

Happy Meal: Craig Chen(PM), William Guo, Nada Hameed, Erica Li
Target Ship Date: May 26th, 2023

Design V.2 for Happy Meal

Idea :) !

- Coffee Consumption & Production
 - <https://www.kaggle.com/datasets/yamaerenay/ico-coffee-data-set-worldwide>
 - [Coffee Production \(1991-2020\) - Data from ICO | Kaggle](#)

-> [17 Important Data Visualization Techniques | HBS Online](#)

- bar graph (each country export volume)
- pie chart
- [choropleth map \(of world?\)](#)

Description of Site/Goals:

- We plan to make a choropleth map of the world showcasing the exports of coffees from each country (or at least the ones on the database) throughout the different years. When users hover the country, it will display the country name and its export for that certain year.
 - Clients are able to search to gather more information on the country
- Time permitted, a search function to find nearby coffee shops based on location

Program Component:

- HTML/CSS/JS Scripting
 - Templates to be served to the Flask app
 - Login page with logo
- Python Files
 - Flask app that runs the whole thing
 - Our web server and delivery framework
 - Utilizes database functions
 - Calls from APIs
- Backend databases
 - SQLite

Component Relations:

- Login Page that redirects users to the homepage through a username and password

- If not registered, allows users to register new username and password before entering homepage
- Home page where the data set is presented using data from the databases (world map of coffee consumption)
 - Map is able to zoom in and out and hover to show data
- Search option that allows users to learn more about the country as well as show line chart of coffee export throughout the years

Database Organization:

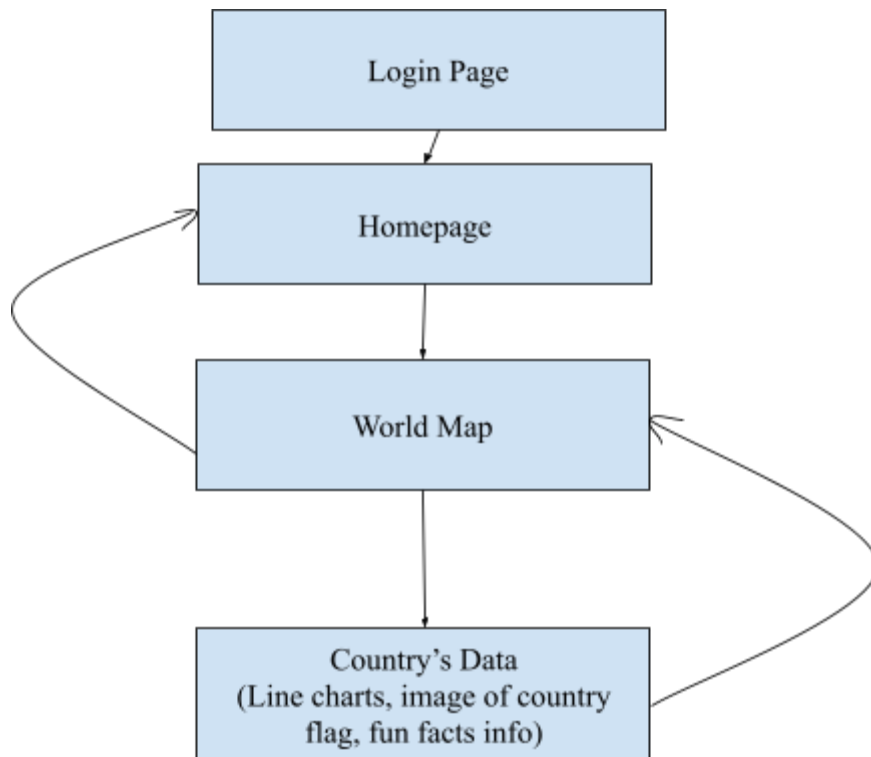
- Table with 29 rows
 - Country where the coffee is exported
 - Year of export
 - Value being the amount of coffee exported in thousands of 60kg bags

