

# Team Burgers and Fries

Benjamin Avrahami: Frontend and Bootstrap Framework

Ethan Chen: Backend Flask/API

Peihua Huang: Database

Jionghao Wu: Project Manager

## Core Components:

- Login Mechanism
  - After they click login, their info is checked with the database to make sure that the username and password are correct
  - If either is incorrect, they will be returned to the login page with a flashed error
  - If the user correctly signs in, a new session will be created and they will be redirected to the homepage
- Sign up Mechanism
  - Users also have the option to create a new user, which will be on a different page
  - They have to put in a username and password, neither of which can be blank
  - If the username is already taken, they will be returned to the page with a flashed error
  - If the signup is successful, a new session will be created and they will be redirected to the homepage
- Home page
  - The home page will welcome the user and guide them either to the quiz or to search for country facts
  - There will be a link redirecting to the quiz, and a search bar to look for countries, which will autocomplete countries the user types
- Quiz
  - The quiz will be to list out all the countries of the world.
  - Quiz progress will be saved until user logs out.
  - User can also choose to reset quiz.
  - As the user enters each one in, there will be a table displaying the results, organized by continent

- Country page
  - Each country will have their own page, which can be accessed by the search bar on the home page
  - Many facts about each country will be provided by the Countries and UNdata APIs
  - There will also be a currency converter for most countries, which will convert some amount of that country's currency into a number of other currencies

## APIs used:

REST Countries - basic info about countries

Currency Exchange - exchange rates between base country and other countries on record

UNdata - information on growth, pollution, and health indicators that the UN uses

Agify.io - number people and average age of a person with a given name in a given country

## Component Map:

login page "/login"	create-account page "/create-acc"
<div> <div>Username: <input type="text"/></div> <div>Password: <input type="password"/></div> <div>Login</div> <div>Create Account</div> </div>	<div> <div>Username: <input type="text"/></div> <div>Password: <input type="password"/></div> <div>Re-enter Password: <input type="password"/></div> <div>Create Account</div> <div>Return to Login</div> </div>

homepage "/home"

Navigation Bar

Search.....

Search

Logout

Welcome <username>

Name all Countries Quiz Button

MAP BACKGROUND

Weird Facts

Enter name: 

name....

Choose a country: 

countries ▾

Results:  
Average age of person with <name> in  
<country> is: <age>

countries quiz "/quiz"

Navigation Bar

Search Country...

Search

Logout

Welcome <Username> to the Countries Quiz

Country Name: 

Enter country here....

Check

Flag of Previous Country Found

LIST OF COUNTRIES FOUND BASED ON CONTINENTS				

search results "/search"

Navigation Bar

Search Country...

Search

Logout

Search: <keyword>

List of Countries found

country page "/<country\_code>"

Navigation Bar

Search.....

Search

Logout

Country: <blahhh name>

Random info about country  
Category: info  
.  
.  
.

