

Starting Pitch - Student

Problem

- Living on campus sometimes gives a limited selection of ingredients
- Sometimes, on campus dining doesn't have certain dietary restrictions
- What happens if your dorm doesn't have a stove?



User Stories

John

- Only has a mini-fridge in his dorm
- Cannot store many perishable ingredients to cook with
- Needs simple recipes with few ingredients

Alice

- Student athlete & high courseload
- Does not have much time to go to dining halls but needs regular food intake
- Needs to be able to find quick recipes

Jane

- Follows a vegan diet, closest dining halls have poor selection of choices for vegans
- Dedicated vegan dining hall is too far to consistently get food from
- Needs nutritious options that can be made in dorm kitchen

Solution

- Page to view database recipes
- Advanced search
- Profiles
- Recommended page
- Potential price calculator based on ingredients map (stretch goal)
- Login functionality to store preferences, recommendations (super stretch goal)

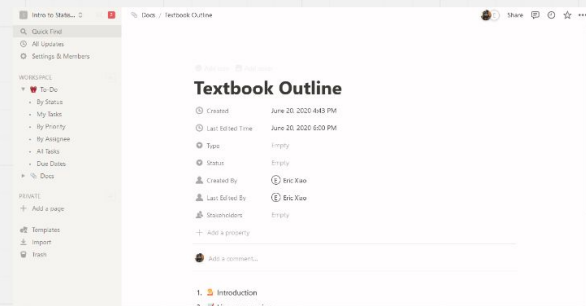
Research

Most recipe websites were formatted like blogs.

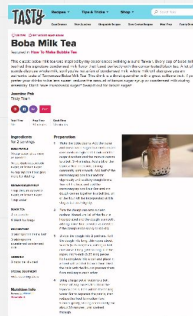
We wanted a more efficient and information dense website.

Followed design cues from note taking apps and content recommendation systems.

Notion - personal note app



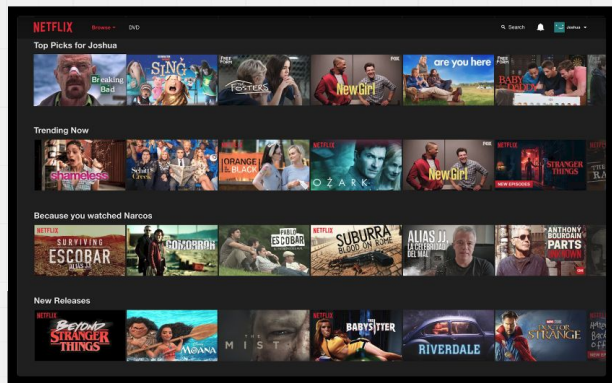
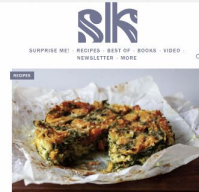
<https://tasty.co/recipe/boba-milk-tea>



Very compact, information dense

<https://smittenkitchen.com/>

More blog-style than other recipe websites
Surprise me! feature supplies a random recipe
Good search function, including by ingredients and number of ingredients, seems to be more sophisticated than keyword searching

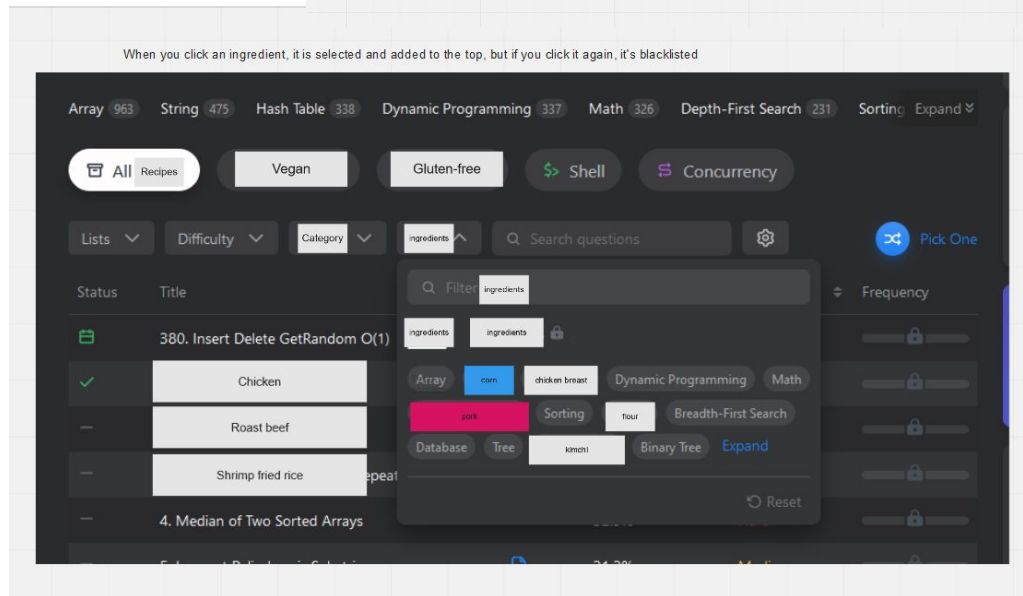
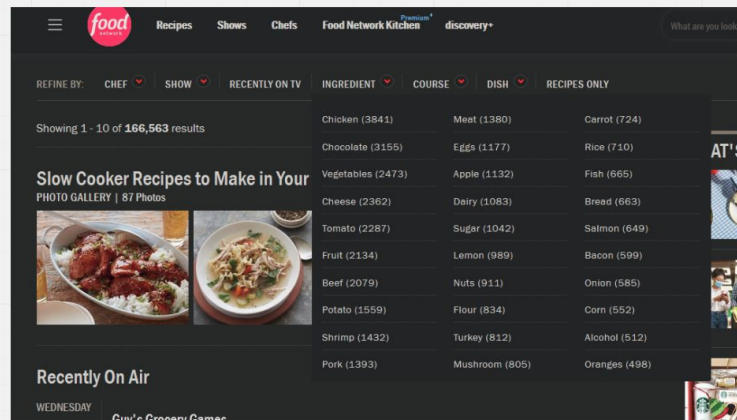


