Investment Prediction

Wireframe Documentation

Wireframe Document for Stock Price Prediction Application

1. Overview

This document presents the wireframe designs for the Stock Price Prediction application. The wireframes illustrate the layout and design of the user interface, detailing the different screens and their components.

2. Wireframes

The application consists of three main pages:

1. Actual Value
2. Prediction
3. Ticker Information

2.1 Actual Value Page

Layout:

```
-------------------------------------------------
|              Stock Price Prediction           |
|-----------------------------------------------|
|               Actual Value                    |
|-----------------------------------------------|
| Stock Symbol: [_________] [Fetch Data Button]  |
|-----------------------------------------------|
| Select time period for the data:              |
| [Dropdown: 1 Week, 1 Month, 3 Months, 6 Months,|
|  1 Year, 5 Years, Max]                        |
|-----------------------------------------------|
```

| [Stock Data Table] |

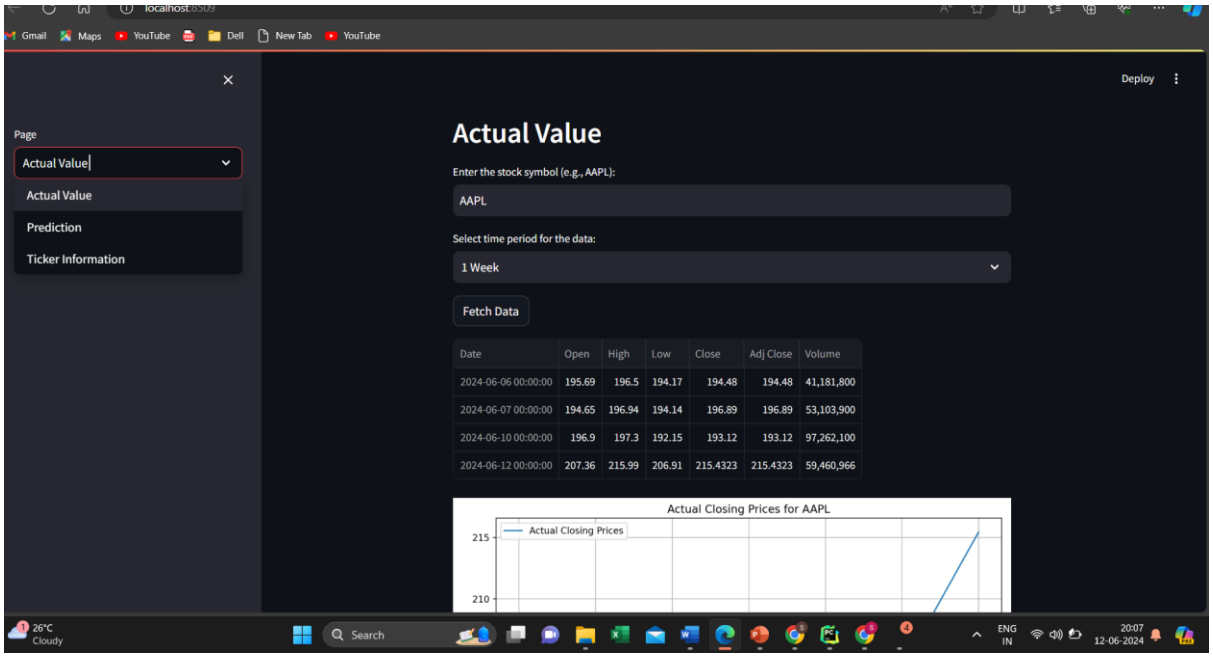
|---|

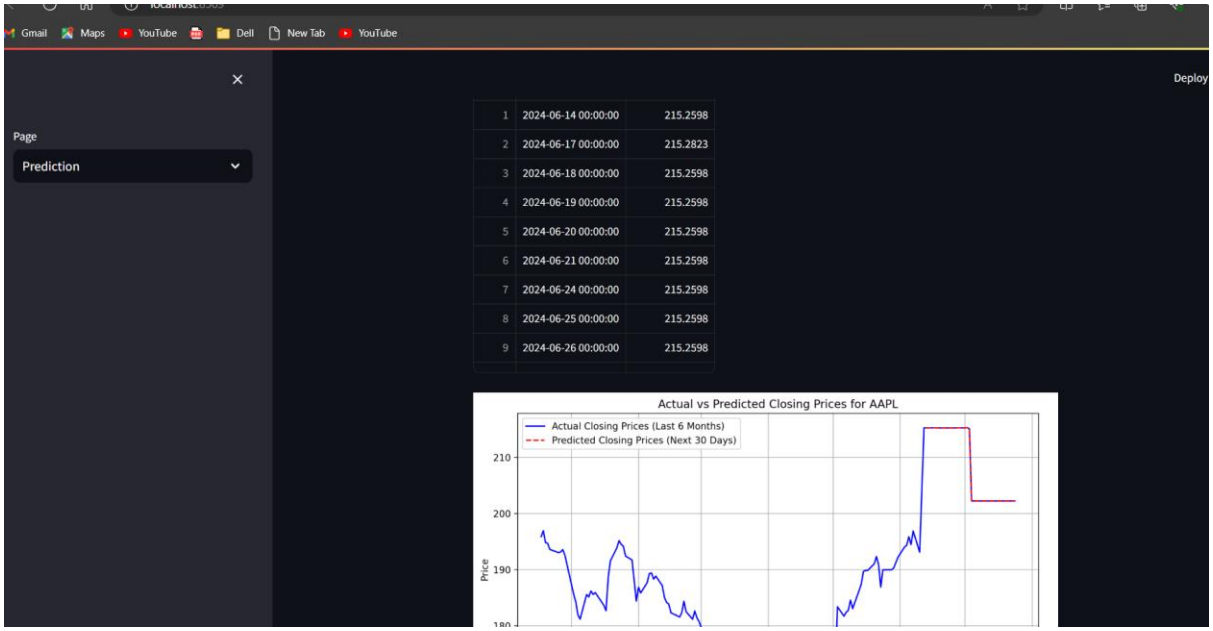
| [Graph: Actual Closing Prices] |

|---|

Description

- Stock Symbol **Input**: A text input field for the user to enter the stock symbol.
- **Fetch Data Button**: A button to fetch the stock data based on the entered symbol and selected time period.
- **Time Period Dropdown**: A dropdown menu for selecting the time period for which to fetch the data.
- **Stock Data Table**: A table displaying the fetched stock data.
- **Graph**: A graph showing the actual closing prices of the stock.



