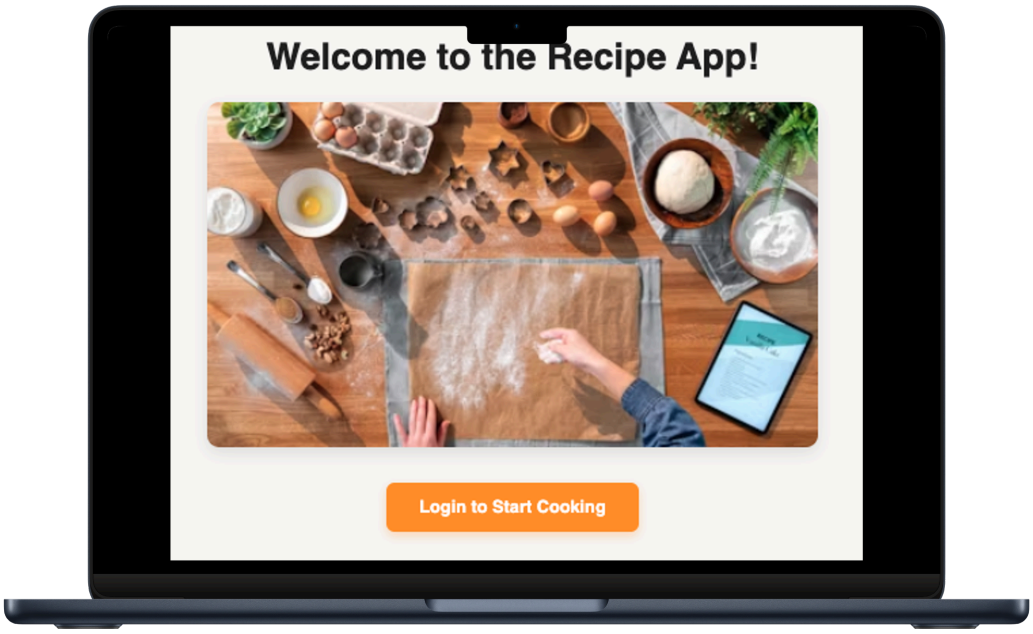
Recipe App Case Study



Executive Summary

The Recipe App was created to make home cooking easier, one simple recipe search at a time.

Introduction

The Recipe App is a website I built that allows users to easily create, find, and manage their favorite recipes. Whether you want to search for a quick meal idea or add your own family recipe, the app makes it easy.

The Problem

There are a lot of recipe apps out there that are filled with advertisements and pop ups that make the user experience challenging. I wanted to solve that problem by creating a clean and easy-to-use website where users could find recipes based on

ingredients they already had, share their own recipes, and even see fun charts about their cooking all without the nuances of unwanted distractions.

My Role

This is a website that I created by myself as my final project of my fullstack web development program. I built and designed the website, its layout, features, and tested everything thoroughly prior to launching it online.

