or websites before publishing them to a remote web server. The XAMPP server software on a local computer provides an appropriate environment for testing MYSQL, PHP, Apache, and Perl projects

# Workflow Diagram



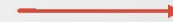
User Login



Select stock



Get Forex  
Data



Get Stock Data

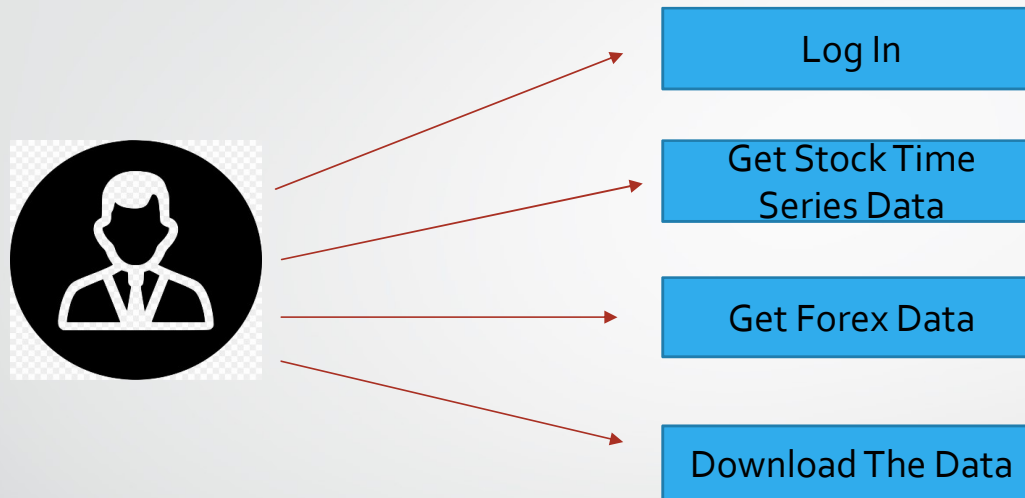


Download in Jason



Visualization of  
data

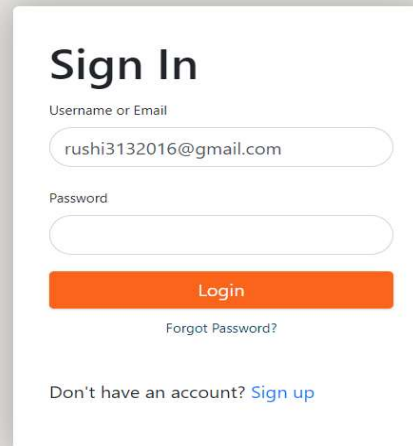
# Use Case Diagram



- There are some use cases which our project involves. It makes our project more user friendly and easy to understand



# Login Page



**Sign In**

Username or Email

Password

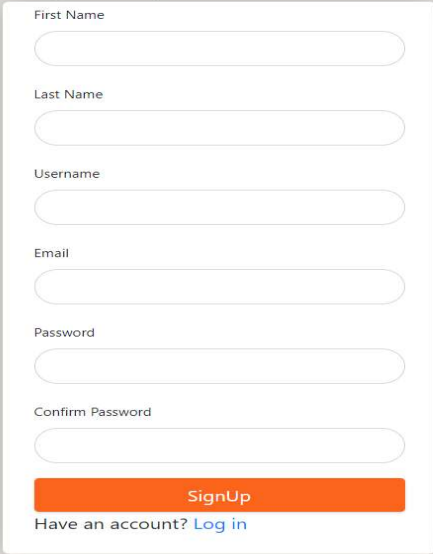
**Login**

[Forgot Password?](#)

Don't have an account? [Sign up](#)

- The login page is the first page of our platform. It consist of user email address and password. First user has to click on 'signup now' if he does not have any account. It will make the platform secure.

