

Team Verbose Spoon — Design Doc

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Task Delegation:

Project Manager: Jack

Database Interaction: Bayle

API Interaction: Rodda

Flask: Jordan

Bootstrap: Jessica

Front End:

- Show graphs of stocks
- Show history of stock if click
 - Have ability to buy/sell stock
- Show profile with how much money and shares of stocks they have

Site Map:

- Home Page: `@app.route("/")`
 - One form for login, one form for register.
 - This is where all pages will redirect to if they are accessed by someone who is not logged in.
- Feed: `@app.route("/feed")`
 - Show basic information about all stocks.
 - Show more detailed information about stocks that the user has shares of, or has marked as a favorite.
 - Uses "markitondemand" API
- Stock Page: `@app.route("/stock")`
 - Show all information about one selected stock
 - Relevant news related to stock
 - Uses nasdaqdod and ft APIs
 - Get info about if stock share was bought/sold
- User Page: `@app.route("/me")`
 - Show all stocks that a user owns, and some information about them.
 - Show other funds that a user has.
 - Show gains/losses and portfolio info

Back End:

- app.py
 - Contains all the routes
- Utils:
 - Initialize.py:
 - Initialize the database and create all the tables
 - Write secret key to utils/key
 - Should be run ONCE, the first time one wants to run the flask app after cloning the repo
 - api.py
 - Contains functions for getting information from each api
 - dbmanager.py
 - Contains functions for all interactions with database.db
- Templates:
 - login/register
 - Feed
 - Specific info on one stock
 - profile

Database Schema:

In database.db, we will have 2 tables:

1. users

username	password	Display name/id/something like that?	Available Funds
TEXT	TEXT	TEXT	INTEGER

2. Owned stocks

username	stock name	shares
TEXT	TEXT (stock abbr)	INTEGER

API's we will use:

http://dev.markitondemand.com/MODApis/#doc_lookup

—confirmed

- Includes API for making cool charts

- Has historical data for each stock which can be graphed

<https://developer.ft.com/docs> -- financial times —confirmed

https://developer.ft.com/docs/api_v1_reference/content_items/ -- dict items inside ft

<http://usfundamentals.com/> -- free for stocks —confirmed

<https://www.quandl.com/> -- real time stocks —confirmed