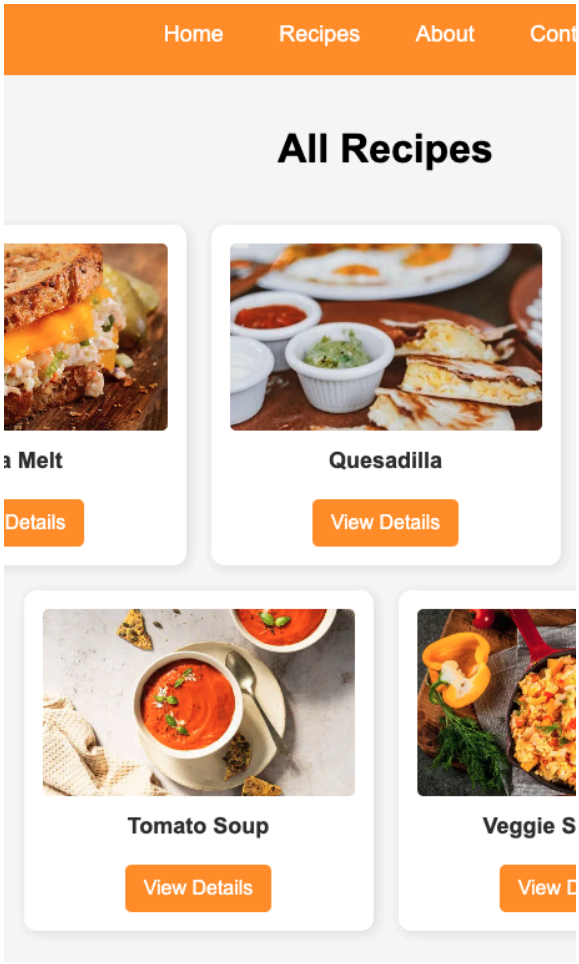
Timeline

The project took approximately 4 weeks to complete from start to finish.

Tools and Skills Used

- Python and Django: Python is a programming language that helps make websites work behind the scenes, and Django is a tool that makes it faster and easier to build websites with Python.
- HTML, CSS, and JavaScript: These are the building blocks that control how the website looks and feels.
- SQLite and PostgreSQL: These are types of databases — places where the app stores recipe information. I used SQLite while building the app and PostgreSQL when putting it online.
- Heroku: A platform that makes it easy to launch websites and apps live on the internet.
- AWS S3: A service from Amazon that safely stores files online. I used it to hold images that users upload with their recipes.

Skills I Practiced: Full-stack development (building the front and back of the app), database design, user login systems, data charts, and putting the app online for everyone to use.



Key findings

Key Finding 1:

Creating a clean, ad-free layout made it easier and faster for users to find and manage recipes.

Key Finding 2:

Having the ability to search by ingredient or recipe name helps users find recipes that they may already have ingredients for.

Key Finding 3:

Adding simple data charts gives users a fun way to learn more about recipe cooking times, ingredient count, and difficulty levels.

Solutions

Solution 1

Designed a simple, distraction free homepage and layout to create a better user experience.

Solution 2

Built a flexible search feature that allowed users to search recipes by full or partial ingredient names.

Solution 3

Created simple charts to display cooking time, difficulty, and ingredient trends without overwhelming users.

Impact

Impact 1

Created a smoother, faster, and more enjoyable user experience compared to traditional recipe websites.

Impact 2

Made it easier for users to find recipes they could actually make based on ingredients they already had.

Impact 3

Provided users with fun and useful insights about their recipes, helping them engage more with the app.

Case Study Introduction

Background

The Recipe App is a full-stack web application that helps users easily create, find, and manage their favorite recipes.

I built this app as part of my final project for my fullstack web development program to demonstrate my ability to plan, design, build, and launch a fully functional website.

The goal was to create a clean, easy-to-use website where users could find recipes based on ingredients they already had, share their own recipes, and view simple charts about their recipes, ingredients, and cooking difficulty. Unlike many cluttered, ad-heavy recipe websites, this app focuses on providing a smooth and enjoyable user experience.

Objectives

Objective 1

Build a clean, user-friendly app that allows users to create, view, and manage recipes.

Objective 2

Allow users to search for recipes by ingredient or name.

Objective 3

Use simple charts to help users explore recipe data.

Problem

Many recipe websites are cluttered with ads, pop-ups, and distractions, making it hard for users to quickly find, see, or save recipes.

The Recipe App was created to solve this problem by offering a distraction-free platform where users could easily search for recipes, add their own recipes, and view meaningful data about their recipes.

Recommendations

Recommendation 1

Create a simple, clean homepage and layout to remove distractions.

Recommendation 2

Add a flexible search feature that allows users to search by ingredients they already have.

