:INDIVIDUAL CONTRIBUTION REPORT:

Stock Market Prediction Application Project(SMP-20)

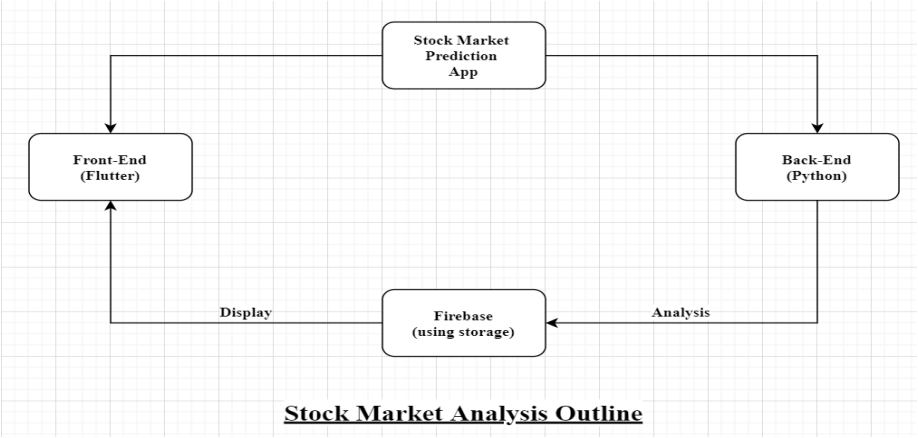
Siddharth Jena
1705851

Abstract: A Stock Market Prediction Analysis Application, we created a machine based analysis in which ,

Front-end: Google's UI toolkit for building beautiful, natively compiled applications for mobile, web, and desktop from a single codebase well known as "Flutter"

Back-end: Artificial Neural Networking and Deep Learning(Python), test in different model to get accuracy

Firebase Storage: For Message passing from back-end to front-end and display the graph and chart in flutter app.



Stock Market Analysis Outline

Individual contribution and findings:

- ✓ Python to firebase linking- Found out the code for connecting and uploading files to firebase so as to link the python code indirectly to flutter app.
- ✓ Model selection for sentimental analysis- Researching and finding out the best model for sentimental analysis i.e. Naive-Bayes.
- ✓ Pipelining of the sentimental analysis process- The process of sentimental analysis involves a lot of data preprocessing and then model fitting which can be done in less number of lines using pipelining.

- ✓ Formatting of output for proper display in the app- The output of the python codes were formatted(in the form of png and json) so that it can be properly displayed within the app.
- ✓ Usage of API for tweet fetching- Used tweepy module and the Twitter developer account access so as to fetch tweets so that it can be used for predicting its sentiment.
- ✓ Python coding for sentimental analysis and historical data analysis- Wrote and executed the code for sentimental analysis and historical data analysis using python.

Individual contribution to project report preparation:

- ✓ Prepared literature analysis for the thesis. Used Google scholar for finding sources.
- ✓ Prepared the Software Requirements Specification chapter.
- ✓ Prepared the Project Planning chapter.
- ✓ Helped write the Project Implementation chapter.

Individual contribution for project presentation and demonstration:

- ✓ Demonstrated how sentimental analysis works.
- ✓ Demonstrated how the output from python code is sent to firebase.
- ✓ Demonstrated how tweets from twitter were fetched using tweepy.
- ✓ Demonstrated the coding for sentimental analysis.

Siddharth Jena
23/05/2020

Full Signature of Supervisor: Full signature of the student:

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:INDIVIDUAL CONTRIBUTION REPORT:

Stock Market Prediction Application Project(SMP-20)

Aakash Das
1705841

Abstract: A Stock Market Prediction Analysis Application, we created a machine based analysis in which ,

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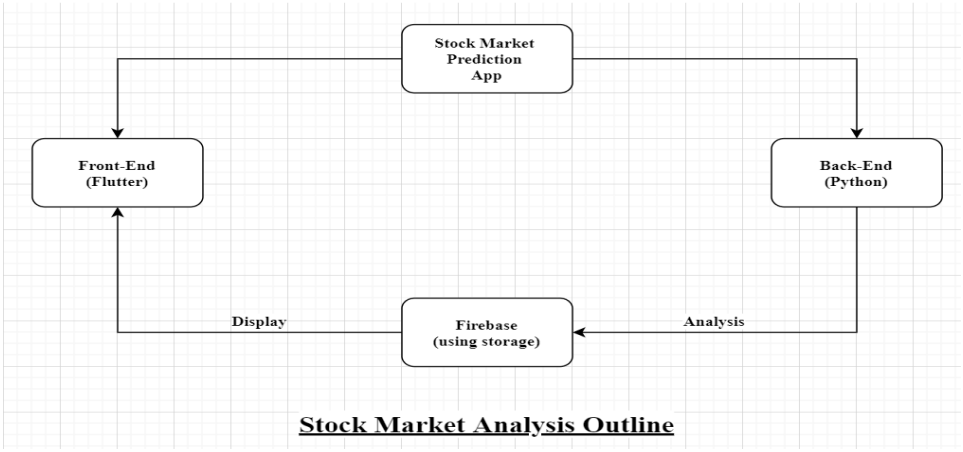


