Name:

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Problem:

The number of people who want to learn about stock market is growing. However, beginners in the stock trading often need practice and experiment with stock price prediction.

The app, Stock Advisor, uses machine learning to predict the price of stock the next day based on historical data from previous years. To use the app, user will give their own prediction, with or without the app's consultation. If the user decides to see the advice, the app shows its prediction.

On the next day, the app will show the user real price of tracked stocks. The user can compare his/her yesterday's prediction

The app also keeps track of user performance.

Specifications

- Datasets
  - - New York stock exchange: https://www.kaggle.com/dgawlik/nyse#prices.csv
    - Open, close, low, high of various stocks from 2010 to 2016 in one big file for all stocks
  - - S & P 500: https://www.kaggle.com/camnugent/sandp500
    - Same, from 2013 to 2018 with separate file for each stock
  - - Huge stock market dataset: https://www.kaggle.com/borismarjanovic/price-volume-data-for-all-us-stocks-etfs
    - Same, but different formats, from 2005 to 2017, separate file for each stock
- Where we save and retrieve the data:
  - Google cloud storage (12 months free) https://cloud.google.com/free/
- We can make tomorrow's prediction with Tensorflow model. Since Tensorflow and GCP are owned by Google, it's easy to integrate them.
  - https://cloud.google.com/ml-engine/docs/tensorflow/getting-started-training-prediction
- Displaying graphs: http://www.android-graphview.org/
- Developer Tools: Android Studio
- Design: Mai can do some design with Adobe suite software. Android has a design guidelines: https://material.io/develop/android/
- Should we also do an iOS app? Since both of us has Macbooks and iPhones?
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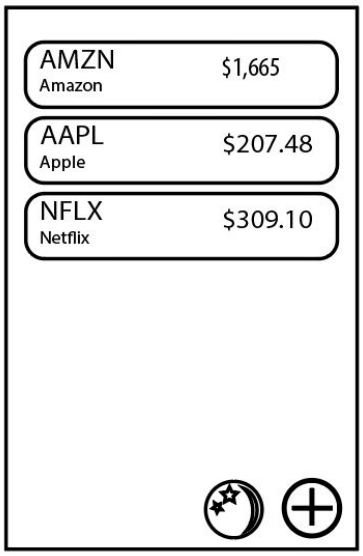
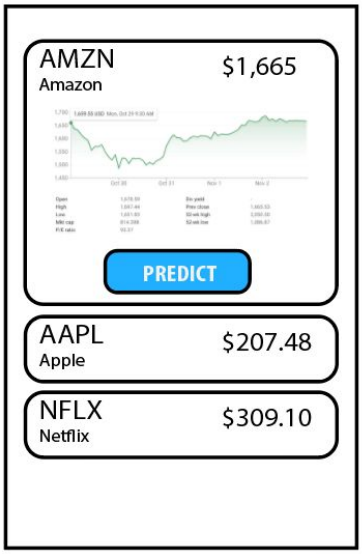
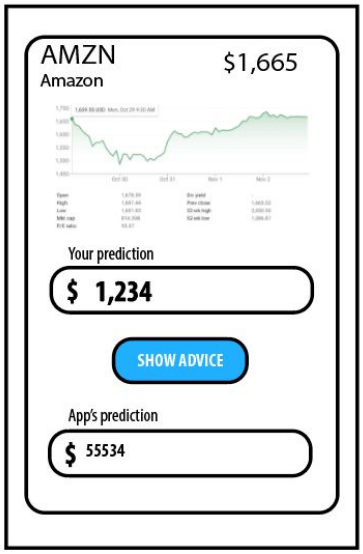
Home screen



