



# **Department of Information Technology**

## **NBA Accredited**

A.P. Shah Institute of Technology

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UNIVERSITY OF MUMBAI

Academic Year 2021-2022

A Project Presentation on  
**Smart Investment Predictor(MoneyCanny)**

Submitted in partial fulfilment of the degree of  
Bachelor of Engineering(Sem-6)

in

**INFORMATION TECHNOLOGY**

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# 1. Project Conception and Initiation

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# 1.1 Objectives

- To help user make the right investment choice.
- To display the different markets.
- To educate the user about different investment options.
- Make a list of investments and track them.
- To give personalized user experience.

## 1.2 Literature Review

Sr.no	Author Name	Paper Title	Publication	Findings
1	F. G. D. C. Ferreira, A. H. Gandomi and R. T. N. Cardoso	"Artificial Intelligence Applied to Stock Market Trading: A Review"	<i>IEEE Access</i> , vol. 9, pp. 30898- 30917, 2021	It is possible to use Artificial intelligence algorithms (regression) to predict the stock market.
2	Dharmendra Singh	Causal Relationship Between Macro- Economic Variables and Stock Market: A Case Study for	Pakistan Journal of Social Sciences (PJSS) Vol. 30, No. 2	The Singapore market deeply affects the Indian stock market.

## 1.2 Literature Review (Contd.)

3	W. Yiyang and Z. Yeze	"Cryptocurrency Price Analysis with Artificial Intelligence,"	<i>2019 5th International Conference on Information Management (ICIM)</i> , 2019, pp. 97-101, doi: 10.1109/INFOMA N.2019.8714700.	Algorithms like LSTM and Artificial Neural Networks can be used to study and predict the trends in the cryptocurrency market

## 1.3 Problem Definition

- The user is inexperienced with investing their money so they have to find a reliable source of information. The user is also confused in which type of investment he would get better returns. Thus the solution is to come up an app which can predict returns on different Investment options and compare them.

## 1.4 Scope

- Can be useful to any beginner in Investment field
- Can be used by students to learn about different investment options for the future
- Can be used to store the user profile and suggest the investment options based on that.



## 1.5 Technology stack

- Front End- Flutter (App)
- Backend- Python, Google Sheets and
- Database - Firebase

