

Capstone 1 Proposal: *Recipe App* (API = Spoonacular API)

1. Project Goal:

The goal of ***Recipe App*** is to create a comprehensive recipe app that enables users to discover, save, and cook a wide range of recipes. This app aims to address the challenges people face in finding recipes that suit their dietary preferences and nutritional needs, while also offering features for meal planning and user interaction.

2. User Demographics:

The target demographic for the app includes individuals of various age groups who are interested in cooking, exploring new recipes, and maintaining a healthy lifestyle. This app will cater to users with different dietary preferences, such as vegetarians, vegans, and those with specific allergies or dietary restrictions.

3. Data Usage:

The app will utilize the Spoonacular API to search for recipes, retrieve detailed information, and provide nutritional data. The desired data includes recipe names, images, ingredient lists, step-by-step instructions, and nutritional information (calories, carbs, proteins, vitamins, etc.). The API will be used to fetch real-time recipe data, enhancing the variety and up-to-date content of the app.

4. Project Approach:

a. Database Schema:

The database will consist of tables to store user information, saved recipes, user-generated recipes, **subject to moderation**, and comments on recipes. Relationships between users, recipes, and comments will be established for data integrity.

b. API Integration Issues:

Possible issues include API rate limits and handling API errors gracefully. Additionally, ensuring that the API data is effectively mapped to the database schema could be a challenge.

c. Sensitive Information:

Sensitive user information, such as passwords, will be stored securely using encryption. Proper authentication and authorization mechanisms will be implemented to ensure user data remains private.

d. App Functionality:

The app will provide features such as recipe search, detailed recipe information, nutritional information, recipe filtering and sorting, meal planning, user authentication, favorite recipes, recipe recommendations, cooking mode, user-generated recipes and **Facebook sharing**;

Step 1:

Facebook Developer Setup: I'm going to set up a developer account on Facebook. It's pretty straightforward –Just on their developer site sign up.

Step 2:

Creating My Facebook App: Once I'm in, I'm going to create a Facebook app for my recipe project. They'll give me an App ID that I'll need later.

Step 3:

Adding Facebook SDK: To make things work, I'll include a piece of code in my app's HTML. This code, called the Facebook JavaScript SDK, helps connect my app with Facebook's tools.

Step 4:

Sharing Button: Okay, here's where the fun part comes in. I'll add a button to my recipe detail page. It's going to be all like "Share on Facebook." When users click it, I'm going to make sure something cool happens.

Step 5:

Sharing Function: When someone clicks the "Share on Facebook" button, I'll make this special function run. This function will open a box where users can share the recipe details on their Facebook profiles.

Step 6:

Recipe Details: Before users can share, I'll gather the recipe's name, URL, and a nice image of the dish. These are the things that'll show up when they share the recipe.

Step 7:

Making the Magic Happen: So, when someone hits that sharing button, my app will use the gathered recipe info to make a cool-looking Facebook share dialog box pop up. It'll show the recipe name, a little quote about it, and the image.

Step 9:

Getting Approved: Before I can roll this out to everyone, Facebook might want to review my app. They just want to make sure everything's good to go and I'm not doing anything fishy.

Step 10:

Final Touches: I'll make sure the whole sharing process is super user-friendly, and I might even consider adding similar sharing features for other social media platforms too.

e. User Flow:

Users will start by searching for recipes using keywords. They can then view detailed recipe information, nutritional data, and cooking instructions. The app will allow users to

save recipes, plan meals, and share recipes on social media. User-generated recipes will go through a moderation process before being published.

- **Setting Up the Database:** I'm going to create this special table in the app's database where all the user-submitted recipes will go. I'll have fields for stuff like the recipe name, ingredients, and how to cook it. Plus, I'll add a little status tag to show if a recipe is "pending," "approved," or "rejected."

- **The Recipe Submission Form:** That's where they'll share all the cooking details. When they hit submit, I'll make sure their recipe lands in that database table with a "pending" status.

- **Moderator's Hangout:** I'm thinking of creating a secret spot just for us moderators. It's going to be like a backstage area where we can check out all the pending recipes and decide what to do with them.

- **Checking Out the Recipes:** So, when we go into that backstage area, we can take a good look at the submitted recipes. We'll be checking if everything makes sense – the recipe instructions, the ingredients, all that cooking stuff. Then we can choose to give it a thumbs-up or a thumbs-down.

- If we like a recipe, we'll mark it as "approved" in the database. That means everyone can see it on the app. But if it's not quite right, we can also say "no thanks" and mark it as "rejected."

- Whichever way we go, I'll make sure the user knows. If their recipe gets approved, they'll see it in the app. But if not, we'll tell them why and maybe give them a tip to make it better next time.

- **Quick Heads-Up:** Also, I'm thinking of sending a message to the user when their recipe gets approved or rejected. Just so they're in the loop about what's happening.

- I'll mention that it might take a bit to get the recipes reviewed. Like, maybe a few hours or even a couple of days. I want them to know we're taking our time to make sure everything's good.

- **Admin Control Center:** And to make life easier for the moderator, I'll create this cool dashboard where we can see all the pending recipes, filter them, and decide what to do.

f. Site Features Beyond CRUD:

The app goes beyond CRUD by incorporating features such as personalized recipe recommendations, social interaction through comments, and a cooking mode for a user-friendly cooking experience.

5. Stretch Goals:

- Implement a feature that suggests recipe substitutions based on ingredient availability.
- Integrate a rating and review system for recipes.
- Provide integration with third-party grocery delivery services for easy ingredient procurement.
- Develop a mobile app version of the web app for increased accessibility.