

Behaviour Risk Model Algorithm (BRMA) Api

Design Doc

Input: (string)

GET/POST parameter: `gps_data`

desc: set of lines where each line have exactly three fields latitude, longitude and minutes spent at that location.

sample: `37.757815,-122.5076408,120\n40.7058316,-74.2582003,120`

Output: (json)

desc: JSON consisting of:

a. **__final__**: the BRMA score ranging from 0 to 150

b. `nimby_score`: ranging from 0 to 50

c. `yimby_score`: ranging from 0 to 50

d. `env_score`: JSON consisting of:

* `aqi`: air quality score ranging from 0 to 12.5

* `crime_score`: ranging from 0 to 12.5

sample: `{"__final__": 69.25, "nimby_score": 0, "yimby_score": 50, "env_score": {"env_norm": 19.25, "crime": 6.375, "aqi": 3.25}}`

Errors: (string)

1: `'error: wrong input format'`

2: `'error: wrong input values'`

Code Description:

repository: <https://github.com/projectvision/healthapp-api2>

command to run the api: `python web_api.py`

modules:

`web_api`: handler for get/post requests

`scorer`: computes nimby and yimby scores

`env_scores`: computes both the environment scores (aqi and crime)

`crime_rate_api`: interface for provide crime rates for a given lat/long

`config`: the yaml format file of yimby and nimby locations

`requirements`: list of required python libraries

`templates/`: containing the html

`Procfile`: heroku specific file for running the app

`crime_rate.cc`: utility script for parsing the crime date (not production relevant)

`test_api`: simple python script for demoing api usage.