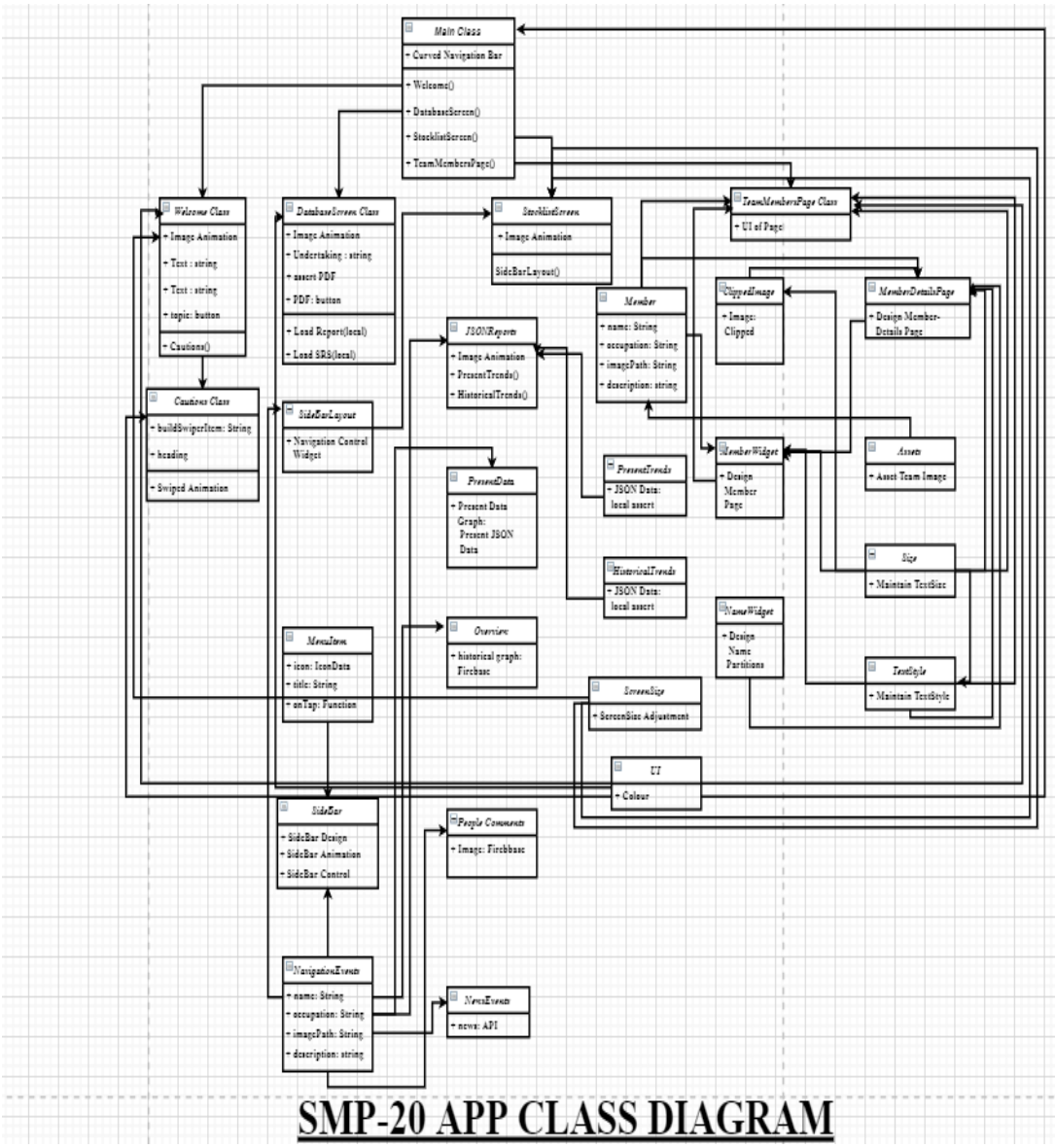
Stock Market Analysis Outline

Individual contribution and findings:

- ✓ All Flutter logical and physical diagram implemented.
- ✓ Implemented App Design.
- ✓ Design and analysis present data.
- ✓ Bug Fix and Screen Adjustment.
- ✓ Attached App Icon and build apk.
- ✓ Findings, StackOverflow, GitHub, Youtube etc.

