Project Proposal for CSCD 350 Spring 2024

BiteShare

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Team_7: Team_404

Submitted By

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Motivation

When it comes to looking for recipes, or cooking in general, we found that a lot of online resources just don't cut it. They seem to either go for the textbook, boring and straightforward explanations, or they have to tell you all about their summer vacation. The idea for this website came from the desire to improve the online cooking experience, and to help build a community around the idea.

The idea of BiteShare is to have a place where the users have the opportunity to moderate the site itself. Giving the users the ability to approve or disapprove of the recipes creates a sort of self mediation. The best recipes come up first, and the rest fall behind. Allowing for comments and other ways to communicate with each other could create a large community of people who are passionate about the recipes they create.

This may not entirely solve the issue, but giving users who feel the problem a place to go, one which fits their needs more, and where they feel welcome and like they belong, will be beneficial. It's an open market, a vacuum, one that when filled, could find itself to be a much larger group of people than originally thought.

What problem are you solving, or what question are you answering?

We are solving the problem of an infinite number of poorly curated recipe websites. The current iteration of recipe databases is an individual's personal food blog or a corporate stock standard how to site. What often happens on the personal blog's is that there is a large amount of completely unnecessary information that does not aid the user in creating appealing meals. The problem with corporate site's is the recipes they end up posting are basic, bland, boring recipes that need a significant number of revisions to become anything resembling a unique tasty meal. We set out to solve this by having user curated recipes, with user added adaptations.
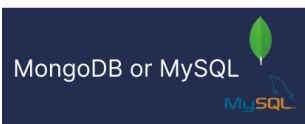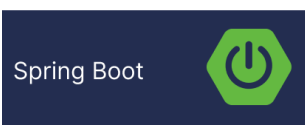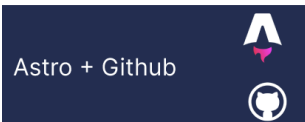
Approach

Many culinary enthusiasts and home cooks often find themselves repeating the same recipes, limited by a lack of access to a diverse culinary database. The intended users of our platform are these individuals who seek to expand their cooking repertoire and explore different cultural cuisines. A crowd-sourced recipe website would address these challenges by providing a user-driven space where people can share, discover, and collaborate on recipes from around the world. This solution would not only make it easier for those with dietary needs to find suitable recipes but also foster a vibrant community of food lovers, enhancing creativity and cultural exchange in the kitchen.

High-Level Approach

Our project begins with initial ideation and design using Pen and Paper, swiftly moving to Figma for the creation of detailed, interactive UI/UX prototypes that focus on ease of use and engaging interfaces. The development process employs Astro to construct a performant and SEO-friendly front end, while Spring Boot will be used to develop a robust back-end framework. Depending on our needs for data structure and scalability, we will choose between MySQL and MongoDB for our database management. The deployment of static site components will be handled through Netlify, which offers streamlined hosting and scaling solutions, ensuring seamless integration with our dynamic backend services.

Key Differentiators

What sets our project apart is the integration of social media features directly into the recipe sharing experience, which not only enhances user engagement but also naturally promotes quality content through community interactions. Unlike many existing platforms, our approach is highly interactive from the start, using a modern tech stack that ensures the platform is not only fast and responsive but also scalable and secure. This technological

foundation enables us to provide a tailored experience whether our data needs are highly structured or more document-oriented, making our service exceptionally user-friendly.

Limitations

The primary limitation of our approach is its reliance on modern technology, which necessitates that our users have access to up-to-date browsers and hardware to fully benefit from all the site's features. Additionally, the flexibility of choosing between a SQL or NoSQL database could complicate the backend architecture, requiring careful management to maintain efficiency. Furthermore, while Netlify is excellent for deploying static assets, it may present challenges in scaling dynamic content as user interaction and load increase, potentially impacting performance during peak traffic times.

Challenges and Risks

The biggest challenge will be the fact that none of us have fully completed a project of this scale. We have a lot of interconnecting technologies to learn about which always has the potential to be a roadblock. We plan to mitigate this by having individuals focus on specific portions of the project so that we can all come together and share what we have learned and how to connect our tech stack.

Communication and collaborating closely will help mitigate this. Since we are all learning this together, the shared struggle within our team will likely push all of us to find the answers we need. Learning under fire is always more stressful, but may lead to a deeper understanding. We all have individual talents and skills, and coordinating correctly to fully utilize these will lead to both great success, and an easier development cycle.

Hours Worked - 5