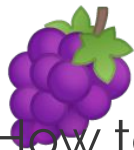# Ingreduce

DS: Celine Zhou
UX: Alpgiray & Elsy Aranda
WD: Aljoscha Beiers, Catarina Louza & Sarita Schenkermayr

Mentor: Christoph Dansard

From Problem to Solution

🍇

How to reduce food waste?
How to keep track of your food consumption?

Keep track of the groceries you have at home.
Get recipe suggestions based on the food you already bought.
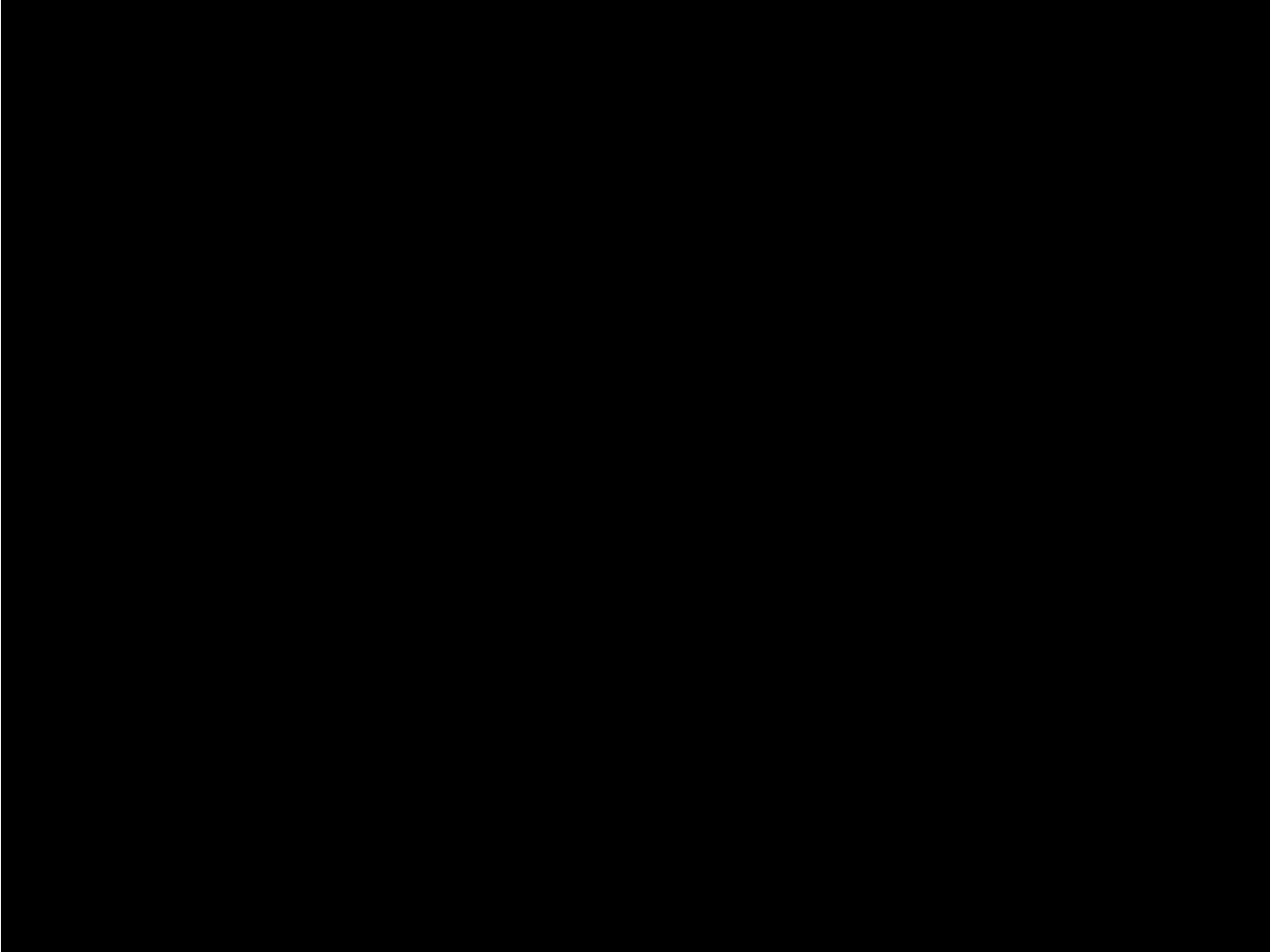
How Ingreduce works 🧅

