

Proposal for Stock Insight: Real-Time Stock Data Analyzer

Overview

Problem Statement:

- The project addresses the need for a user-friendly, real-time stock market data analysis tool. Many existing platforms are either too complex for average users or do not provide real-time data efficiently.

Purpose:

- To provide an interactive, real-time platform for stock market analysis. This will aid users in making informed investment decisions by providing up-to-date stock data and historical trends.

Target Audience:

- The primary users are individual investors who want a quick overview of stocks they may be following.

Major Functions:

1. Real-Time Stock Data Retrieval: Fetching live stock market data using APIs like Alpaca API.
2. Historical Data Charts: Displaying historical stock data using ApexCharts.
3. Stock detail page will show recent news articles, along with the stock chart
4. Search Functionality: ability to search for stocks by ticker
5. User favorites: utilize local storage to keep a list of the users favorite stocks, these will be displayed in cards on the home page.

Wireframes

- <https://www.figma.com/file/zUEHokNd42tuOcoJaQSusU/Untitled?type=design&node-id=0-1&mode=design>

Data Sources

- Primary: Alpaca API or Yahoo Finance API for live-stock data.
- Secondary: Local JSON files for mock data during development or for additional data storage.

Initial Module List

- API Data Fetching Module
- Chart Visualization Module
- User Preferences and Dashboard Module

Design Elements

- Colors: for my colors I'm choosing a cool blue theme <https://coolors.co/173753-6daedb-2892d7-1b4353-1d70a2>
- Typography:
 - Headers: <https://fonts.google.com/specimen/Sixtyfour>
 - Titles: <https://fonts.google.com/specimen/Oswald>
 - Other text: <https://fonts.google.com/specimen/Montserrat>

Development Schedule

- Week 5:
 - Basic outline of the site, with layouts and test data
- Week 6:
 - Connect to stock API
- Week 7:
 - Finish all integrations and polish CSS, layouts, and Animations.

Trello Board

- <https://trello.com/b/G1MhqmD0/stock-data-viewer>