# Sign Up Page



**Sign Up**

First Name

Last Name

Username

Email

Password

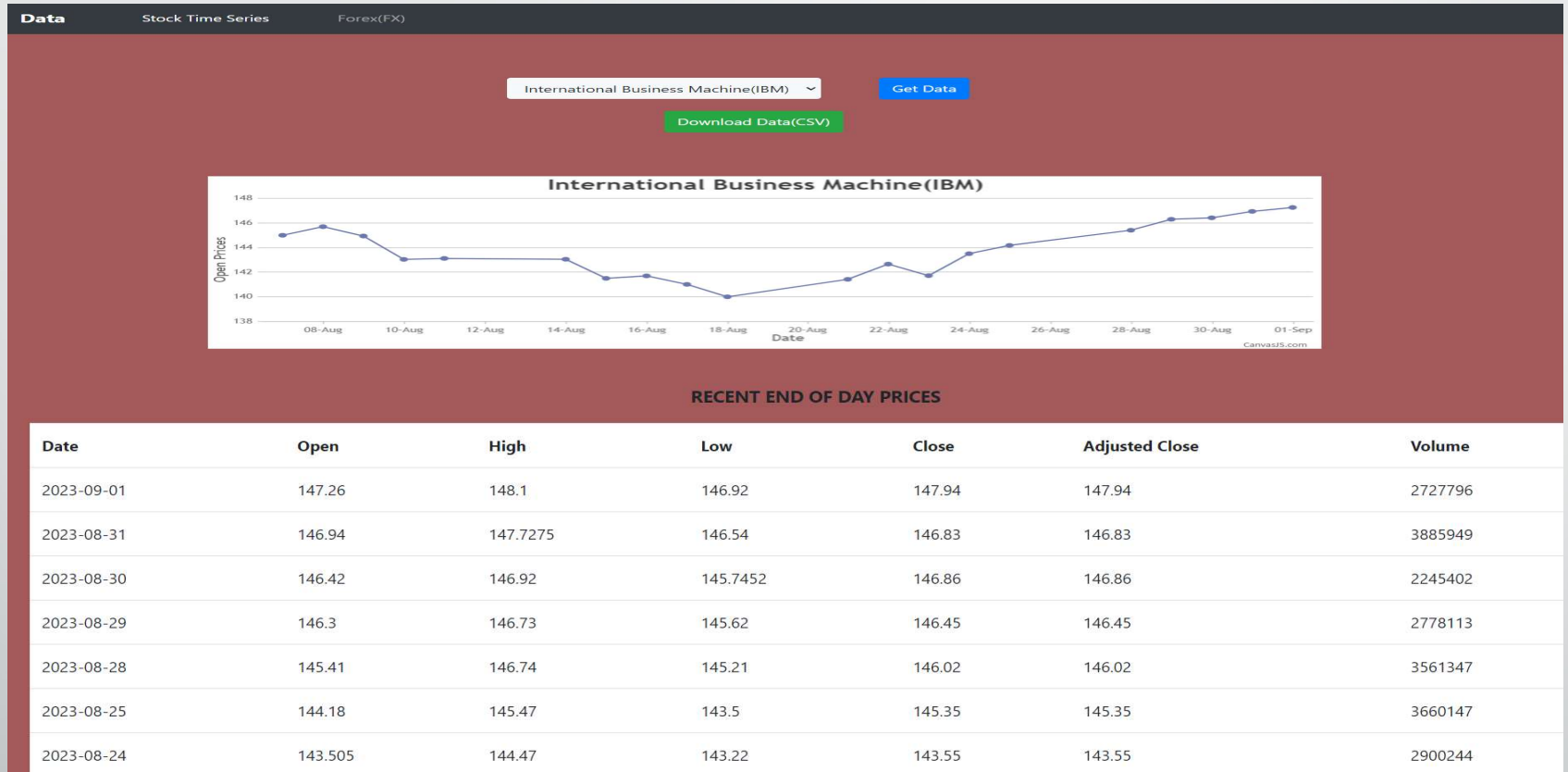
Confirm Password

[SignUp](#)

Have an account? [Log in](#)

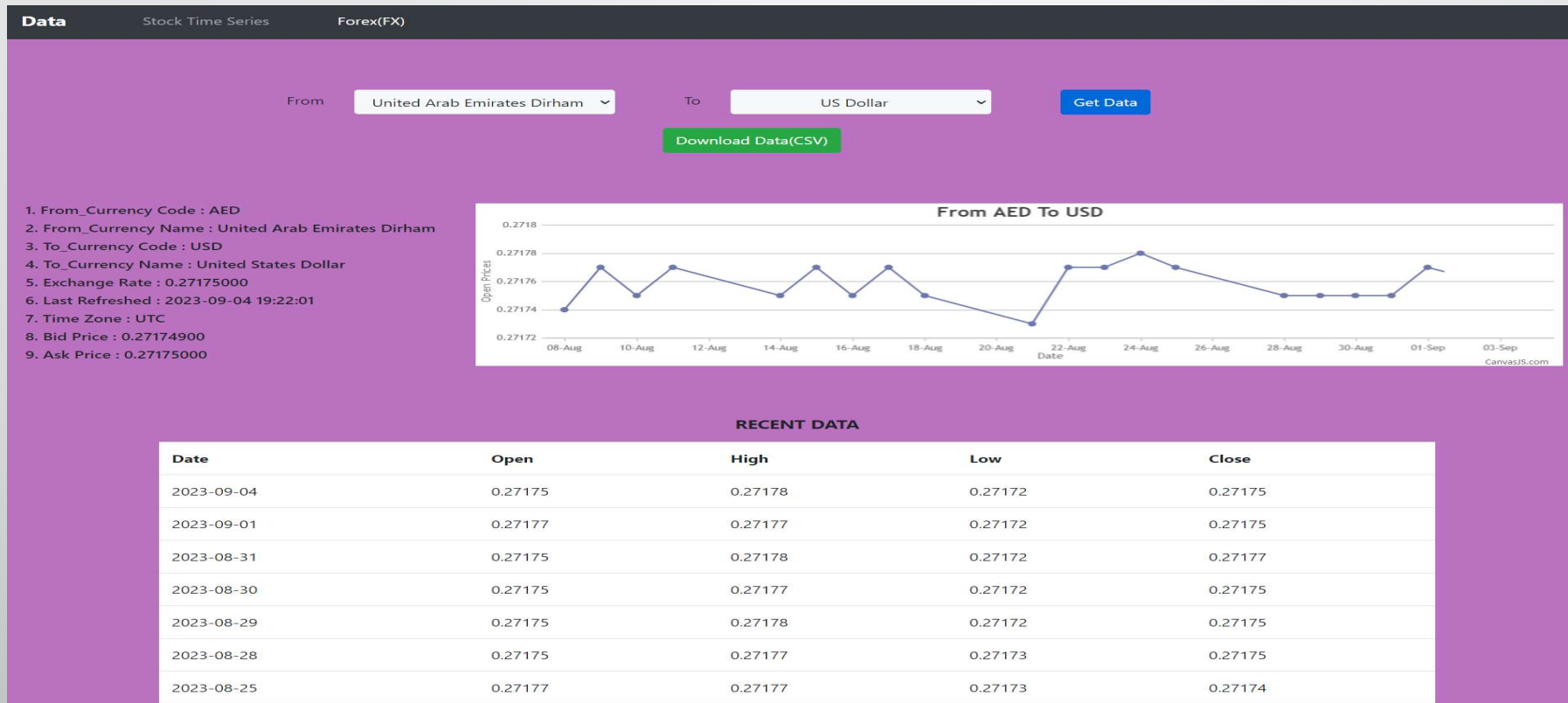
- If user does not have any account he has to click on 'Sign Up' option, to create his account with providing the required information. Then user has to login to go towards next page.

