

## **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**

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' stock choices; vestigial structure from development decision making.

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

urllib - Retrieves requests from remote APIs

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

IEX Trading API - API that returns stock information with not quotas

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

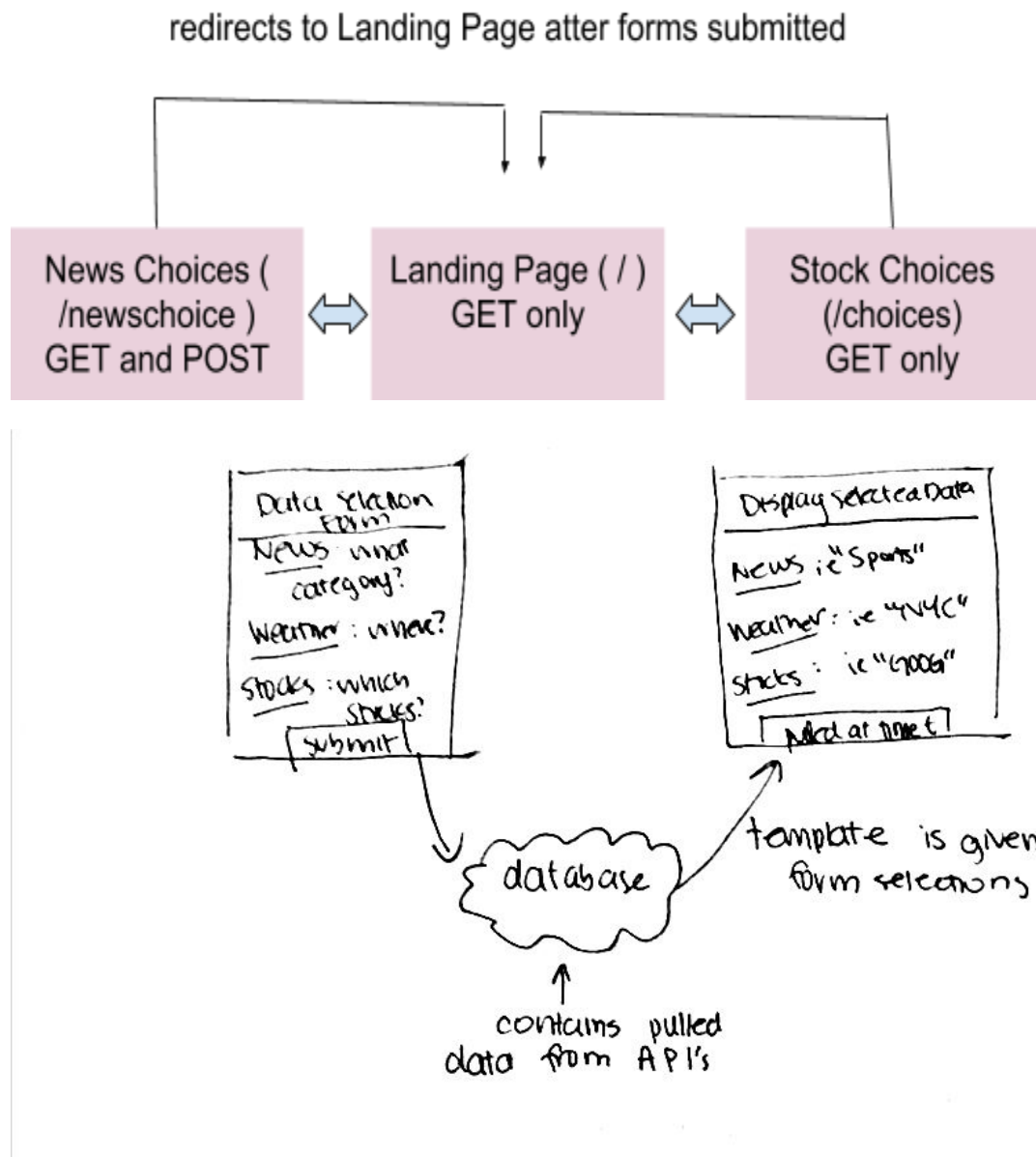
IPAPI - API that returns location of user's IP address. Used to default weather location

Util - to modularize code. api\_to\_db(only used for stock), facilitates operations on databases;

apiOperator(only used for stock), facilitates operations on apis

Keys - 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.

Edit- The login feature did not happen, mainly due to the idea that there was no practical need for it if users were able to easily choose what stocks, news, and locations they wanted to see.

## 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.

### APIs

API (TEXT)	Data (TEXT)
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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