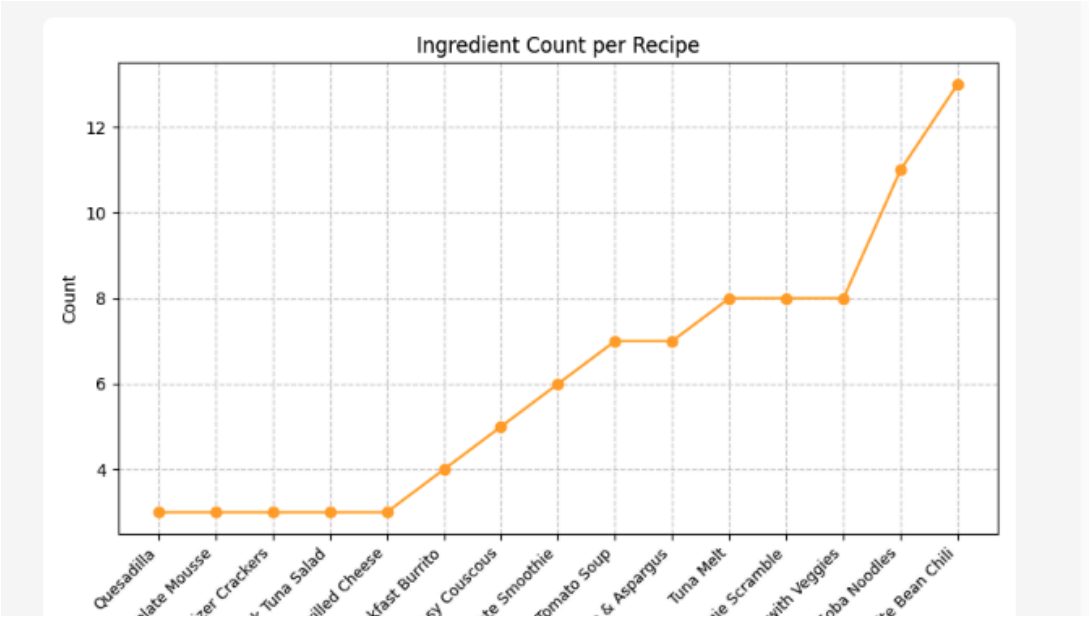
Recommendation 3

Use fun and helpful charts to show users patterns in their cooking recipes.

Impact of recommendations

SOLUTION	EFFECTIVENESS	IMPACT	NOTES
Create a simple, clean homepage and layout to remove noise.	Highly effective	Created a smoother, faster user experience with no unnecessary distractions.	Users can now focus on finding and saving recipes easily.
Add a flexible search feature that allows users to search by ingredients they already have.	Highly effective	Made searching faster and more intuitive.	Users can find recipes even if they only know one or two ingredients.
Use fun and helpful charts to show users patterns in their cooking recipes.	Marginally effective	Added fun and engagement, but could be expanded in future versions.	Charts were helpful, but more data points could make them even better.

Analysis



Research methods

- Personal user testing (testing the app on desktop and mobile)
- Feedback from peers and mentors on app functionality and design
- Research into common frustrations with existing recipe apps

Approaches used

- User-centered design
- Full-stack development practices (using Django for backend and responsive HTML/CSS for frontend)
- Deployment best practices (Heroku and AWS S3 for media files)

Relevant facts and information

- Project Duration: 4 weeks
- Technologies Used: Python, Django, HTML, CSS, JavaScript, SQLite, PostgreSQL, Heroku, AWS S3
- Final Deliverables: Live website with user authentication, recipe creation and search, and recipe data visualization

Challenges

While building the Recipe App, one of the main challenges I faced was deploying the app to Heroku. At first, I encountered several issues related to setting environment variables, configuring the database, and making sure that media files (like recipe images) were stored properly.

Heroku does not store uploaded files permanently, so I had to find a solution that would allow user-uploaded recipe images to persist. I solved this by connecting the app to AWS S3, a cloud storage service, and configuring it to safely store and serve the images.

It took some trial and error to set up the connection correctly and make sure that images uploaded by users would display properly across different pages. This experience taught me a lot about real-world deployment challenges and how to plan ahead for hosting both the app and its media files.

Conclusion

Summary of findings

The Recipe App successfully met its goal of providing a clean, user-friendly space for recipe management. The simple design, flexible search feature, and data visualization tools all worked together to solve the original problem of cluttered and overwhelming recipe websites.

Implications of the study

The app created a better experience for users looking for recipes without distractions. It showed that even a simple, carefully designed app can solve real user frustrations and create value.

> **“This project strengthened my full-stack skills and reminded me that the best apps are the ones that feel easy, natural, and welcoming to users.”**