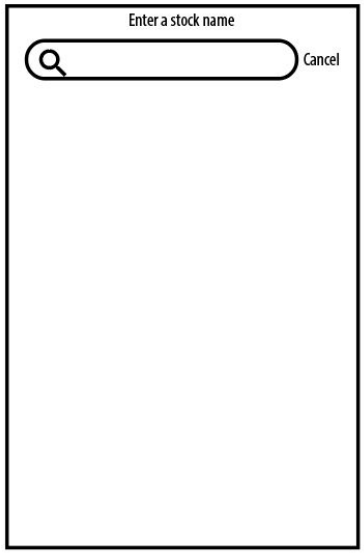
Single Stock info



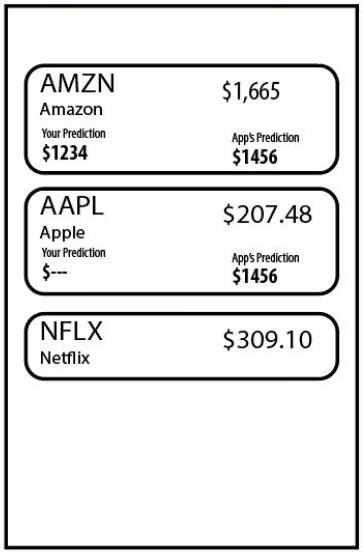
Make Prediction

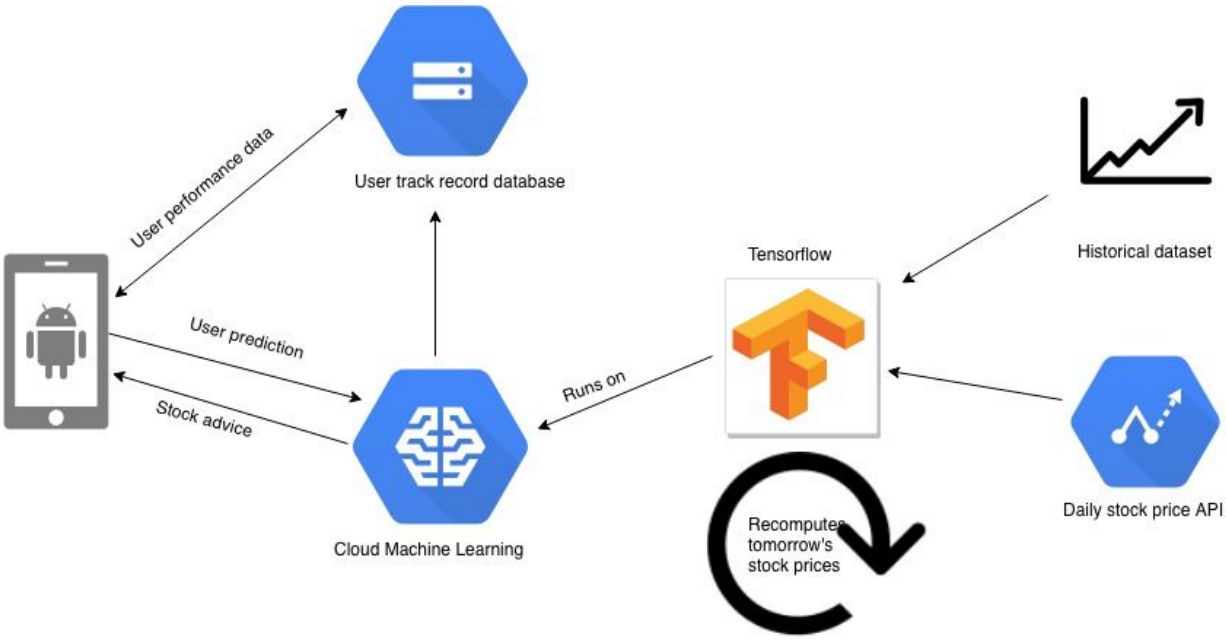


Search a stock



Display results





- Task list
  https://docs.google.com/spreadsheets/d/1ykUyqppkofXM4lBP8qNfw2vRr8BbTs7gw8LyA6Pr88Q/edit#gid=1162815576

Task	Task name
1	Integerate team and discuss project ideas with Dr.Minai
2	Discuss app requirements and features
3	Analyze, clean, and structure dataset
4	Learn about Tensorflow
5	Learn how to use Tensorflow on Google Cloud Platform (GCP)
6	Design UI for mobile
7	Design app architecture
8	get data from google cloud to mobile
9	Test and Fix