Efficient and fast recommender systems

Research

Most search functions for recipe websites were limited or hard to create specific queries.

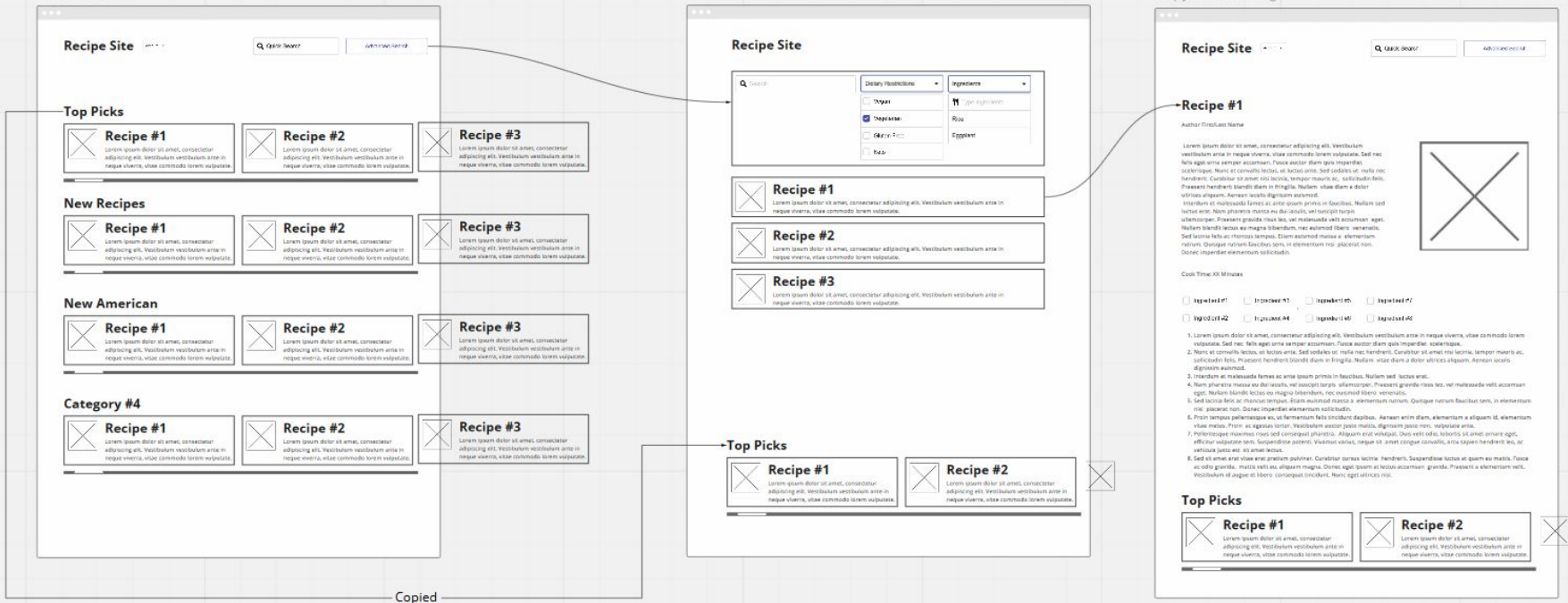
Better solutions were found in other domains (leetcode was a main inspiration) for tags and other search specifications.