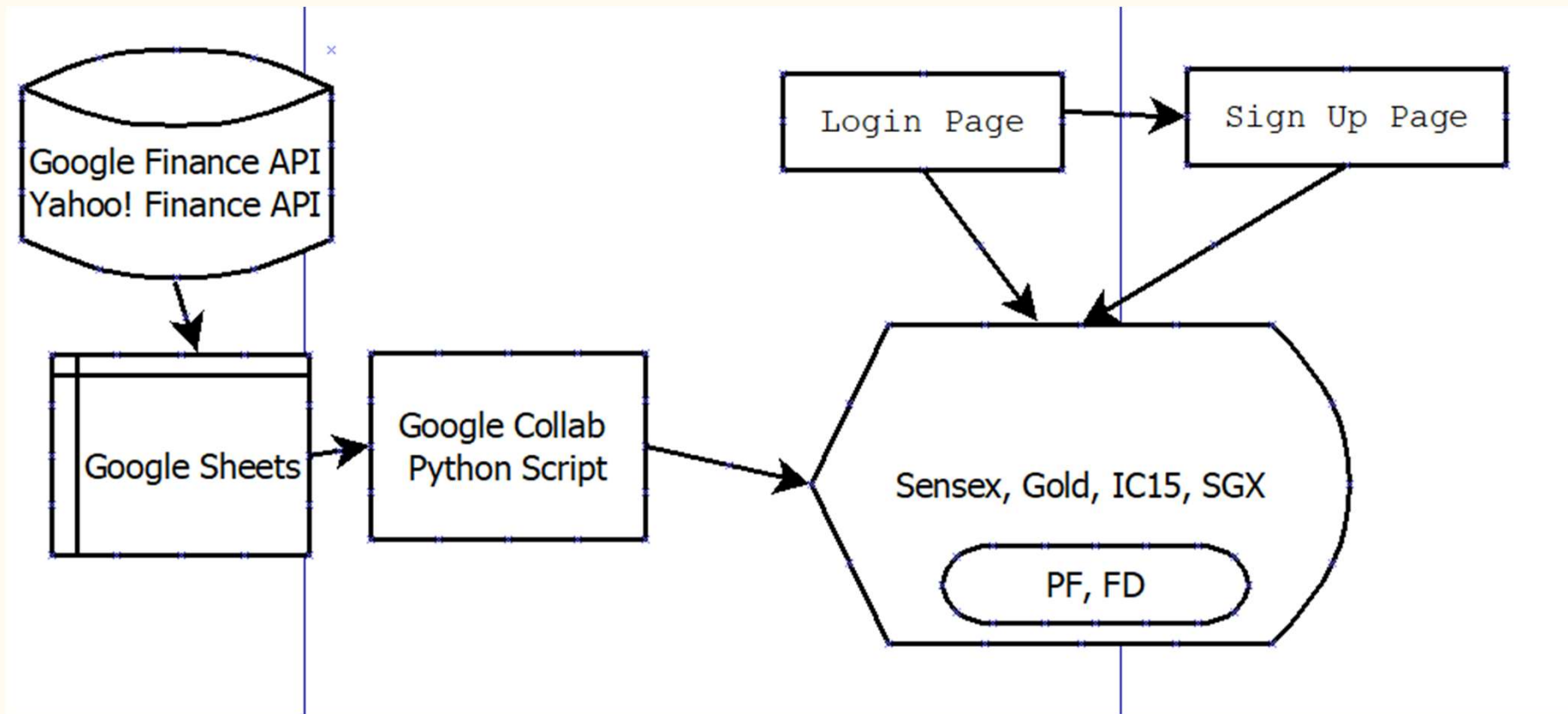
## 2. Project Design

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## 2.1 Proposed System


- The system we have proposed is an app made in flutter which displays the change in market in terms of percentages at the end of the day.
- The app takes the data from different APIs and stores them in a google sheet.
- We take that data and run it through our algorithm and display it in terms of percentages in our flutter app.