# Stock Data



- Stock Time series page is the next tab after the login page in which user can select the stock name, then clicking on get page will display the stock price graph and recent days prices of stock.

# Forex Data



- Forex or FX the global marketplace for the trading of one nation's currency for another
- This is the last page of our platform where user can get FX data of its own choice currency



# Advantages

- **Educational Empowerment:** The platform empowers new learners with the knowledge and skills required to navigate the complex world of stock trading, making it easier for them to make informed investment decisions.
- **Visual Learning:** Visualizing real-time stock data through interactive charts makes learning about stock market dynamics more intuitive and engaging, aiding comprehension for users with varying levels of expertise
- **Technical Analysis:** Integration of technical indicators provides users with tools to analyze stock trends and make informed predictions.



## Disadvantages

- **Market Risk:** The platform may inadvertently encourage inexperienced users to engage in stock trading without fully understanding the associated risks, potentially leading to financial losses
- **Overreliance on Technical Analysis:** Users might rely solely on technical indicators without considering fundamental analysis, which could lead to incomplete decision-making.

# Applications

- **Financial Education Institutions:** Schools, colleges, and universities offering finance and investment courses can integrate the platform into their curriculum to provide hands-on experience in stock market analysis and trading.
- **Freelance Trainers and Coaches:** Freelance trainers specializing in stock trading education can use the platform to create and deliver customized courses for their clients.
- **Trading Competitions and Events:**
  - Trading competitions or events could use the platform to provide participants with a controlled environment to practice and showcase their trading skills.

## Future Scope

- By applying some Machine Learning Algorithms, we can use this data for the future prediction of stock prices
- We can provide educational resources such as articles, videos, and tutorials explaining stock market basics, trading strategies, and investment concepts.
- Enable users to set up price alerts for specific stocks. Users receive notifications when a stock reaches a certain price level.
- Implement email or in-platform notifications for alerts triggered by price changes.





## Conclusion

In conclusion, the development of your Real-Time Analysis of Stock Market Segment Platform holds great promise in providing an intuitive and visually engaging experience for individuals seeking to understand the complexities of stock trading and investment strategies. By combining real-time data, interactive charts, and educational resources, your platform aims to empower users with the knowledge and skills needed to navigate the dynamic world of the stock market.

# References

- Bollen J, Mao H, Zeng X (2011) Twitter mood predicts the stock market. J Comput Sci 2(1):1–8 (ISSN 1877-7503)
- Li X, Xie H, Chen L, Wang J, Deng X (2014) News impact on stock price return via sentiment analysis. Knowl Based Syst 69(Supplement C):14–23. <https://doi.org/10.1016/j.knosys.2014.04.022> (ISSN 0950-7051)
- Nassirtoussi AK, Aghabozorgi S, Wah TY, Ngo DCL (2015) Text mining of news-headlines for forex market prediction: a multi-layer dimension reduction algorithm with semantics and sentiment. Exp Syst Appl 42(1):306–324 (ISSN 0957-4174)
- <https://www.alphavantage.co/documentation/>
- T. A. Keahey, "Using visualization to understand big data, Technical Report, IBM Corporation", 2013, pp. 1-16.
- P. Fox and J. Hendler, "Changing the Equation on Scientific Data Visualization", Science, 331(11), February 2011, pp. 705-708.
- B. Otjacques, UniGR Workshop: "Big Data- The challenge of visualizing big data", Gabriel Lippmann, 2013, pp. 1-24.



Thank You