

# What's *(the impact of)* Gaby Cooking?

An interactive and instructive look into popular recipes from *whatsgabycooking.com*

*By Samuel Robbins*

# Design

*This app is for people who...*

Love to cook  
but are  
very indecisive

Want to know the  
impact of their  
cooking  
choices



Are curious about  
where their  
food comes from

Love to click  
buttons on  
apps :)

# Data Pipeline

a) Web scrape from [whatsgabycooking.com](https://whatsgabycooking.com)

b) API Calls from:

- Spoonacular - *ingredient information*
- ClimatIQ - *climate impact*



spoonacular API



climatiq

Data  
Ingestion



# Data Pipeline



- Standardize ingredient lists, time estimates, etc.
- Gather data from API calls into single and grouped data frames



# Data Pipeline



- MongoDB/Atlas (and PyMongo) for database management



# Data Pipeline



- Deploy interactive recipe dashboard to Streamlit



# Data Pipeline



# Data Example

*From Web Scrape:*

```
{ 'course' : <str>,  
  'cuisine' : <str>,  
  'ingredients' : { 'amount': <str>,  
                    'name' : <str>,  
                    'unit' : <str> },  
  'instructions' : [<str>,<str>,etc.],  
  'time' : <str>,  
  'title' : <str>,  
  'url' : <str> }
```





# Data Example

## From Web Scrape:

```
{ 'course' : <str>,  
  'cuisine' : <str>,  
  'ingredients' : { 'amount': <str>,  
                    'name' : <str>,  
                    'unit' : <str>},  
  'instructions' : [<str>,<str>,etc.],  
  'time' : <str>,  
  'title' : <str>,  
  'url' : <str> }
```

## From Spoonacular API:

### Input

```
$ api.parse_ingredients(INGREDIENT)
```

### Output

```
{ 'original' : <INGREDIENT>,  
  'estimatedCost' : {...},  
  'aisle' : <str>,  
  'nutrition' : {...},  
  ... }
```



# Data Example



Source: NYTimes.com

## From Web Scrape:

```
{ 'course' : <str>,  
  'cuisine' : <str>,  
  'ingredients' : { 'amount': <str>,  
                    'name' : <str>,  
                    'unit' : <str>},  
  'instructions' : [<str>,<str>,etc.],  
  'time' : <str>,  
  'title' : <str>,  
  'url' : <str> }
```

## From Spoonacular API:

### Input

```
$ api.parse_ingredients(INGREDIENT)
```

### Output

```
{ 'original' : <INGREDIENT>,  
  'estimatedCost' : {...},  
  'aisle' : <str>,  
  'nutrition' : {...},  
  ... }
```

## From ClimatIQ API:

### Input

```
{ 'emission_factor' : based on AISLE,  
  'parameters' : { 'money': <ESTIMATEDCOST>,  
                   'money_unit' : <str> }  
}
```

### Output

```
{ 'co2e' : <float>,  
  'co2e_unit' : <str>,  
  'constituent_gases' : {...},  
  ... }
```

# Data Example

## From Web Scrape:

```
{ 'course' : <str>,  
  'cuisine' : <str>,  
  'ingredients' : { 'amount': <str>,  
                    'name' : <str>,  
                    'unit' : <str> },  
  'instructions' : [<str>,<str>,etc.],  
  'time' : <str>,  
  'title' : <str>,  
  'url' : <str> }
```

## From Spoonacular API:

### Input

```
$ api.parse_ingredients(INGREDIENT)
```

### Output

```
{ 'original' : <INGREDIENT>,  
  'estimatedCost' : {...},  
  'aisle' : <str>,  
  'nutrition' : {...},  
  ... }
```

## From ClimateIQ API:

### Input

```
{ 'emission_factor' : based on AISLE,  
  'parameters' : { 'money': <ESTIMATEDCOST>,  
                   'money_unit' : <str> }  
}
```

### Output

```
{ 'co2e' : <float>,  
  'co2e_unit' : <str>,  
  'constituent_gases' : {...},  
  ... }
```

Recipe	Ingredient	Category /Aisle	Nutrient A	Nutrient B	Nutrient etc.	Cost	co2e
<str>	<str>	<str>	<str>	<str>	<str>	<float>	<float>

