



# Cash App Stocks Take Home Project

Build a stocks app that shows a list of stock symbols and prices for a set of stocks parsed from the provided JSON endpoints.

## Requirements

Your app should...

- Handle loading, error, and empty states
- Display the returned information in a list (feel free to add whatever UI touches you'd like)
- Have unit tests that protect against regressions (don't worry about snapshot or UI tests)

This project should take you around 2-3 hours, at the end of this time, please take about 15 minutes to write up your experience in a README file to give us a window into your thought process. This README should tell us...

- The architectural approach you took and why
- The trade offs you made and why
- How to run your project
- 3rd party libraries or copied code you may have used
- Any other information that you would like us to know



This project will be used throughout your Cash interview experience, so please ensure that you feel comfortable modifying, maintaining, and extending this code.

## Details

### Portfolio Endpoints

We have provided an endpoint which will return your current portfolio. When called this will return a JSON object containing a list of stocks with some relevant information.



<https://storage.googleapis.com/cash-homework/cash-stocks-api/portfolio.json>

You can also simulate a malformed response using the following provided endpoint (it's okay to discard the entire response if it is malformed):



[https://storage.googleapis.com/cash-homework/cash-stocks-api/portfolio\\_malformed.json](https://storage.googleapis.com/cash-homework/cash-stocks-api/portfolio_malformed.json)

Finally, you can simulate an empty response using the final endpoint.



[https://storage.googleapis.com/cash-homework/cash-stocks-api/portfolio\\_empty.json](https://storage.googleapis.com/cash-homework/cash-stocks-api/portfolio_empty.json)

## Response Structure

Aa Field	☰ Data type	▢ Nullable?	☰ Description
<u>stocks</u>	Array	false	The list of stocks that are currently in your portfolio.

## Stock Structure

Aa Field	☰ Data type	▢ Nullable?	☰ Notes
<u>ticker</u>	String	false	This is the ticker symbol for a given stock.
<u>name</u>	String	false	The name of the company the ticker belongs to.
<u>currency</u>	String	false	The denominating currency for this stock.
<u>current_price_cents</u>	Integer	false	The currently trading price for this specific stock in USD cents.
<u>quantity</u>	Integer	true	The amount of this stock that is currently in the portfolio.
<u>current_price_timestamp</u>	Integer	false	A Unix timestamp represented in UTC from when the current price was last calculated.

## Example JSON

```
{  
  "stocks": [  
    {  
      "ticker": "UA",  
      "name": "Under Armour, Inc.",  
      "currency": "USD",  
      "current_price_cents": 844,  
      "quantity": null,  
      "current_price_timestamp": 1563451200  
    }  
  ]  
}
```

```
        "current_price_timestamp": 1597942385
    },
    ...
]
}
```

## Other Stuff

### Use What You Know

We're looking to see you at your best – as such, please use the language and frameworks you're most comfortable with on your chosen mobile platform. This means that if you're most proficient with Objective-C or Java, use that – don't feel pressured to use Swift or Kotlin! Cash App ships all four in production, so we're not going to prefer answers in one language over another.

### Show Us Your Strengths

We want to see what you're best at. Feel free to use 3rd party libraries, but please understand that we want this exercise to be a good representation of your coding ability.