Individual contribution to project report preparation:

- ✓ Provided class diagrams and app outline for System Design chapter.
- ✓ Wrote the system testing chapter and provided screenshots.
- ✓ Helped prepare Implementation chapter



SMP-20 APP CLASS DIAGRAM

Individual contribution for project presentation and demonstration:

- ✓ App Testing & its implementation in Android,ioS and Web.

Akash Das.
23/05/2020

Full Signature of Supervisor:
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Full signature of the student:
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:INDIVIDUAL CONTRIBUTION REPORT:

Stock Market Prediction Application Project(SMP-20)

Meghna Verma
1705854

Abstract: A Stock Market Prediction Analysis Application, we created a machine based analysis in which ,

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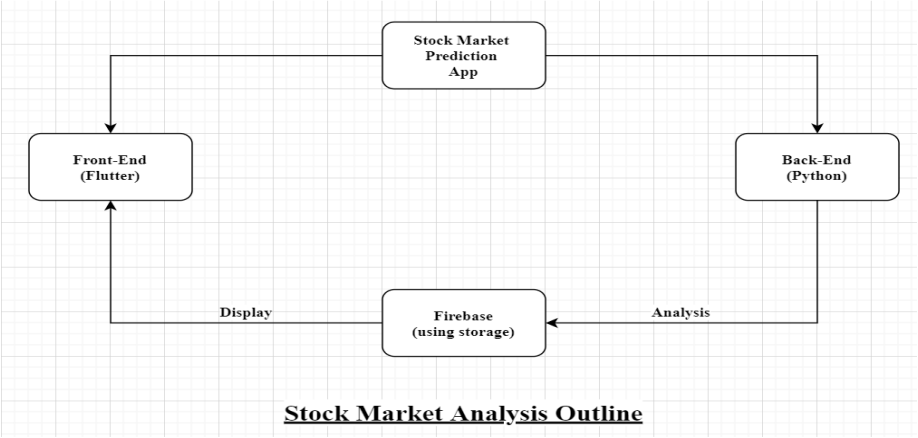

Stock Market Analysis Outline

Individual contribution and findings:

- ✓ Data Collection
  - For sentimental analysis- The labelled csv files were fetched from google/github.
  - For historical data prediction- The required hsitorical data was loaded into the code with the help of yfinance module(Developed by Ran Aroussi)

- ✓ Data Cleaning-
  - For sentimental analysis- Multiple csv files were combined along with text with neutral emotions. The labelling was modified for better analysis. (removing complex emotions and replacing them with positive,negative and neutral). The number of positive,negative and neutral statements were also balanced out for better sentimental analysis
  - For historical data prediction- The obtained data had its date in the form of string which was converted into datetime format.
- ✓ Found out the way to run python scripts periodically without any cloud servers.
- ✓ Automated addition of dates into the obtained historical data for stock market so as to predict the price of the stock for the next day.

Individual contribution to project report preparation:

- ✓ Wrote the Requirement Analysis chapter
- ✓ Wrote the Conclusion and Future scope chapter.
- ✓ Helped write the Project Implementation chapter.

Individual contribution for project presentation and demonstration:

- ✓ Demonstrated how data was fetched and cleaned for sentimental analysis
- ✓ Demonstrated how data was fetched and cleaned for historical data analysis.
- ✓ Demonstrated how the python programs were made to run automatically.
- ✓ How future dates were automatically added into the historical data.

Meghna Verma
23/05/2020

Full Signature of Supervisor: Full signature of the student:

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:INDIVIDUAL CONTRIBUTION REPORT:

Stock Market Prediction Application Project(SMP-20)

S Subhashree Priyadarsini
1705861

Abstract: A Stock Market Prediction Analysis Application, we created a machine based analysis in which ,

