MIS 6900

Project Summary

Client Name: Arpit Neema
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Group:
Chetan Birthare
Yixin Zhao
Kumar Akshat

Stock Advisor

Project Details:

This project will be used to help the users understand with various algorithms on when a stock should be bought and sold. The project will be a web application based on Node js. The project will be using three different algorithms to provide the analysis on which kind of algorithm with which stock could provide the best results. The project will use an API provided by alpha-vantage for gathering the stock data. The project will then clean the data and select the specific chunks to be thrown inside the algorithms for different companies. When the algorithms have performed their analysis they would provide an output in the form of a json file, which will be used by the front end for representing the graph and its buying and selling point over time, below the chart it will show the points it should have been bought and sold, with the availability to select the period and have a real time changed analytics. The api used is free and thus has limitations on its usage restricted to 50 calls a day, but whenever the api is used for data request, it saves it locally from the beginning and each call only leads to update in the data and no old data is lost. The three algorithms run on the data of the selected period and show the graphics rendered on the web page.

Goal Statement:

- What: The goal of this project is to make a functionable web application. Using various algorithms to study the time of specific companies a share

should have been bought and sold and understanding which algorithm works best for which specific company.
- When: The total amount of this project has been spanned over a period of 4 sprints, which will be the release period for this project. This is the Sprint 1 for this project.
- How much: The dates notified in the product backlog needs to be followed in this case.
  Project Objectives:
- To provide users an option to select the algorithm they think is the best for thor investment.

Team Member responsibilities:
Chetan Birthare - Back end development
Kumar Akshat - Back end Development
Yixin Zhao - Front end Development

Product Backlog:
- Setting up requests and router setup: Priority - High, Size - 6 days
- MVC Setup well arranged and clear: Priority - High, Size - 5 days
- Website frontend representation: Priority - Medium, Size - 5 days
- Correct Information representation: Priority - Low, Size - 4 days
- Each run updates the graph and data files: Priority - Low, Size - 3 days
- All algorithm implementation: Priority - Low, Size - 3 days
- Data handling: Priority - Low, Size - 3 days

Acceptance Criteria:
- Clear MVC structure
- All the algorithms work correct
- After first fetch, program should only update the latest data and not overwrite
- Accurate output and implementation
- Proper Data json output
- Accurate data storage
- Accurate web front-end representation