## 2.2 Flow of Modules



# 3. Implementation

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 ShareMarket.ipynb ☆

File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

RAM  Disk  Editing

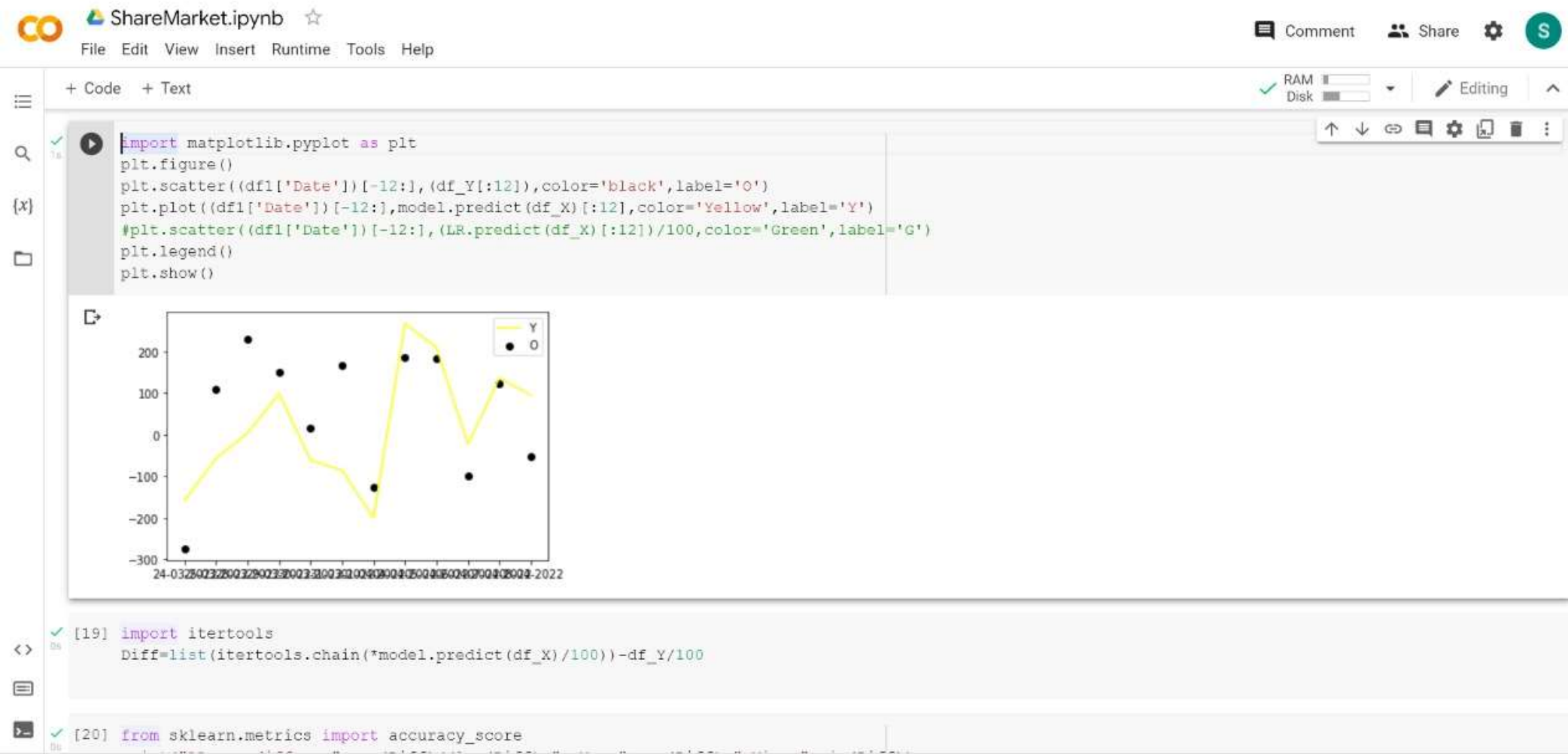
[13] from tensorflow.keras.models import Sequential  
from tensorflow.keras.layers import Dense

[14] model=Sequential()  
model.add(Dense(1,input\_dim=10,activation='linear'))

[15] model.compile(loss='mean\_squared\_error',metrics=["accuracy"])

[16] model.fit(x=d,y=y,epochs=100)  
  
15/15 [=====] - 0s 2ms/step - loss: 9990.0625 - accuracy: 0.0021  
Epoch 73/100  
15/15 [=====] - 0s 2ms/step - loss: 9965.5020 - accuracy: 0.0021  
Epoch 74/100  
15/15 [=====] - 0s 3ms/step - loss: 9912.2959 - accuracy: 0.0021  
Epoch 75/100  
15/15 [=====] - 0s 2ms/step - loss: 9944.8291 - accuracy: 0.0021  
Epoch 76/100  
15/15 [=====] - 0s 3ms/step - loss: 9938.7773 - accuracy: 0.0021  
Epoch 77/100  
15/15 [=====] - 0s 3ms/step - loss: 9891.5742 - accuracy: 0.0021  
Epoch 78/100  
15/15 [=====] - 0s 6ms/step - loss: 9884.4131 - accuracy: 0.0021  
Epoch 79/100  
15/15 [=====] - 0s 3ms/step - loss: 9889.1582 - accuracy: 0.0021  
Epoch 80/100  
15/15 [=====] - 0s 2ms/step - loss: 9864.3613 - accuracy: 0.0021  
Epoch 81/100