Country Flag

Currency Converter

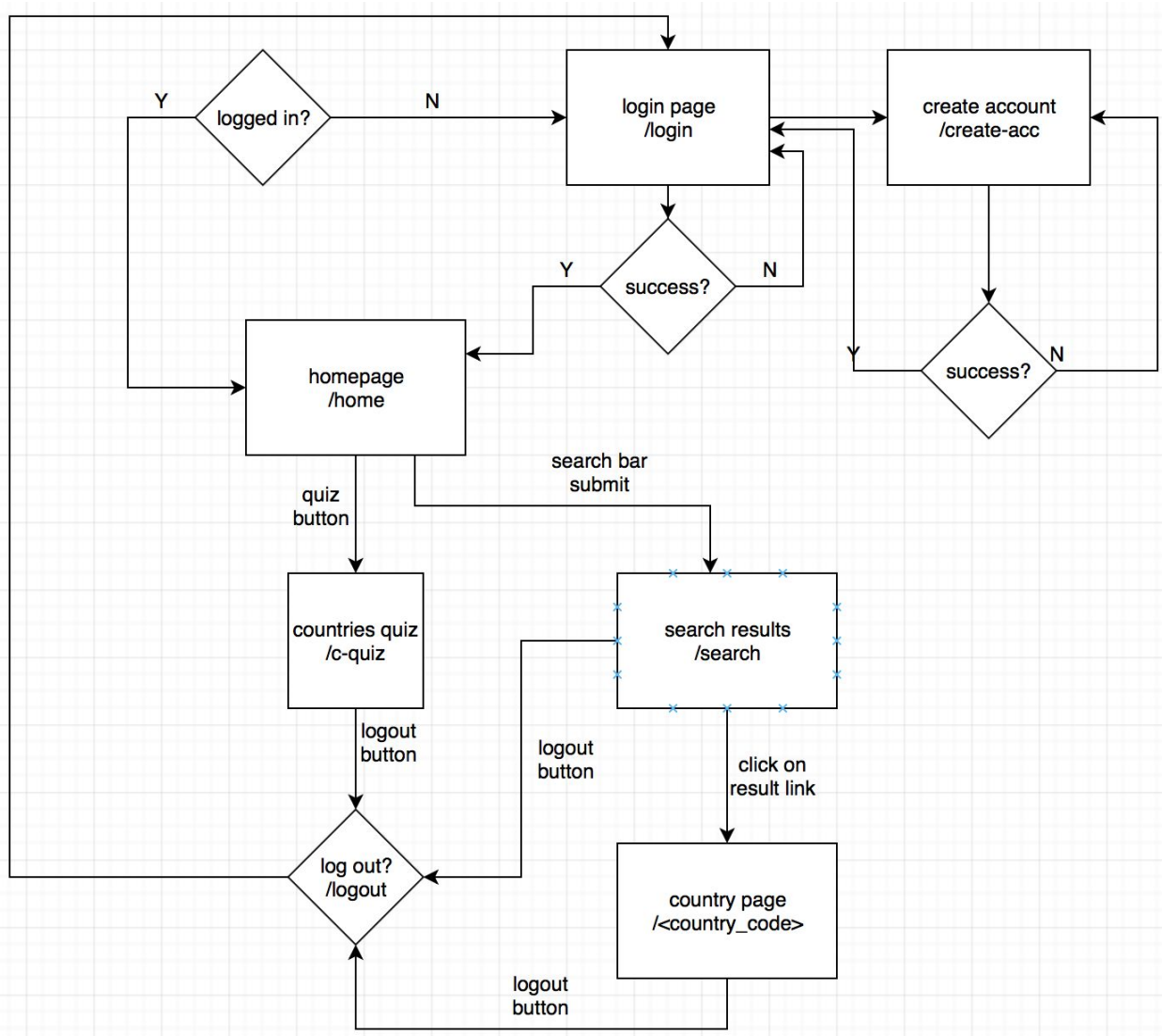
Value...

currency ▾

Convert!

Result:  
This much blah = that much this country blah

## Site Map:



## Database:

users

Username	Password
TEXT UNIQUE	TEXT

countries

name	alpha_2	alpha_3	region
TEXT UNIQUE COLLATE NOCASE (case insensitive)	TEXT UNIQUE	TEXT UNIQUE	TEXT

stat

name	calling_code	capital	population	lang	flag	currency
TEXT UNIQUE COLLATE NOCASE	TEXT	TEXT	INTEGER	TEXT	TEXT	TEXT

currency

currency_1	value_1	currency_2	value_2
TEXT	REAL	TEXT	REAL

name

name	code	count	age
TEXT	TEXT	INTEGER	INTEGER

quiz

name	country	region
TEXT	TEXT	TEXT

Functions (for app.py to call, does not include helpers):

`add_login(username, password)`

- Returns empty string if credentials are added successfully to the database
- Returns error message as a string if credentials already exist or if either username/password is empty

`verify_login(username, password)`

- Returns empty string if credentials are correct.
- Returns error message as string if credentials are incorrect or if username/password is empty

`convert_currency(curr_1, value, curr_2)`

- Returns a double of how much value in currency 1 is in currency 2.
- Returns -1 if value is invalid (ie: a negative number) or if the conversion rate is not in database

`reset_quiz(username)`

- Resets the country quiz for the given username

`get_name_stats(name, alpha_2)`

- Returns a list of the average age of people with the given name in the country with the given alpha-2 code
- If the name is not found in the given country, [0, null] is returned

`get_currency(country)`

- Return the currency code of the given country

`get_currency_list(currency)`

- Return the list of currencies that the given currency can be converted into
- Returns an empty list if conversion is not available

`search_country(keyword)`

- Return a list of countries with given keyword in its name.

`found_country(country)`

- Set found column for given country to 1 (meaning user found it in quiz)

`get_found_countries()`

- Returns a dictionary, with the keys being the 5 regions of the world (Americas, Asia, Europe, Africa, Oceania) and the values being the list of countries found in each region

`alpha_to_country(alpha_3)`

- Converts alpha\_3 code to country name and returns it

`get_country_stat(country)`

- Returns a dictionary of the name, alpha-2 code, alpha-3 code, calling code, capital, population, language, flag, currency, region of the given country