Country	Year1	Year2	YearN
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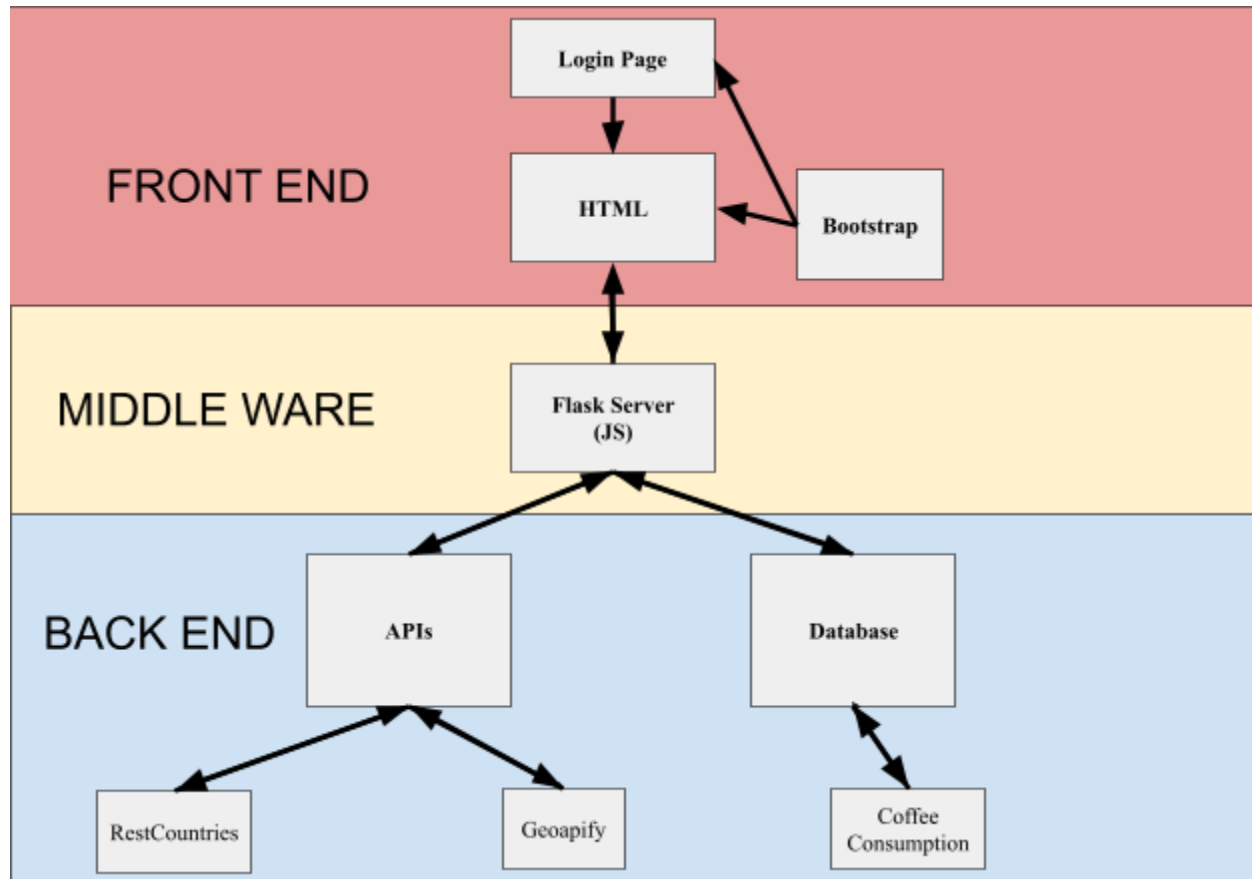
- Table with 2 rows for username and password

Username	Password
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Front-End Site Map:



Component Map:



APIs:

- [Geoapify](#): Pulls a static image of a specified location
- [RestCountries](#): Gives a specific country's population, currency, language, capital

FeF Used:

Bootstrap because of its comprehensive labeling as well as the ability to organize our pages with the nav bars.

Task Assignments:

- Craig: API & Flask app
- Erica: HTML/CSS work
- William: JS visualization
- Nada: databases

TED TOPICS possibly used and why:

- Python Pandas because it has lots of data visualizations tools such as bar graphs, line charts, histogram which can be used to compare the js visualization to see if it's correct.

- Also it has great functions to manipulate data like filtering, cleaning and summations to help reshape and transform data to fit our needs