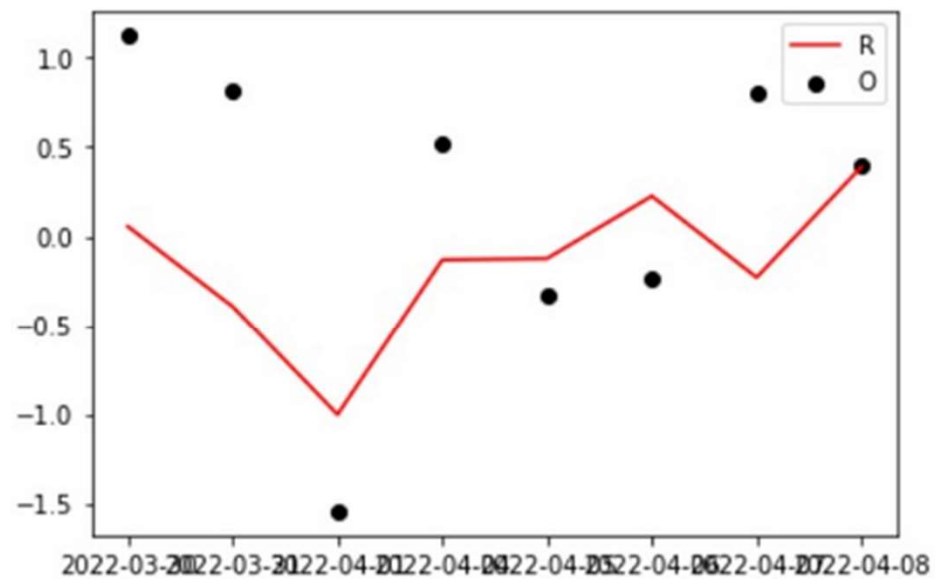
Linear model using Tensorflow



Prediction of Sensex using that model



```
import matplotlib.pyplot as plt
plt.figure()
plt.scatter((df['Date'])[-8:],df['Gold'][-8:],color='black',label='O')
plt.plot((df['Date'])[-8:],rbf_svr.predict(d)[:8],color='Red',label='R')
plt.legend()
plt.show()
```



Gold Data prediction



```

class _IndexPageState extends State<IndexPage> {

  IndexModel indexs = new IndexModel();

  @override
  void initState(){
    super.initState();
    http.get(Uri.parse(
      'https://script.google.com/macros/s/AKfycbxu4WFE2wqFbnEXCjUnBM0E1V0L-CDPt2ZATFHqHEV0G1242h_2eNctQZC4VND8hs4Iw/exec'))
    .then((value) {
      print(convert.jsonDecode(value.body));
      this.indexs = IndexModel.fromMap(convert.jsonDecode(value.body));
      setState((){});
      print('this is json Feedback ');
      print(indexs.Sensex.toString());
    });
  }
}

```

Fetching data from google sheet and storing.

## 4. Result

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DEBUG



Email



Password

Login

Login with Google

Don't have an Account??[SignUp](#)

# Login and Signup pages



Example3



Example3@a.com



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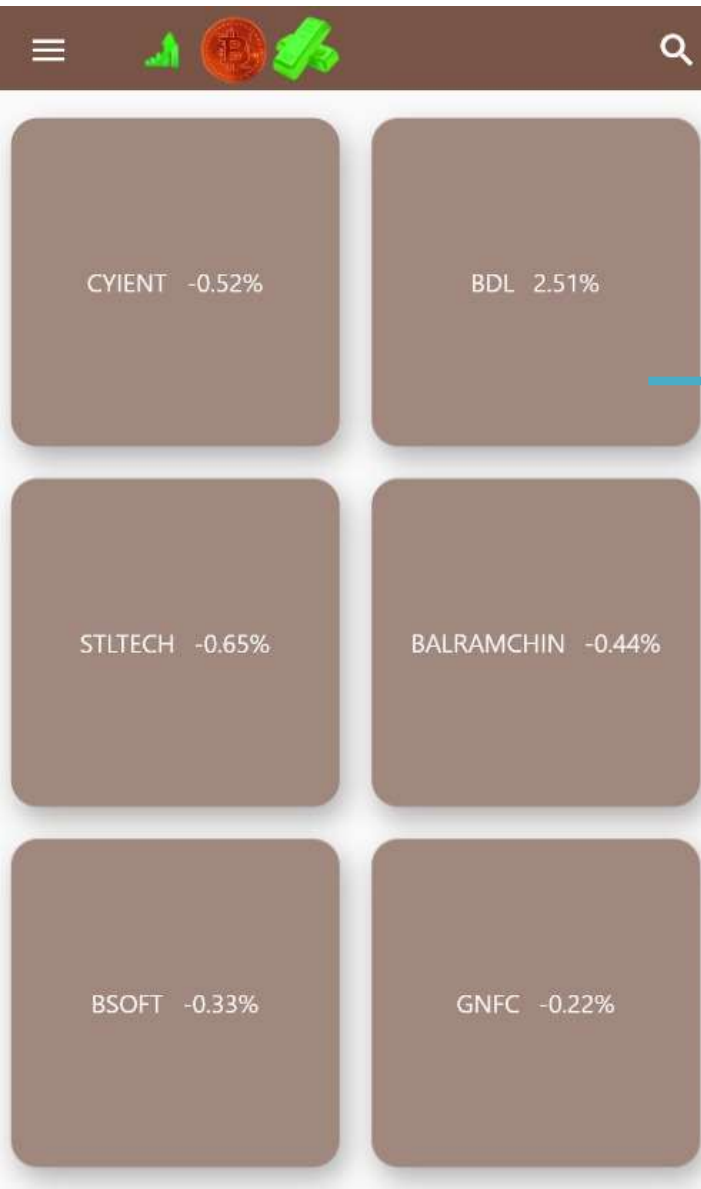