Add Ingredients > Select 'must use' Ingredients > Get Recipe Suggestions

Ingreduce & Cooking = **Reducing food waste!**

Tech Stack

Ingreduce

UX

Figma
MIRO
uxpressia.com
visme.co

WD FE

React JS with
Bulma CSS Library

EDAMAM
API for ingredient search

WD BE

Firebase
Node.js
Express.js
MongoDB Atlas

DS (Python)

BeautifulSoup
Requests
Pandas
Gensim
NLTK

Ups and Downs

I'm happy to have been able to deliver a fully functional backend after spending a lot of time on a Frankenstein's monster-like approach to Firebase.

(Of course this also means that there are a lot of things that I wish I had had more time to work on...)

The functionality to add ingredients was a difficult one and I was very happy when it finally did work.

If we would have had more time it would have been awesome to do the styling from scratch to give UX more flexibility and Frontend Devs more CSS practice.

UX collaborated nicely with the developers despite the time constraints.

In the backlog, we would have liked to implement more features that the UX team worked on like the profile page, my recipes page or a food waste message page.

Team: Alpy, Aljoscha, Catarina, Celine, Elsy and Sarita 🍓

Backlog 14

Make ingredient dataset??
© c

make everything responsive

Filters

"About" page

"My recipes" page

Profile Page

Food waste Message page

📄 ingredient type list component
💬 1

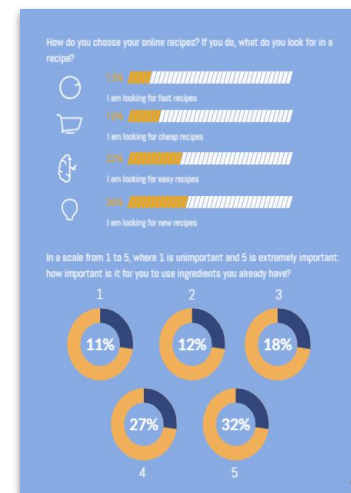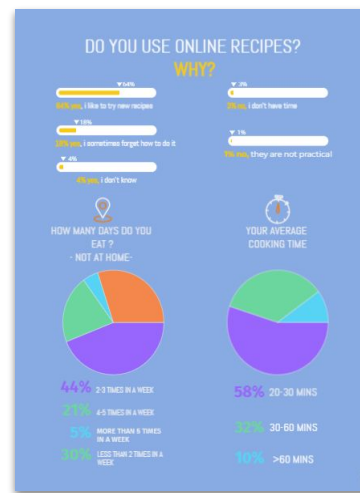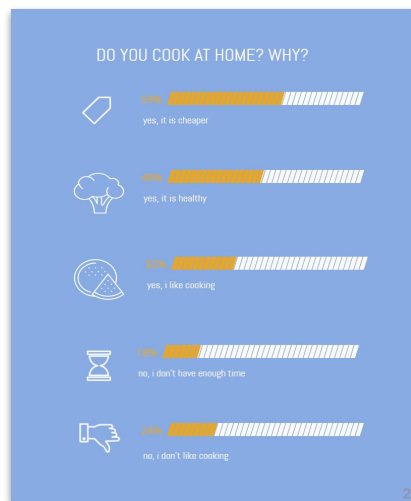📄 Ingredients Section Component
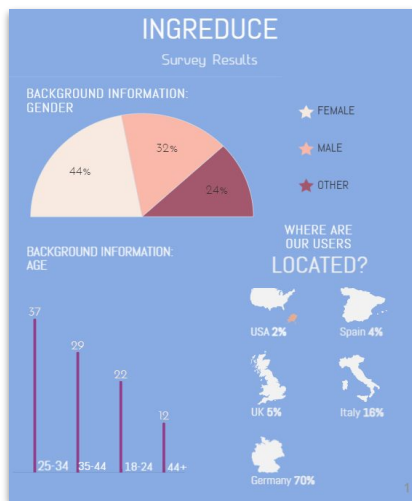💬 1