# Data Example

Add to MongoDB

From Web Scrape:

```
{ 'course' : <str>,  
  'cuisine' : <str>,  
  'ingredients' : { 'amount': <str>,  
                    'name' : <str>,  
                    'unit' : <str> },  
  'instructions' : [<str>,<str>,etc.],  
  'time' : <str>,  
  'title' : <str>,  
  'url' : <str> }
```

From Spoonacular API:

Input

```
$ api.parse_ingredients(INGREDIENT)
```

Output

```
{ 'original' : <INGREDIENT>,  
  'estimatedCost' : {...},  
  'aisle' : <str>,  
  'nutrition' : {...},  
  ... }
```

From ClimatIQ API:

Input

```
{ 'emission_factor' : based on AISLE,  
  'parameters' : { 'money': <ESTIMATEDCOST>,  
                   'money_unit' : <str> }  
}
```

Output

```
{ 'co2e' : <float>,  
  'co2e_unit' : <str>,  
  'constituent_gases' : {...},  
  ... }
```

Add to MongoDB

Recipe	Ingredient	Category /Aisle	Nutrient A	Nutrient B	Nutrient etc.	Cost	co2e
<str>	<str>	<str>	<str>	<str>	<str>	<float>	<float>

## Welcome to the WhatsGabyCooking Interactive Dashboard!

This app is for those who love to cook but can't for the life of them decide what to make. Users will be provided a random recipe - with ingredients and instructions - in addition to useful graphics on the nutrition breakdown of the recipe and the carbon emissions it takes to produce. With over 1000 unique recipes for the app to choose from, feel free to loop through until you find a recipe you like, with a footprint you can feel good about. Happy Cooking!

Choose a random recipe below:

Hit for Random Recipe

### Disclaimer

All recipes presented here are the sole  
IP and trademarks of  
[whatsgabycooking.com](https://whatsgabycooking.com)

Made with Streamlit



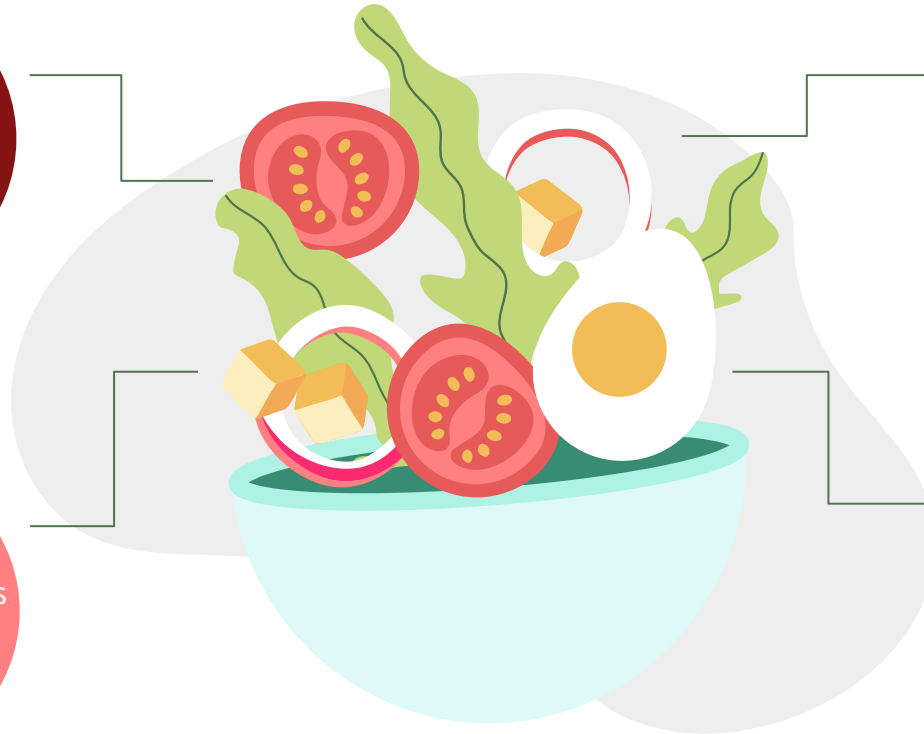
# Future Improvements

Add dropdown menus for cuisine, time, course, etc. to narrow recipe suggestions

Add options to choose which nutrients plots you see

Add more recipes from other sources to broaden selection

Add an option for drink pairings





# *Questions?*