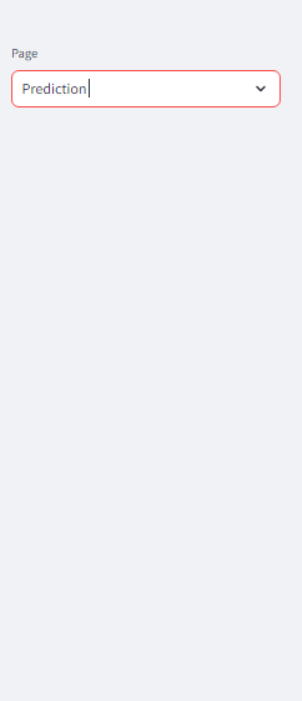


2.2 Prediction Page

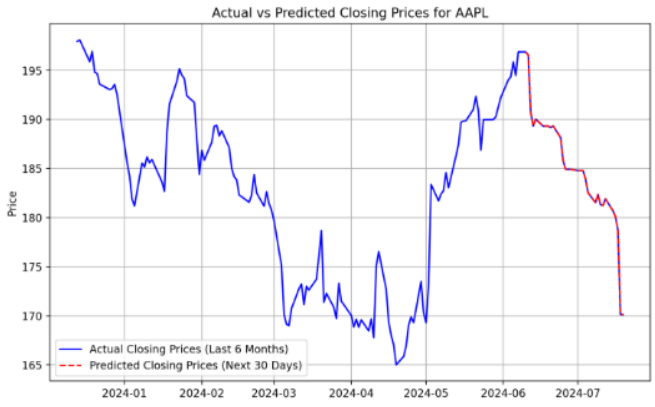
```
-------------------------------------------------
|              Stock Price Prediction           |
|-----------------------------------------------|
|                  Prediction                   |
|-----------------------------------------------|
| Stock Symbol: [________] [Fetch Data Button]  |
|-----------------------------------------------|
| [Predicted Data Table]                        |
|-----------------------------------------------|
| [Graph: Actual vs Predicted Closing Prices]   |
|-----------------------------------------------|
```

Description

- Stock Symbol Input: A text input field for the user to enter the stock symbol.
- Fetch Data Button: A button to fetch the stock data and make predictions based on the entered symbol.
- Predicted Data Table: A table displaying the predicted closing prices for the next 30 days.
- Graph: A graph showing the actual closing prices for the last 6 months and the predicted closing prices for the next 30 days.



2	2024-06-12 00:00:00	190.7148
3	2024-06-13 00:00:00	189.3276
4	2024-06-14 00:00:00	190.034
5	2024-06-17 00:00:00	189.3182
6	2024-06-18 00:00:00	189.3276
7	2024-06-19 00:00:00	189.3276
8	2024-06-20 00:00:00	189.1799
9	2024-06-21 00:00:00	189.34



3. Detailed Component Descriptions

3.1 Stock Symbol Input

- **Type**: Text input field
- **Function**: Allows the user to input the stock symbol for which they want to fetch data or information.

3.2 Fetch Data Button

- **Type**: Button
- **Function**: Initiates the data fetching process for the stock symbol entered in the input field.

3.3 Fetch Info Button

- **Type**: Button
- **Function**: Initiates the information fetching process for the stock symbol entered in the input field.

3.4 Time Period Dropdown

- **Type**: Dropdown menu
- **Options**: 1 Week, 1 Month, 3 Months, 6 Months, 1 Year, 5 Years, Max
- **Function**: Allows the user to select the time period for which they want to fetch stock data.

3.5 Stock Data Table

- **Type**: Table
- **Columns**: Date, Open, High, Low, Close, Volume, Adj Close
- **Function**: Displays the fetched historical stock data.

3.6 Predicted Data Table

- **Type**: Table
- **Columns**: Date, Predicted Close
- **Function**: Displays the predicted closing prices for the next 30 days.

3.7 Graph: Actual Closing Prices

- **Type**: Line graph
- **X-Axis**: Date
- **Y-Axis**: Price
- **Function**: Visualizes the actual closing prices of the stock over the selected time period.

3.8 Graph: Actual vs Predicted Closing Prices

- **Type**: Line graph
- **X-Axis**: Date
- **Y-Axis**: Price
- **Function**: Visualizes the actual closing prices for the last 6 months and the predicted closing prices for the next 30 days.

3.9 Stock Information Details

- **Type**: Text
- **Function**: Displays detailed information about the stock, such as name, sector, industry, etc.

4. User Interaction Flow

1. **Actual Value Page**
    - User enters the stock symbol.
    - User selects the time period.

    - User clicks the "Fetch Data" button.
    - Application fetches and displays the stock data and graph.
2. **Prediction Page**
    - User enters the stock symbol.
    - User clicks the "Fetch Data" button.
    - Application fetches the data, trains the model, makes predictions, and displays the predicted data and graph.
3. **Ticker Information Page**
    - User enters the stock symbol.
    - User clicks the "Fetch Info" button.
    - Application fetches and displays the stock information.

5. Conclusion

This wireframe document outlines the structure and layout of the Stock Price Prediction application's user interface. The design focuses on simplicity and ease of use, ensuring that users can easily navigate through the application and access the information and predictions they need. The wireframes provide a clear blueprint for the development of the user interface.