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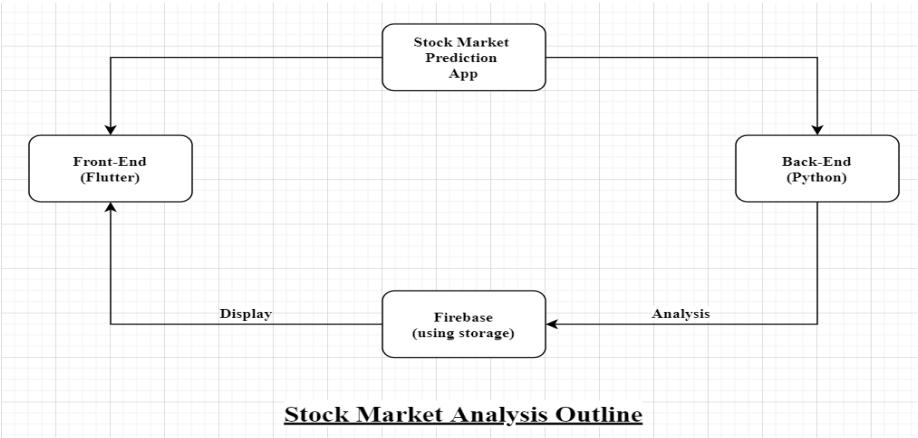


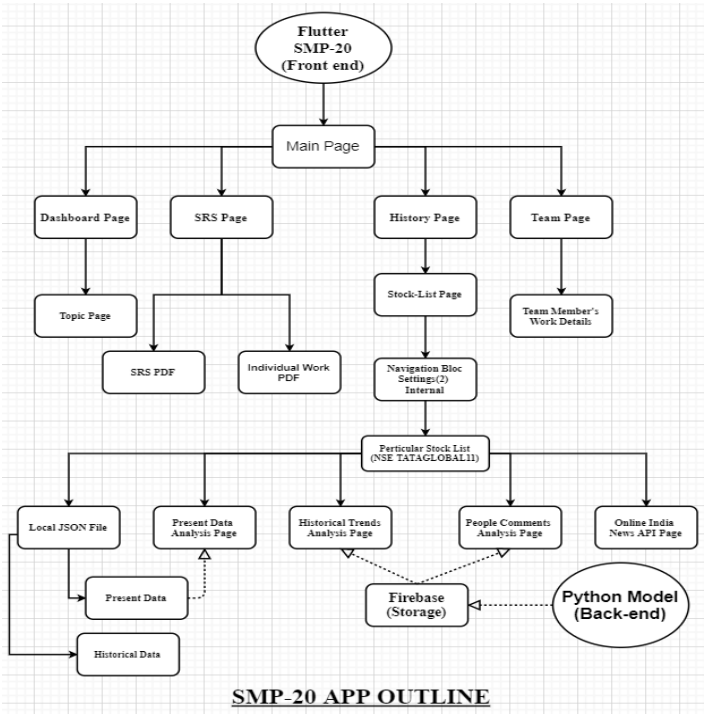
Stock Market Analysis Outline

Individual contribution and findings:

- ✓ Designed the application after deep market research and analysis.
- ✓ Find Topic for Flutter App
- ✓ Proposed Flutter Outline Diagram
- ✓ All Image Attachment in flutter app
- ✓ Findings, image source from Google Image

Individual contribution to project report preparation:

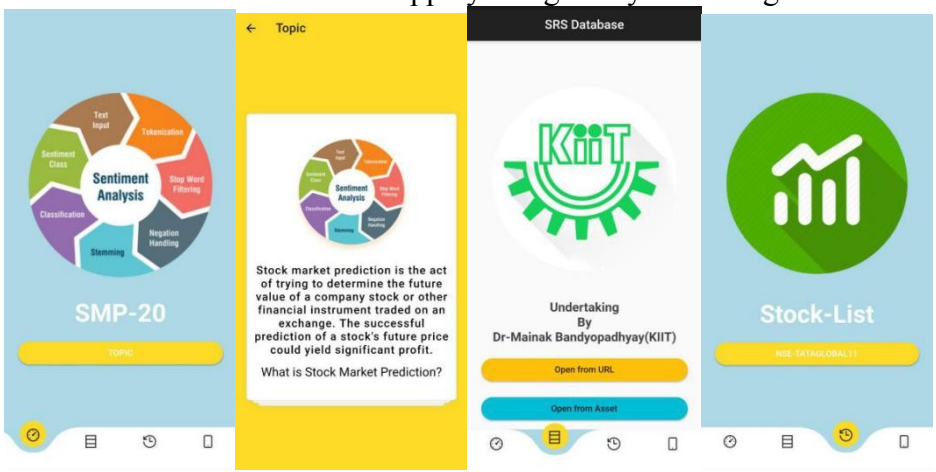
- ✓ Filled the System Design part in the thesis report.
- ✓ Wrote the Introduction for the thesis report.
- ✓ Wrote the Abstract for the thesis.



SMP-20 APP OUTLINE

Individual contribution for project presentation and demonstration:

- ✓ Demonstrated the flow of app by using the system design.



S. Subhashree Priyadarsini
23/05/2020

Full Signature of Supervisor:
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Full signature of the student:
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