expiration date

Reminder after login to update inventory

ingredient amounts

check if ingredient is already in pantry before adding

check "scrolling state" bug

User Research

Ingreduce

Personas & Scenarios

Ben came home from work and realized that it was 19 o'clock. He checked that he had no dinner. He opened the refrigerator and saw that there was some spinach and 200 grams of ground beef inside. Furthermore, he didn't want to prepare the same meal he prepared yesterday because he had been eating the same meal for two days. He didn't want to go down from his fourth-floor building to the grocery store, which he would reach in ten minutes on foot. He was too tired and didn't have time for shopping. He wanted to sit on his coach to watch the cycling tournament that would start in two hours. He started looking for recipes on the website he always checked, but he had tried all the recipes that came his way. He also looked at the ingredients of the recipes he did not try. He realized that he did not have enough material. He opened the "our product" site, which he heard from his friends, and took turns choosing the ingredients that were in the refrigerator. When he clicked the "recipe search button". In a short time, different recipes appeared in front of him. Filtered and sorted by preparation time. He chose the shortest one, but this was a recipe he knew before. He chose the second recipe and the recipe he hadn't known before. He looked at the materials needed. Except for one missing, he had everything he had to cook the meal. There was a suggestion for the missing one and he liked it. He cooked his dinner and watched the bike race with his new style spinach.

○ Female	37	years
○ Hamburg, Germany		
Project Manager		
Married		

○ Female	25	years
○ Cologne, Germany		
Single		
University Student		

Anna was invited to the park on Saturday afternoon for her friend's birthday party. She didn't have enough time for shopping, as she left the bar she was working in very late on Friday evening. When she woke up at noon on Saturday, she realized she had very little time to get ready for the party. She would prefer to make a cake from home, as it would be very expensive to buy a ready-made cake from outside. She went to the kitchen and opened the fridge. Except for a few fruits, unfinished ice cream, some peanuts and walnuts, none of the ingredients were complete. When she called her aunt, who loves to cook, she wanted to get her opinion, but she couldn't find what she was hoping for. She chatted with her roommate, wanted some ideas from him, but was unsatisfied. She opened site "our product" and chose all the materials she has. Deep in the kitchen, he found a few more perishable items. She got permission from her roommate to use these materials. She read the recipes she chose from the site. She liked the approaches of each of them, and she preferred to make an experimental cake from all the recipes she liked from the site. A cake recipe was perfect and everyone at the party enjoyed it. She added these three recipes she saw on the site to the "my recipes" tab for later use.

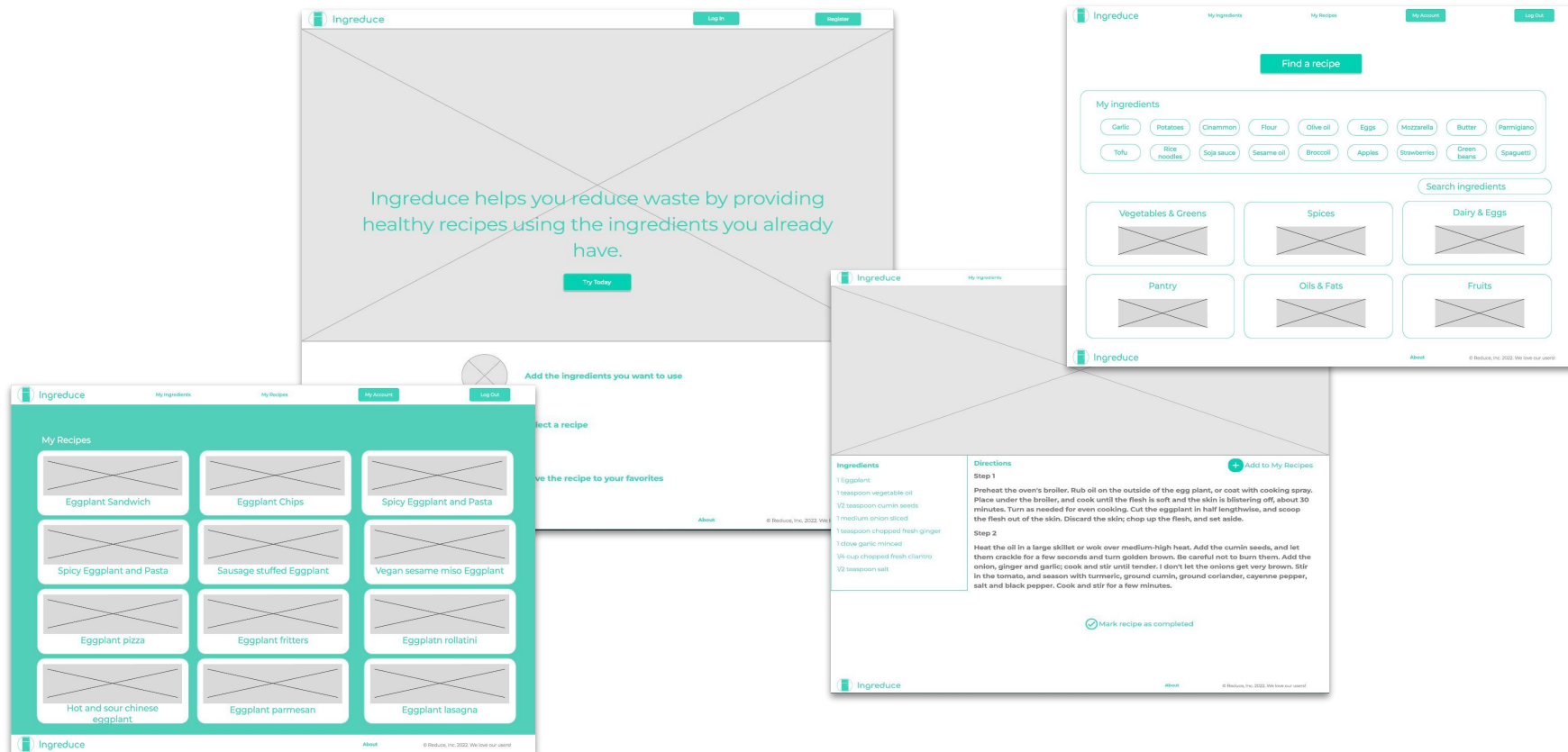|		
♂ Male	32	years
○ Berlin, Germany		
Single		
Customer Service Agent		

