

Team RanQuoR-Turkey

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SoftDev Period 07

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Purpose

This website displays:

- updates for stocks chosen by the user
- weather for locations chosen by the user
- Headlines from The Guardian from news categories chosen by the user

It provides a customizable daily report.

Components

Flask Routing – Allows user to view the API data presented in the webpage

Jinja2 Template Engine – Used to display data by accessing SQLite database

Bootstrap - Open-source front-end framework for designing websites to make this site look nicer

Font Awesome - Another open-source font used to improve web design (for weather)

SQLite Database – Store data on users and their passwords, currently active sessions, and other table info

JSON - Functions turns API responses into dictionaries and parse through that data

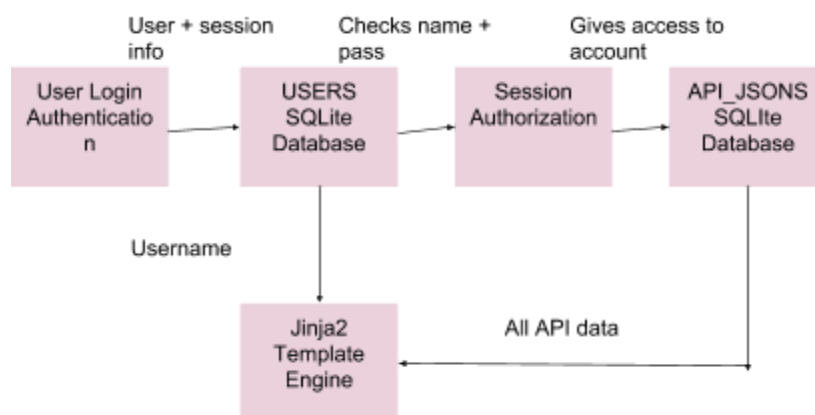
urllib - Retrieves requests from remote APIs

Time - module in Python for retrieving current time

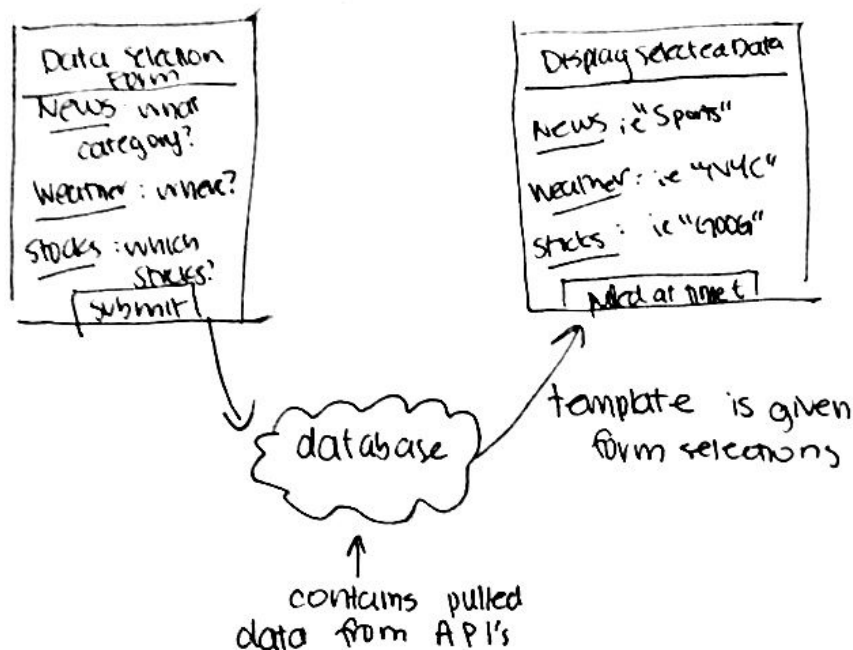
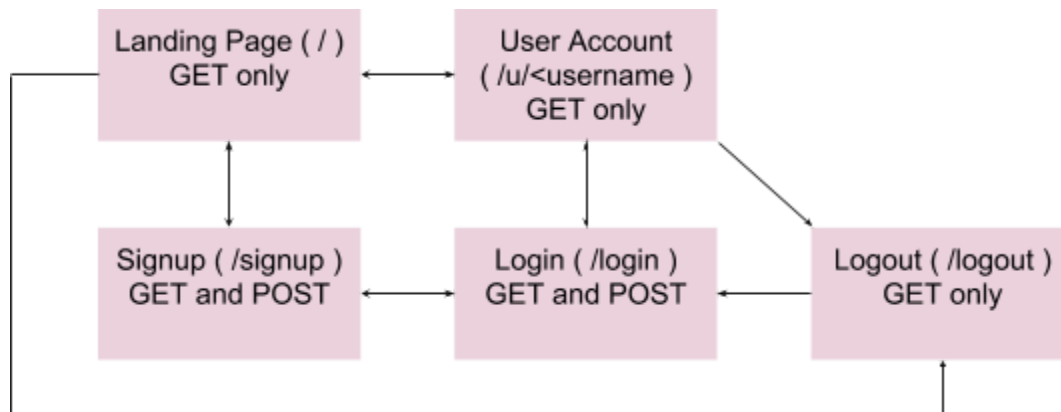
Alpha Vantage API - API that returns current stock prices and other statistics from; used to conduct searches for stock names

The Guardian API - API that returns article links and their headers from The Guardian

OpenWeatherMap API - API that returns data on weather (temperature, humidity, etc.) based on a query of a zip-code/location name



Site Map



This diagram shows what the website would look like without the login feature. If there were to be a login feature, then there would be a login page and a logout button. This feature would allow for settings to be saved.

Database Schema

Databases store most recently retrieved data from the APIs. Every time you run the page, it rewrites the database. This way, data won't be pulled from the APIs every time a new page is accessed, and we minimize the amount of time we make a call to the APIs.

API JSONs

API name (TEXT)	Last_retrieval (a time stamp) (TEXT)	JSON data from last retrieved API call (TEXT)	Additional API-specific info, if needed (TEXT)
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The API_JSONS table will store all data from the three APIs.

If we have users:

USERS

Username (TEXT)	Password (TEXT)	Stock preference (TEXT)	Weather preference (TEXT)	News category preference (TEXT)
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Roles

Ryan- PM, Templating (Bootstrap)

Clara- The Guardian API section

Key: 697684d3-9e9e-45e8-b3a4-b28ed5a741d9

Qian- Alpha Vantage (Stocks) API Section

Keys: XDFTB6OV8CPHPJ45,

Rachel- Open Weather Map API section

Key: 87bdad31331cad64c1efc0c13526c6f8

Working on databases will be joint effort as all members are working with APIs.