.....|

What Level Of Risk you can take?

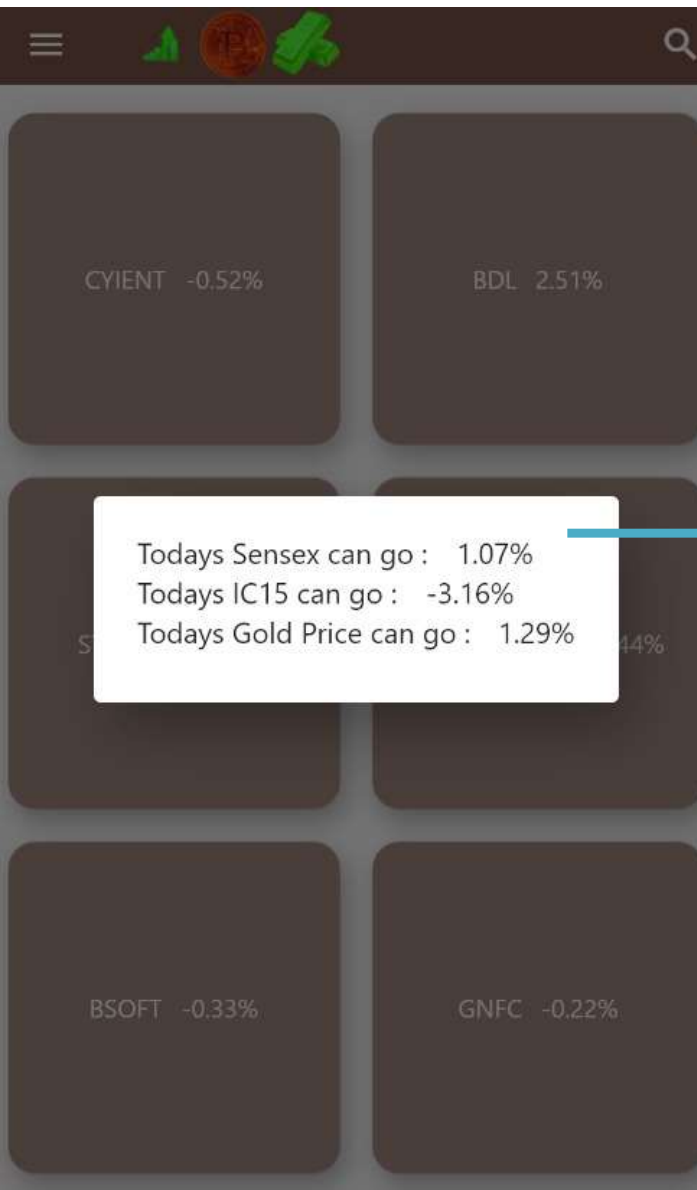
High ☒ Mid ☐ LOW ☐

SignUp

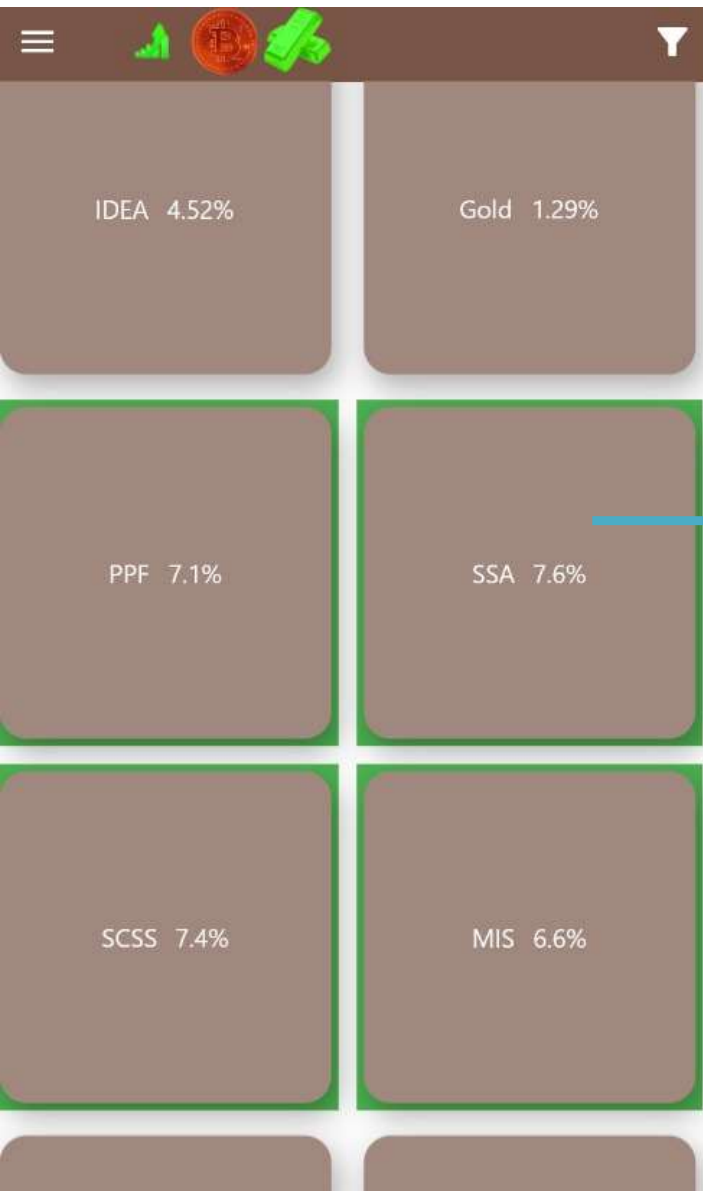


# INDEX PAGE

Top Stocks are displayed  
with their rate of change



On clicking the AppBar



Government Schemes are highlighted

## 5. Conclusion and Future Scope

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## 5.1 Conclusion

- Thus we have made an app which predicts the market and displays the results in terms of percentages. The user can also view the static investment options like PF and FD.

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## 5.2 Future Scope

The app can be fully developed to display finance related news  
Sentiment analysis of that news can be used to further predict the market  
Educative tips and information can be added to the App  
Can be deployed as a full fledged app.

## 6. References

- <https://docs.flutter.dev/>
- Book: Beginning Progressive Web App Development by Dennis Sheppard
- Book: Artificial Intelligence A Modern Approach by Stuart Russell and Peter Norvig
- "Artificial Intelligence Applied to Stock Market Trading: A Review" by F. G. D. C. Ferreira, A. H. Gandomi and R. T. N. Cardoso
- Causal Relationship Between Macro-Economic Variables and Stock Market: A Case Study for India by Dharmendra Singh
- "Cryptocurrency Price Analysis with Artificial Intelligence" by W. Yiyang and Z. Yeze

**Thank You**

