
Adder-all-the-data

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PURPOSE

Our site will visualize the relationship between data concerning school scores (GPA and SAT) and substance abuse by state. The visualization will be split into two portions, one describing the United States as a whole, and another for each individual state. A heat map of the United States will be used to demonstrate how closely substance abuse correlates with school scores depending on state. A user may interact with this heat map by clicking on a state in order to get more information. This portion will display various statistics regarding substance abuse of choice, substance abuse based on age groups or family income, school scores overall, as well as how closely correlated these two data sets are.

FILE TREE

~\adder-all-the-data\

- app.py
- utils\
 - drugs.py
 - school_scores.py
- data\
 - drugs.db
 - school_scores.db
- static\
 - \js\
 - page.js
 - \css\
 - style.css

```

graph LR
    Home[Home.html] --> App[App.py]
    App --> Page[Page.js]
    Page --> App
    App --> Drugs[Drugs.py]
    App --> Scores[School_Scores.py]
    Drugs <--> Drugs_db[Drugs.db]
    Scores <--> Scores_db[School_Scores.db]
  
```

```

graph TD
    subgraph Home_Page [Home.html]
        direction TB
        H1[Home.html]
        H2[Example: School vs Drugs]
        H3[Map of US states]
    end

    subgraph Page_JS [Page.js]
        direction TB
        P1[Page.js]
        P2[JS Requests For Data]
    end

    subgraph App_PY [App.py]
        direction TB
        A1[App.py]
        A2[App.py returns Data]
    end

    subgraph Database [Database Access]
        direction TB
        D1[Drugs.db]
        D2[School_Scores.db]
    end

    Home_Page -- "User Clicks On a State" --> Page_JS
    Page_JS -- "JS Requests For Data" --> App_PY
    App_PY -- "App.py returns Data" --> Page_JS
    Page_JS -- "User Clicks on State Icon" --> Home_Page
    App_PY <--> Database

```

FILE DISTRIBUTION

app.py

The main flask app file

utils\

drugs.py

- File handling all retrieval of information regarding drugs (different types, usages in each state, etc)

school_scores.py

- File handling all retrieval of information regarding school scores(different types of tests, scores in each state, etc)

data\

drugs.db

- Database file holding all the information regarding drugs

school_scores.db

- Database file holding all the information regarding school scores

Static\

\js\

page.js

- File handling svg and d3 elements of the page, how users interact with the map of the US, and how they view the data

\css\

style.css

- Responsible for making the site look aesthetically pleasing

TASK DELEGATION

U.S. Heat Map: Emma

Per-state data Compilation/Interpretation: Yvonne

Transitions/Site layout: Ayman

Project Manager: Kevin

TIMELINE

March 29th: Complete the retrieving of data

March 30th: Complete the interpreting/compiling of data

April 1st: Complete initial draft of visualization of data (heat-map and per-state)

April 3rd: Finish!