

# “Apppy” = app.py

## Summary:

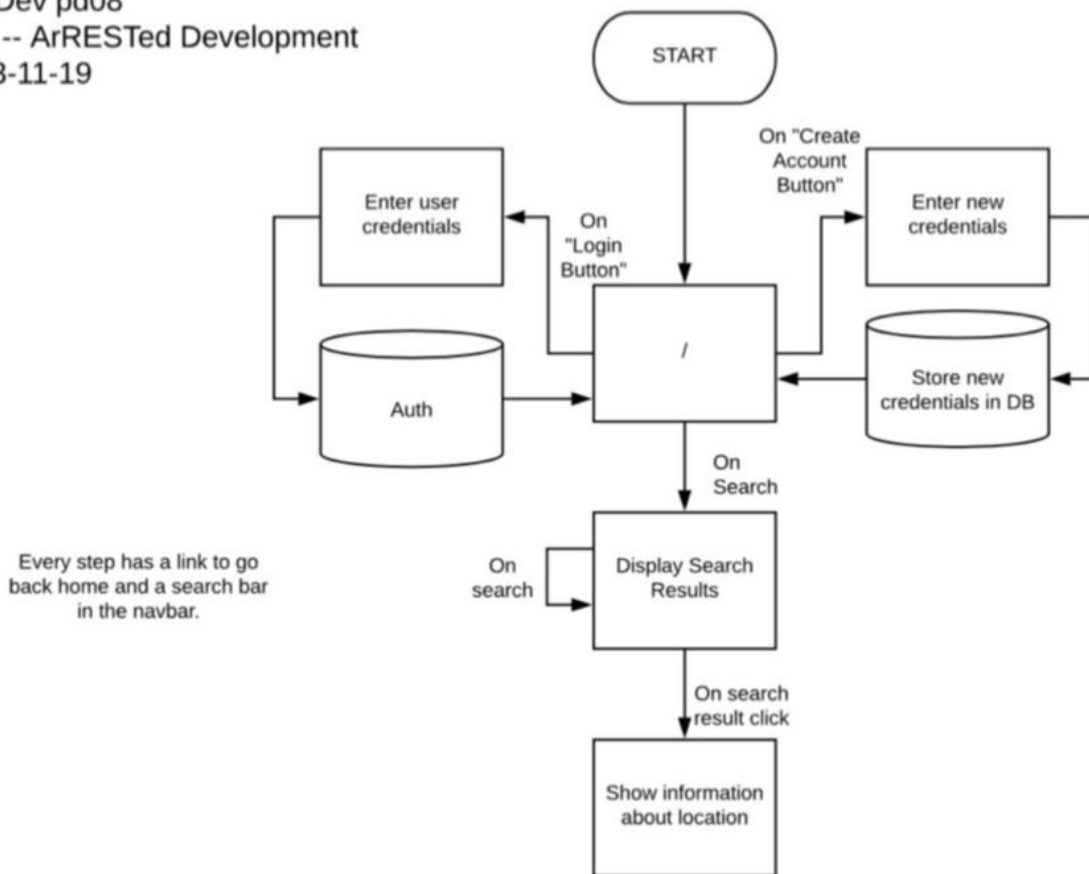
The web app will allow users to search up cities and view the current and past climate and weather of the country the city is based in. The app will also provide historical data on the country in question, from the geography to the current political situation. The website is intended to be a compilation of data so that travelers can make the most informed decisions about where they want to go.

## REST APIs in Use (we will create cards as we familiarize ourselves with them):

- ClimaCell (general climate per location)
- World Weather Online Premium API (will be used primarily for historical data)
- Accuweather (information on cities including GPS location, time-zone, population, elevation above sea level, and the current time)

## COMPONENT MAP

Joan Chirinos, Raunak Chowdhury, Susan Lin  
SoftDev pd08  
P01 -- ArRESTed Development  
2018-11-19



## DATABASE SCHEMA:

We are using a DB to allow users to save their searches

| users |               |
|-------|---------------|
|       | username TEXT |
|       | password TEXT |

| searches |               |
|----------|---------------|
|          | username TEXT |
| PK       | long INT      |
| PK       | lat INT       |
|          | time TEXT     |
|          | city TEXT     |
|          | region TEXT   |
|          | country TEXT  |

## SITEMAP

Weather Bois

BROOKLYN  
2018-12-06

Weather of Current Variety

Max:      Min: 

Weather of Hourly Variety

12:00 AM - 2:59 AM

|      |        |          |            |
|------|--------|----------|------------|
| Temp | Precip | Humidity | Wind speed |
|      |        |          |            |

etc.

Forecast of daily variety

2018-12-09

|      |      |            |        |            |            |
|------|------|------------|--------|------------|------------|
| Temp | Info | Feels like | Precip | Avg. Humid | Wind speed |
|      |      |            |        |            |            |

Weather Bois

Brooklyn, NY, USA | BROOKLYN, (40.634, -73.95)

Brooklyn, Ohio, USA | BROOKLYN, (41.44, -81.735)

Brooklyn, St. Mary, Jamaica | BROOKLYN, (18.383, -76.917)

Weather Bois

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## TASK DIVISION:

ALL:

- Docstrings

SUSAN (PM):

- will become familiar with all APIs to inform team members on how they work
- database stuff (db.py)

JOAN:

- building and maintaining front-end frame **via Bootstrap**
- will be responsible for templating the home page and the results page
- Does app.py + authentication

RAUNAK:

- primary backend developer
- Handles all API calls in api.py
- will be responsible for **search** functionality for city name/zip code

## ROADMAP:

2018-11-26

- Login System set up (J)
  - Fully functional, can use login system from last project
- Database set up (S)
  - DB creation (and checking for the existence of the DB)
  - DB Schema in DB
  - DB calls should be functional
- Bootstrap installed and set up (J)
- Beginning of API implementation (order in GeoDB, ClimaCell, and World Weather Online)

2018-11-29

- APIs set up (R)
  - All API calls should be functional
  - Uses a modular function that makes decisions based on the presence of an API key or not

2018-11-30

- Piping into templates
  - API calls should be displayed on the site (J)
  - Logins should work on the site (J)
  - Login storing should work (S)
  - Searching v1 should be online (R, J, S)

2018-12-01

- Stress testing phase

2018-12-7

- Project deadline

## API Drawbacks (observations and reservations we had when using APIs)

- GeoDB only returns the first ten searches (alphabetical, I believe) for our trial
- Wunderground, what we'd initially wanted to use, was going out of service
- World Weather Online gives you a lot of data to parse through with each call, slowing down slightly the efficiency of the website
- GeoDB requires a credit card so we decided against use.
- We switched to Accuweather, which limits the user to 50 calls per day but is effective and easy to implement and most important, doesn't require a credit card.

**Extra Features**

- Background color for results based on time of day of specific location
- Possibly include select location information dialect

**API Keys Stored In:**

- Climacell.txt
- Worldweatheronline.txt
- Accuweather0.txt
- Accuweather1.txt
- Accuweather2.txt
- Accuweather3.txt
- Accuweather4.txt