Situation Target Plan

1. Situation

The situation I’m hoping to address with this project is the manual entering and retrieval of recipe data from my NoSQL database. Currently, I have been manually entering recipes into my database and wishing the process could be quicker. When looking for a recipe I usually cook based on ingredients I currently have or a specific category. Instead of querying the data and looking at the raw data I wanted filters that would streamline this process. Right now, entering new recipes is time consuming, finding and altering recipes feels like a chore, and querying the data is a bit of an eyesore when trying to follow steps in a recipe.

1. Target

I will be focused on creating a full stack application that’s intuitive, interactive, and user-friendly. It will allow users to quickly alter their database and retrieve information while cooking up a meal. Users will be able to directly query from their own database without having to use a programming language. This database will include information like the title of the recipe, the name, quantity, unit, and style of the ingredients, the instructions, categories, prep time, cook time, servings, author, and date added.

1. Plan

|  |  |
| --- | --- |
| What | By When |
| Phase 1: Setup and Preparation   * Install and set up Visual Studio, Git, SQL Server, and .NET Core SDK. Create the GitHub repository for the project. * Create a new ASP.NET Core project in Visual Studio. * Design the database schema and set up the database in SQL Server. | Week 1 |
| Phase 2: Backend Development   * Design the database schema and set up the database in SQL Server. * Create models for `user` and `Recipe`. * Create controllers for user authentication and recipe management. * Implement CRUD operations for recipes. * Set up ASP.NET Core identity for user authentication. * Create authentication controllers and views (login, registration, profile). | Week 2 - Week 3 |
| Phase 3: Frontend Development   * Set up frontend framework using Razor Pages or MVC Views. * Develop views for user authentication (login, registration, profile). * Implement forms for recipe input. * Implement recipe search functionality. * Create views for displaying recipes. * Integrate styling and responsive design. | Week 4 – Week 5 |
| Phase 4: Dashboard and Data Visualization   * Design the dashboard layout. * Integrate data visualizations using Chart.js or D3.js. * Test and refine data visualizations. | Week 6 |
| Phase 5: Testing and Debugging   * Conduct unit testing for backend components. * Perform integration testing for frontend and backend. * Conduct user acceptance testing (UAT). * Fix any identified bugs and ensure the application runs smoothly. | Week 7 |
| Phase 6: Deployment   * Choose a cloud service provider. * Set up the deployment environment. * Deploy the application. * Perform post-deployment testing and ensure the application is accessible online. | Week 8 |
| Phase 7: Documentation and Final Review   * Write documentation for the code and application features. * Create user manuals/guide if needed. * Conduct a final review of the project. * Prepare a project presentation and integrate it into portfolio website. | Week 9 |