Front Page

Search Function

Copy of Front Page



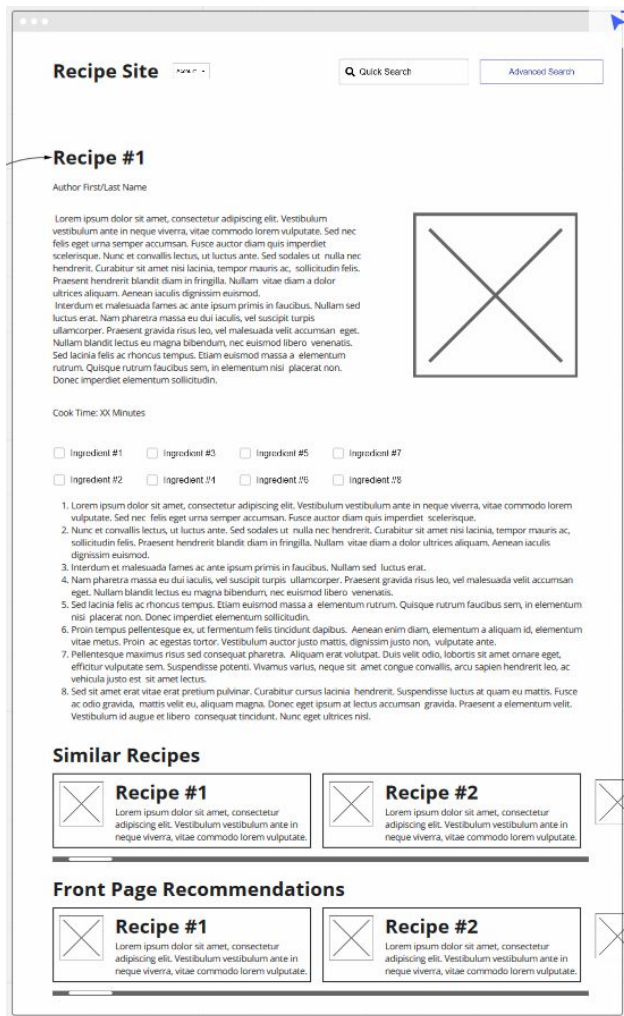
Page to view database recipes

Some sort of query to page

Made such that we can add new recipes to the database and automatically generate new pages

Has recommendations at the bottom

Has similar recipes at the bottom




Advanced search

Robust searching tool (thanks leetcode)

Search by ingredient (whitelist/blacklist specific items, use database flags)

Search by food name (string similarity calculator or preprocessed index)

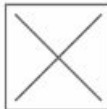
Dietary/Appliance Restriction
(vegan/gluten free/no stove)

<input type="text" value="Search"/>	<div>Dietary Restrictions ▾</div> <div><input type="checkbox"/> Vegan</div> <div><input checked="" type="checkbox"/> Vegetarian</div> <div><input type="checkbox"/> Gluten Free</div> <div><input type="checkbox"/> Keto</div>	<div>Ingredients ▾</div> <div> Type ingredients</div> <div>Rice</div> <div>Eggplant</div>
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Recipe #1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum vestibulum ante in neque viverra, vitae commodo lorem vulputate.



Recipe #2

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum vestibulum ante in neque viverra, vitae commodo lorem vulputate.



Recipe #3

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum vestibulum ante in neque viverra, vitae commodo lorem vulputate.

