### Team RanQuoR-Turkey

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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**

<u>Flask Routing</u> – Allows user to view the API data presented in the webpage

<u>Jinja2 Template Engine</u> – Used to display data by accessing SQLite database

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

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

<u>SQLite Database</u> – Store data on users' stock choices; vestigial structure from development decision making.

<u>JSON</u> - Functions turns API responses into dictionaries and parse through that data <u>urllib</u> - Retrieves requests from remote APIs

Alpha Vantage API - API used to conduct searches for stock names

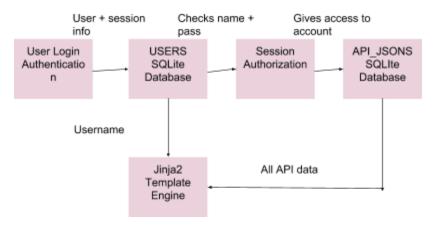
<u>The Guardian API</u> - API that returns article links and their headers from The Guardian

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

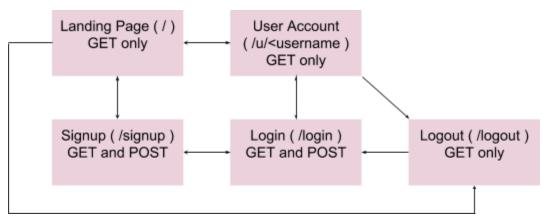
IPAPI - API that returns location of user's IP address. Used to default weather location

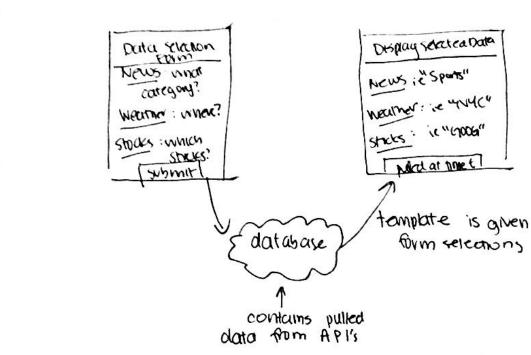
<u>Util</u> - to modularize code. api\_to\_db(only used for stock), faciliates operations on databases; apiOperator(only used for stock), faciliates operations on apis

<u>Keys</u> - to modularize api keys location



# 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.

## <u>APIs</u>

API (TEXT)	Data (TEXT)

The API\_JSONS table will only store stock names in a comma separated string (bad choice...perhaps) due to difficulty storing data retrieved from json for guardian.

## Roles

Ryan- PM, Templating (Bootstrap)

Clara- The Guardian API section

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

Qian- Alpha Vantage and IEX Trading (Stocks) API Section

Keys: XDFTB6OV8CPHPJ45,

Rachel- Open Weather Map and IP address API section

Key: 87bdad31331cad64c1efc0c13526c6f8