Larissa picked up her children from school and came home. After taking care of them in their room, she opened the fridge to cook dinner. She asked what food their children would like to eat. Besides what the kids wanted, there were a few other healthy meal options for them, but there are not enough ingredients. For these, she texted her husband the shopping list. Within a few hours, when her husband came home with bags, they realized that several items of the list were missing. It was too late to reorder, and everyone in the house was pretty hungry. That's why they launched the "our product" website. She researched a few possible recipes to make the dish the kids wanted. She chose one of the recipes she found. In addition, she found another recipe that included a few perishable vegetables. Together with her husband, they completed the meal in a short time, although the ingredients were missing.
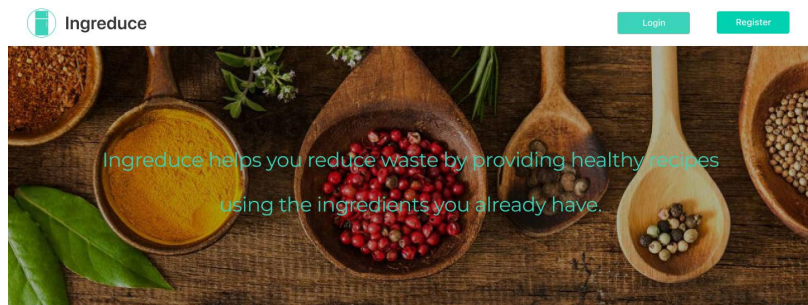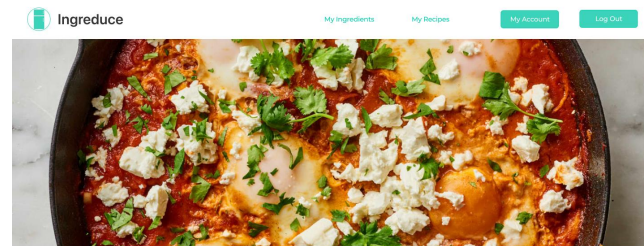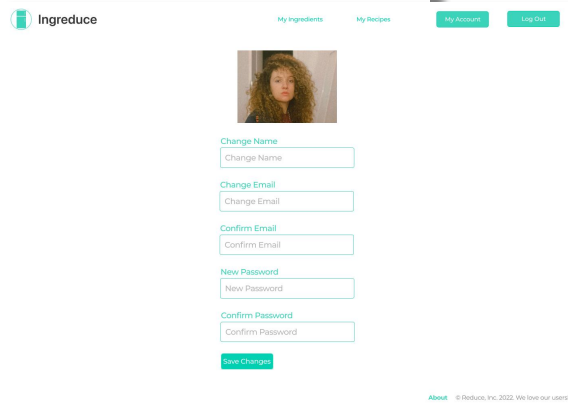
Wireframes

