Project Plan

Mobile Cooking Companion

Group 6

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1. INTRODUCTION

Our project is the Mobile Cooking Companion. It is an Android mobile app that has the capability of allowing a user to log what ingredients they have, and then when they are trying to cook with a specific ingredient, it will show them recipes that they could make currently with what they have on hand.

2. BUSINESS NEEDS/REQUIREMENTS

The need that we have seen for the app is that home cooks who lack the experience to come up with recipes on the fly need help in terms of finding out how different ingredients work together. Home cooks also tend to have a decent amount of food waste by not utilizing ingredients in a timely manner or forgetting they have a specific ingredient that will expire soon.

3. PRODUCT OR SOLUTION OVERVIEW

The first version of the app at a base level will act as a recipe book. You can search by recipe name or ingredient name to find a recipe. The user has an option to input their pantry/ingredient list and there will be a filter to sort recipes by currently available ingredients. The user can also input their own recipes to store them in the app and have an easy way to see if they have everything they need for the recipe.

Further versions of the app (that eclipse the scope of this class) would be making the database shared between all users of the app, so that one person could have access to a recipe of someone else if they marked it as public when they submitted it. Another feature would be smart home inclusion, as that has become more and more prevalent in kitchens, and a shopping list functionality that would allow them to add ingredients the user would need to buy directly from the recipe they were interested in. Rating systems for different recipes would also be beneficial so as to help steer users to good recipes that more people have had success with.

4. MAJOR FEATURES

- Self-input into the pantry or recipe database
- Pantry database
- Recipe database
- Recipe Step-by-Step UI/Instructions

5. PROJECT PROCESS DESCRIPTION

- UI/Data Entry Design
- This activity would be about designing a UI and entry system that the user would be able to use to submit new recipes and ingredients into their respective databases. There would also be a need to sanitize the data so that later processes aren't bogged down by incorrect data types.
- Entry Criteria: None, step 1 of the process.
- Exit Criteria: Outputs a recipe that can be read by the recipe database or an ingredient that can be read by the pantry database.

- Database System Building
- This activity consists of creating the template that would read the user input and store it as a consistent, structured template that would be legible for the other parts of the system.
- Entry Criteria: UI/Data Entry Design Output
- Exit Criteria: An object that stores the appropriate data that is well named enough to input into their appropriate database

- Pantry Database Systems Building
- This activity consists of creating systems to add, modify, remove, update expiration dates and other things to ingredients in the database, using either lists or anything else that would make it efficient to search through the database.
- Entry Criteria: Database System Building output, objects that can be read and sorted based on contents
- Exit Criteria: Outputs objects that can be read that identify important data such as expiration dates, quantity, etc.

- Recipe Database Systems Building
- This activity consists of creating systems to add, modify, remove, add public/private labels and other things to recipes in the database, using either lists or anything else that would make it efficient to search through the database.
- Entry Criteria: Database System Building output, objects that can be read and sorted based on contents, Pantry Database information to update whether recipes are available to make
- Exit Criteria: Outputs objects that can be read that identify important data such as ingredients used, how long to make, availability based on ingredients, etc.

- Recipe Step by Step Instructions Design
- This activity consists of designing a UI that would guide people through the process of making a specific recipe. It would also be responsible for updating the pantry ingredients based on the quantities used in the recipe.
- Entry Criteria: Pantry and Recipe Database outputs, User-input system to select recipes to make
- Exit Criteria: Updated pantry information, appropriate modifications to pantry database

6. PROJECT SCHEDULE

Date (YYYY-MM-DD)	Milestone/ Event	Entry Deliverable & Criteria	Exit / Notes
2021-08-29	Team Assignments	Teams assigned	Completed
2021-09-19	Project Proposal	Inspection completed	Completed
2021-10-03	Project Plan Baselined	Inspection completed	In progress
2021-10-??	Research	Research for anything project-based	In progress
2021-10-24	Requirements Doc	Inspection not yet completed	Not yet started
2021-11-07	Design Doc	Inspection not yet completed	Not yet started
2021-11-21	Test Document	Inspection not yet completed	Not yet started
TBD	Implementation	Implementation not yet completed	Not yet started
TBD	Testing & Analysis	Testing not yet completed	Not yet started
TBD	Validation	Validation not yet completed	Not yet started
2021-12-06	Final Product	Final Product not yet delivered	Not yet delivered

*TBD = To-Be Determined

7. PROJECT WORK AND PRODUCT ESTIMATES

Effort hours: Total: about 45 hours.

This estimate is based on the project process description. There are 5 elements in the project process description. Assuming it will take about 2-3 hours to get the base code of each element. Another 2-3 hours to integrate each section and work out any bugs. Plus, another 3 hours just to fine tune the code to make it user friendly. This is a very rough estimate, but it will become more accurate as we are able to break down the project into simpler sections.

Lines of code: > 500.

Once again, based on the elements in the project process description. Each element will take roughly 100 lines of code to complete.

8. TEAM

Team member's name: Jeremy Ray
Role: Back-End Developer
Assists in creating the functions and logic which make up the core features of the app.
Critical skills: Experience with Java, detail-oriented

Team member's name: Thomas Roberts
Role: Back-End Developer
Helps create the back-end code for the application. Focuses on the general logic and processes. Will also work with front-end developers to make sure all UI processes are sustained.
Critical skills: Experience with C#, Team Player

Team member's name: Vitor Santos
Role: Design Lead
In charge of general design decisions for application and for desired aspects of application.

Front-End Development
Responsible for designing UI and providing hooks for the back-end to plug into
Critical skills: Collaboration, object-oriented programming experience, documenting code properly

Team member's name: Joshua Schoen
Role: Back–End Developer,
Helps in writing some of the general code for the app.
Critical skills: Have made several applications with C# and Java, in visual studios 2019, Thorough researcher and analyst.

Team member's name: Katlin Scott
Role: Team Lead, Flexible Developer
Coordinates group member's tasks, encourages active participation, and ensures timely submission of requirements and communication between group members
Able to fill in any role when needed
Critical skills: Collaboration**,** communication, decision-making, experience with Java, leadership, and organization

9. SCOPE AND LIMITATIONS

Our product focuses on making a mobile application to assist home cooks with inventory and recipes based on inventory availability. As a result, the features of allowing an editable pantry database and an editable recipe database are essential for the application and will most definitely be included in the final product. As for additional features, such as optional authorized user for adding more recipes, will more than likely not be included in the final product due to the non-necessity nature of the feature in the scope of a home cook as well as time constraints that may be put on the project.