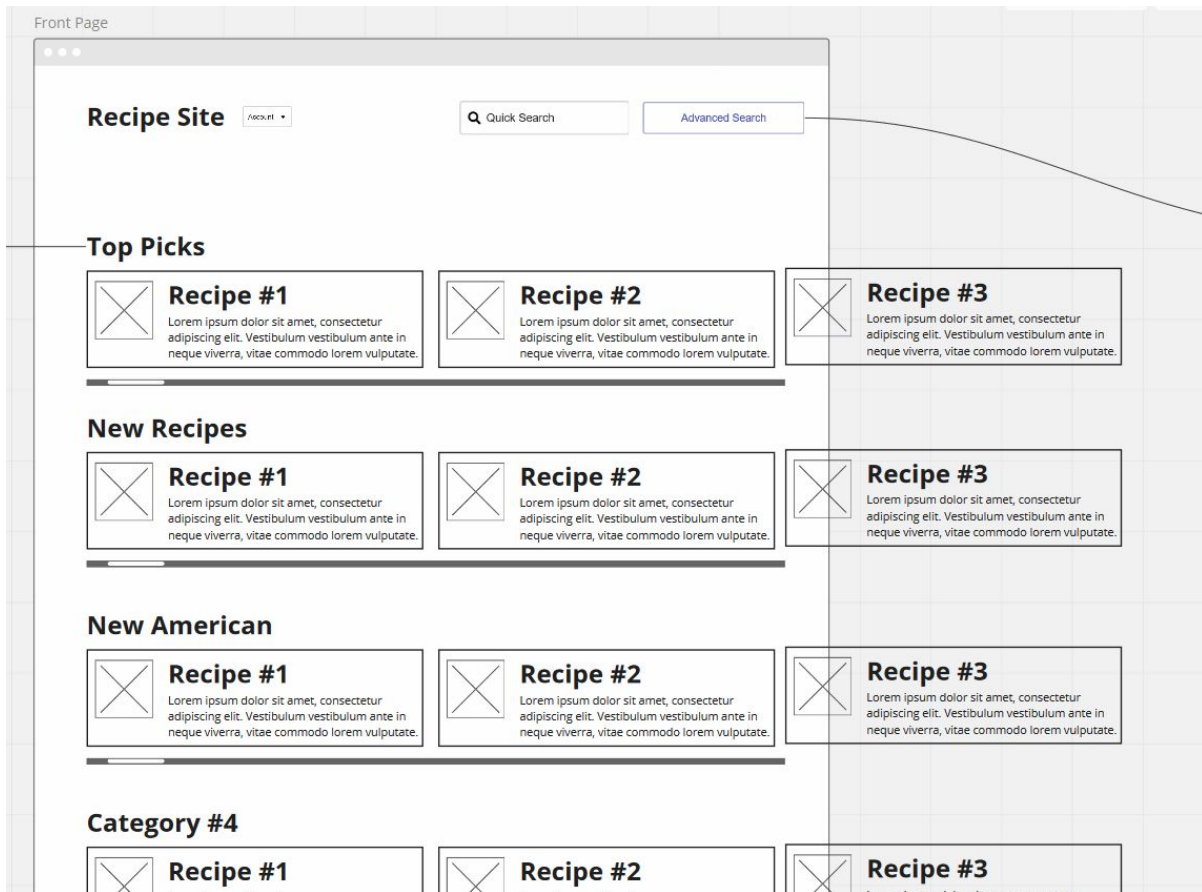
Front Page

Similar to netflix recommendation system

Search at the top, as well as link to advanced search

If advanced search is our main feature, we might put it at the top of our front page

Login is tentative (first to be cut from feature list)




Profiles

Able to create, update, add, remove

Changes recommendations in the front page

Profile Menu



Profile #1 ▼

Profile #2

New Profile

Dietary Restrictions

☐ Vegan

☒ Vegetarian

☐ Gluten Free

☐ Keto

Option #2

☐ Vegan

☒ Vegetarian

☐ Gluten Free

☐ Keto

Data

Working on dataset query and search

Many resources for scraping recipes, not all websites have all these query requirements, so we'll have to think of something that we can do to fill in the gaps (or leave them be and adjust how search works)

Web Scraping

Dataset Query Requirements

- Recipe Name
- Author
- Description
- Recipe Text
- Ingredients
- Tags
 - Vegan, vegetarian, gluten free
- Required Appliances
 - Stove, cast iron
- Time to complete

Rabbit holes and No gos

- Login is a whole can of worms that has yet to be fully fleshed out
 - First to be cut due to time constraints
- Price calculator would essentially be a map of 500+ items and prices, mostly grunt work and likely to not be useful
 - Second item to be cut due to time constraints
- Recipe generation was something we discussed but is a no go due to complexity

Summary

Problem: Students have many problems with resources for cooking

Solution: Recipe site with advanced search

Appetite:

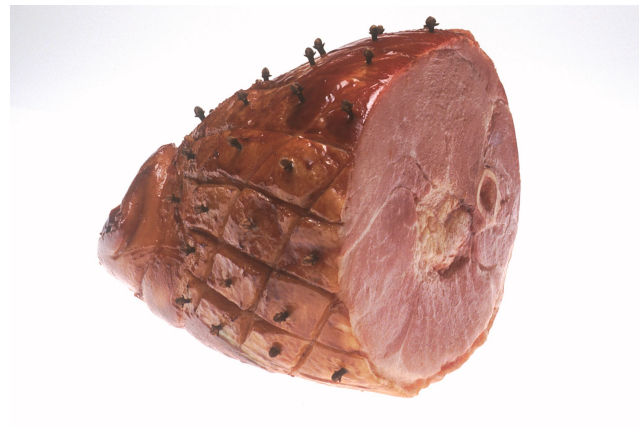
1 week: some research on APIs, initial HTML work

2 weeks: main pages roughly built, API finalized

3 weeks: make search & start integrating w/ frontend

4 weeks: CRUD app complete, cleanup

(can use extra week for cleanup)



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