Ingreduce

User Tests

Natalia

Demographics	Behavior
24 yo Woman Single Designer	Cooks a few times a month Beginner cook

Needs	Pain Points
Intuitive recipe website Easy recipes	Website should work on mobile Recipes on websites tend to be too advanced

Adam

Demographics	Behavior
45 yo Man Single Photographer	Vegetarian Cooks several times a week Expert cook

Needs	Pain Points
Recipes should be interesting and vegetarian friendly	He doesn't want boring recipes and cooks outside traditional european recipes.

Adriana

Demographics	Behavior
36 yo Woman Married 1 child Family business	Cooks very healthy. Cooks daily for her toddler. Intermediate cook

Needs	Pain Points
Fast and easy recipes. Healthy recipes	Doesn't have time to cook elaborate meals. Doesn't have time to shop for groceries often.

Registration

Login

Adding Ingredients

Searching/Finding Recipes

Observations

Great that we can register via Google or Social Media

Do we need to register? why?

Looks weird on mobile

Observations

Easy login

Observations

There are some types on this page

Observations

Seems intuitive

Components

Ingreduce   My Ingredients   My Recipes   Log in   **Register**

Header

Login

Email

Email

Password

Password

Forgot password?

Login

OR

G Login with Google

Login with Facebook

Login with Twitter

Not a member yet? Register here.

Login Form V2

Login

Email

Email

Password

Password

Forgot password?

Login

Or Login Using:

Facebook   Google

Not a member yet? Register here.

Login Form V1

Registration Form

Register to save ingredients and recipes to your Ingreduce dashboard.

Username

Username

Email

Email

Password

Password

Confirm Password

Confirm Password

☐ I agree with the Terms & Conditions.

Register

Registration Form

Search

🔍 search ingredient

My Groceries

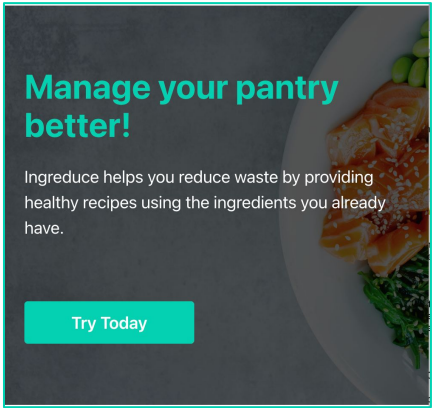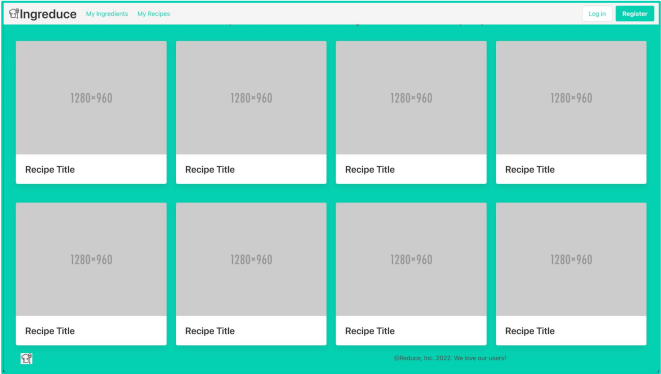butter ⊗

wheat flour ⊗

Ingredient Search Bar
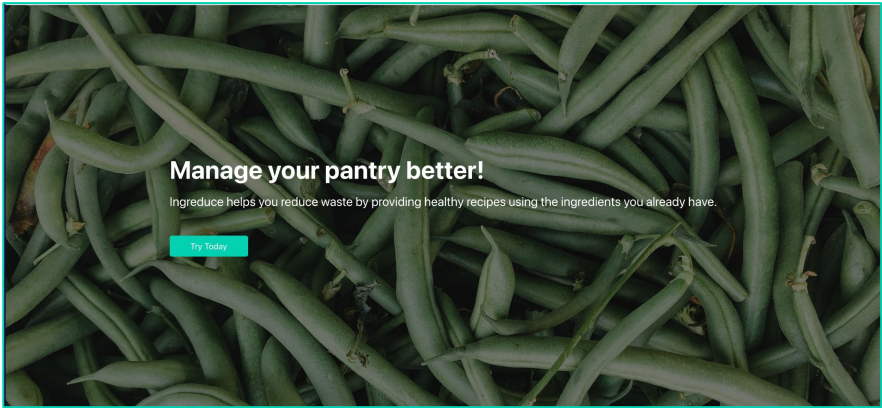
Hero Image V1

Hero Image V2

Recipe Overview

MongoDB.

