#### **DiseaseWatch**

#### Summary

Using APIs that hold disease data (listed later), this app will display such data on a map based on concentration. This map will have multiple layers for each disease, and the app will be able to alert users of a flu outbreak/other disease outbreaks. The app will also include charts and graphs tracking diseases in the past month. With this app, users will be able to know when (or roughly when) a particular disease could have an outbreak, to possibly avoid contracting it.

#### **APIs**

## WHO Global Health Observatory API (info <a href="here">here</a>)

- Updates count annually but also can have updates every 1-2 weeks
- Can be used to see historic trends for users to predict future outbreaks
- Free with no significant request limit
- <a href="https://ghoapi.azureedge.net/api/">https://ghoapi.azureedge.net/api/</a> (API base url)

#### CDC Data API via Socrata (info here)

- Updates weekly
- Can be used to see recent changes in disease counts, nuanced
- Free with no significant request limit
- Each dataset has a specific id
- Add more to the end to specify region, time
- https://data.cdc.gov/resource/{datasetID}.json (API base url)
- Possible dataset to use: 5dgz-y4ea
- Data Catalog

# HealthData API via Socrata (info here)

- Update times vary depending on data
- Can be used to track hospital data
- Free with no significant request limit
- Each dataset has a specific id (similar to CDC)
- <a href="https://healthdata.gov/resource/{dataset\_id}.json">https://healthdata.gov/resource/{dataset\_id}.json</a> (API base url)

#### disease.sh API (info here)

- Updates ASAP
- Compiles info from multiple reputable sources
- Free with no significant request limit
- <a href="https://github.com/GedionT/Disease.sh">https://github.com/GedionT/Disease.sh</a> (github location)
- <a href="https://disease.sh/v3/">https://disease.sh/v3/</a> (API base url)

#### PubMed / NCBI E-utilities API (info here)

- Updates with new publications
- Can be used to track outbreaks and research trends
- Free with no significant request limit (but lowest compared to others here at 3/s per IP)
- https://eutils.ncbi.nlm.nih.gov/entrez/eutils/ (API base url)

## PhysioNet API (info here)

- Updates every few months
- Can be used to analyze tons of data
- Free with no significant request limit
- <a href="https://physionet.org/api/">https://physionet.org/api/</a> (API base url)

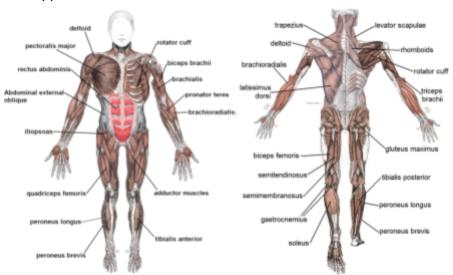
#### FluSight API (info here)

- Updates weekly
- Can be used to access forecasts on flu admissions in the US
- Free with no significant request limit
- <a href="https://www.cdc.gov/flu/forecasting/api/">https://www.cdc.gov/flu/forecasting/api/</a> (API base url)

# Stretch (I prefer DiseaseWatch though)

# **Summary**

This app will have one of these as a 3d model:



It will be used so that users can click on muscles to bring them to pages to where they can read about them. There will be another tab with just a list of all the muscles with links to their respective pages. These will be organized into the general groups they fall into (chest, back, arms, legs). Each muscle's page will have an exercise to strengthen it and a stretch to stretch it. Using APIs that hold health data (currently only PubMed), this app will display exercise and gym related studies on a third tab. On another tab, there will be a list of common problems faced by old people (back pain and such) that will have stretching solutions. With this app, users can improve their physical health.