

How to Use this Template

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DividendPayout

Description

DividendPayout is an application intended to track cash flow from investments. The application will track year to date dividend payments, monthly dividend payments for both the past and the future.

Intended User

The application is intended as a budgeting tool for a retiree or an investor to determine the amount of dividend income that their portfolio generates.

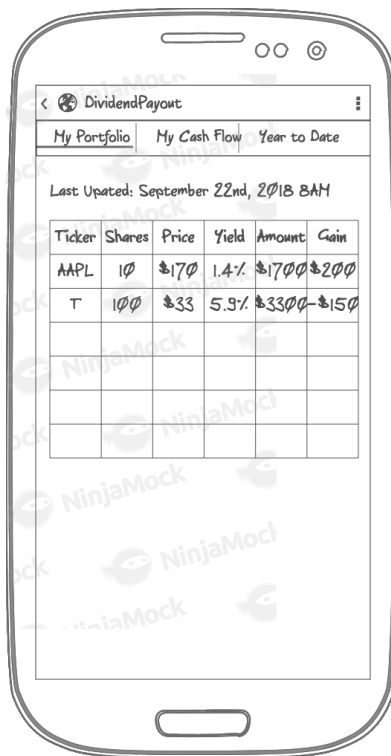
Features

- Saves list of stock tickers.
- Pulls dividend info for each ticker from an API
- Calculates and displays dividend payments by month
- Predicts cash flow for future months based on historical data

User Interface Mocks

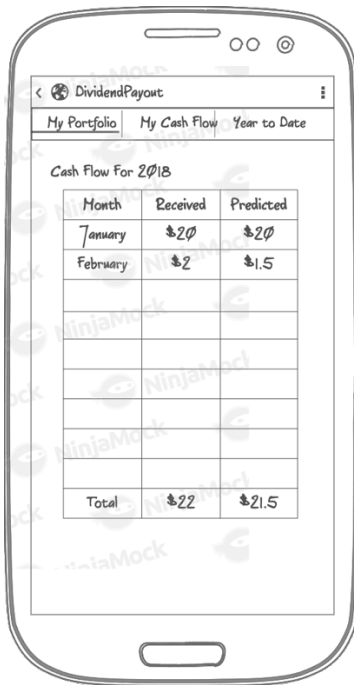
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Google Drawings, www.ninjamock.com, Paper by 53, Photoshop or Balsamiq.

Screen 1



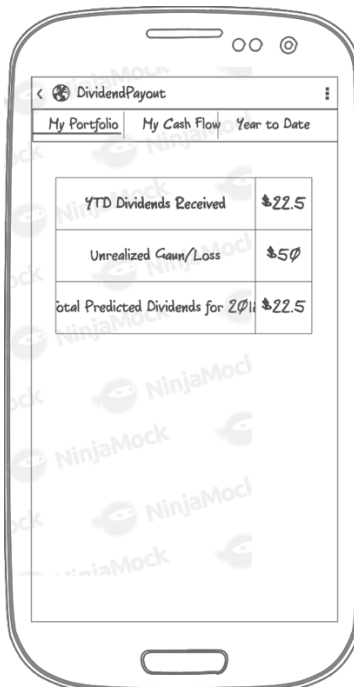
The screen will list the portfolio of the user by ticker. Information contained will be stock ticker, number of shares, prices, dividend yield, total amount and unrealized gain. Navigation is via tab clicks at the top of the screen. This page corresponds to the first (left most) tab.

Screen 2



The screen will contain the dividend cash flow by month for the current year. The application will predict future cash flow based on historical data. Navigation is via tab clicks at the top of the screen. This page corresponds to the second tab.

Screen 3



The screen will contain a summary of dividends received and realized and unrealized gain for the year. The application will predict future cash flow based on historical data. Navigation is via tab clicks at the top of the screen. This page corresponds to the third (right most) tab.

Screen 4



The screen will be used to log trades. Information recorded will be stock ticker, number of shares, purchase price, date purchased, sale price and date of sale. This screen will be accessible by clicking on one of the stock tickers on MyPortfolio screen or by clicking on “Log Trade” item in the dropdown menu on the right side of the main toolbar.

Key Considerations

How will your app handle data persistence?

App will use Room persistence library to save user portfolio data.

Describe any edge or corner cases in the UX.

The user will navigate between screens by clicking on one of the tabs, by clicking on “Log Trade” on the main menu or by clicking on one of the stock tickers. Each screen will contain a back button.

Describe any libraries you’ll be using and share your reasoning for including them.

Room as a persistence library
LiveData to hold stock data
Retrofit to consume stock API
RecyclerView to display list of stock ticker in a portfolio
CardView to represent each stock ticker.

Describe how you will implement Google Play Services or other external services.

Application will use Google Ads
Application will consume an external stock API.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and break them down into tangible technical tasks that you can complete one at a time until you have a finished app.

Task 1: Project Setup

- Finalize stock API selection
- Setup skeleton project containing required libraries

Task 2: Implement UI for Each Activity and Fragment

- Build UI for My Portfolio page
- Build UI for My Cash Flow page
- Build UI for YTD page
- Build UI for Log Trade page

Task 3: Initial API Integration

- Obtain necessary credentials for stock API
- Create POJOs to model API response
- Create classes necessary for API call

- Test API data retrieval
- Use Retrofit library to place network calls asynchronously.

Task 4: Implement Persistence

- Create Entity classes to represent the data model.
- Create database class
- Create DAO code for data access

Task 5: Implement Google Ads

- Use Google AdMob to display banners at the bottom of the screen.

Task 6: Implement Error Handling

- Display a notification when connectivity is lost to the API
- Display data that was previously stored in the database with visual indication that the displayed data is not live.

Task 7: Test and Final Build

- Execute test cases to validate application functionality
- Build and submit project for review.

Add as many tasks as you need to complete your app.

Submission Instructions

- After you've completed all the sections, download this document as a PDF [File → Download as PDF]
 - Make sure the PDF is named "**Capstone_Stage1.pdf**"
- Submit the PDF as a zip or in a GitHub project repo using the project submission portal

If using GitHub:

- Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
- Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"