HEROKU

Goodbye Firebase, hello ME(R)N

BETTER LATE...

repeatedly encountered difficulties with the Firebase setup

➡ a late switch to MongoDB Atlas, Node.js and Express.js to run a traditional backend

➡ full functionality locally, started deploying to Heroku

ingreduce-shard-00-00.nw3rh.mongodb.net:27017

Opcounters

Connections

Network

Activity Feed

bl.st22.ingredient.tracker@gmail.com: Deployed 3be58e48
Today at 6:49 PM · v37

bl.st22.ingredient.tracker@gmail.com: Build succeeded
Today at 6:47 PM · View build log

bl.st22.ingredient.tracker@gmail.com: Deployed b3939c21
Today at 6:42 PM · v36 · Roll back to here

bl.st22.ingredient.tracker@gmail.com: Build succeeded
Today at 6:39 PM · View build log

bl.st22.ingredient.tracker@gmail.com: Deployed 60d81634
Today at 6:30 PM · v35 · Roll back to here

bl.st22.ingredient.tracker@gmail.com: Build succeeded
Today at 6:27 PM · View build log

bl.st22.ingredient.tracker@gmail.com: Deployed b9261a97
Today at 2:46 PM · v34 · Roll back to here

bl.st22.ingredient.tracker@gmail.com: Build succeeded
Today at 2:44 PM · View build log

bl.st22.ingredient.tracker@gmail.com: Deployed 5c30a98e
Today at 2:26 PM · v33 · Roll back to here

bl.st22.ingredient.tracker@gmail.com: Build succeeded
Today at 2:24 PM · View build log

bl.st22.ingredient.tracker@gmail.com: Deployed c04d1522
Today at 2:19 PM · v32 · Roll back to here

My tryst with Firebase lasted for almost a month and a half

Recipe dataset

Contains the following information for each recipe:

Recipe URL,

Recipe Name,

Description,

Ingredients,

Instructions,

Servings / Yield,

Prep/Cook/
Total times,

Image urls,

Nutritional information.

Beef Lo Mein

allrecipes

I couldn't find a good lo mein recipe on here, so I'm posting mine. I made it this week and my roommate and I agreed that it was possibly the best that we've ever had.

By Rachel Swiger-Imhoff

Save
Pin
Print
Share

Prep: 15 mins
Cook: 25 mins
Total: 40 mins
Servings: 4
Yield: 4 servings

Nutrition Info

Adjust − 4 +

Original recipe yields 4 servings

Ingredients

☐ 1 (8 ounce) package spaghetti

☐ 1 teaspoon dark sesame oil

Directions

✓ Step 1

Bring a large pot of lightly salted water to a boil. Cook spaghetti in the boiling water until cooked through but firm to the bite, about 12 minutes; drain and transfer to a large bowl. Drizzle sesame oil over the spaghetti; toss to coat. Place a plate atop the

Requests   Beautifulsoup   pandas   python

Recommender system

Based on topic modelling with the
Latent Dirichlet Allocation and
cosine similarity.

Pork enchiladas

Cola-Brined Chicken Wings Recipe

Slow Cooker Shredded Beef Sandwiches
Recipe

Kay Kay's Pulled Pork Recipe

Grilled Sweet and Sour Chicken Thighs

Grilled Buffalo Chicken Thighs with Blue
Cheese Slaw

...

GENSIM
topic modelling for humans

NLTK

Ingreduce

Thank you! 🥨

Special Thanks to Christoph, Basan, Soma, Stephanie, Juliana, Zubin, Alba, Mihailo...
and all the other TechLabs volunteers!

Celine Zhou, Alpgiray, Elsy Aranda, Aljoscha Beiers, Catarina Louza & Sarita Schenkermayr.
Mentor: Christoph Dansard
Final Presentation, July 21st // TechLabs Berlin, ST-22