Progress Report

- Increment 2 -

Group #8

1) **Team Members**

   John Fleming - JRF18 - JohnRyanFleming

   Mason Joy - MBJ19B - FloridamanProgram

   Alex Jeannite II-adj18-adj18

   Justin Nahorny - jrn18

2) **Project Title and Description**

   RecipeBuilder:The project will be to develop a web application and corresponding databases with the purpose of storing, listing and organizing various food recipes and their ingredients. It is intended to provide user functionality through tracking a collection of their favorite recipes and an inventory of what food they have on hand. Through this, users will also be able to discover recipes similar to those that they already enjoy or new recipes that satisfy certain dieting requirements like keto or vegan.

3) **Accomplishments and overall project status during this increment**

   Taking the baseline created in increment one, the primary goal of increment two has been to develop and solidify the functionality of our application. We wanted to take the rudimentary system from increment one and create what would be a complete application. Though this is distinguished from a finished product in terms of design, which is what we plan to focus on in increment three.

   Increment two mainly involved works in taking the simple sql tables and expanding them to encompass the scope initially intended by the proposal. A single recipe table has expanded to a recipe and pantry table which act as the direct user interface to input and view both the recipes within the databases and the ingredients the user has logged as having onhand. On Top of this, the basic steps and ingredients attributes have been expanded from being simple text blocks and now exist as individual tables that bind to a recipe based on the recipe ID stored across the three tables.

   The simple list view from increment one has been expanded to now only show the recipe names, which will act as links to individual pages to better show the data held in the table for any given recipe. The primary intent of making this change now is to develop the presentation and design of these pages in increment three.

4) **Challenges, changes in the plan and scope of the project and things that went wrong during this increment**

   Initially, we wanted to include more aspects of design to this increment and have increment three be a purely experimental phase. However, as time went on, we decided it would be more efficient to focus on the functional aspects and create a solid structure. The group does lack experience with design and using html to create an appearance beyond the generic template, so a good portion of the work expected in increment three will be exploring some basic design philosophies so that the application

can appear as a finished product that would actually be shown to a customer. This decision changed our initial interpretation of increment two and three, moving from a distinction of required and experimental features, to functional and design features. Essentially, increment two is fulfilling the utilitarian expectations of the original goal, while increment three will be a phase for adding features and design elements that would make the application presentable.
A surprising issue was working around autoincrement as he continued to use sqlite as we had yet to reach a point where a system rework would prove necessary to the quality of the project. Originally, we intended to track unique recipe ID values using the autoincrement keyword within the recipe table. However, we found this could incur necessary overhead and we decided it would be better to draw out the effectiveness of sql by avoiding the use of this particular feature and instead employing a simple workaround.

5) Team Member Contribution for this increment

Alex Jeannite

1. Contributed to discussion on future plans for the next increment, with a focus on programming around APIs to add functions like the ability to pull recipes from other websites and further exploring html to implement proper design elements into the interface.
2. Alex took lead on the R&D Document, acting as the final author for the document itself and determining how data, diagrams and decision on requirement priorities.
3. Alex contributed to discussion of what languages should be used, largely focusing on more advanced systems we plan to focus on in implementation 2 and 3 such as the use of API's for more advanced functions like using user location and pulling recipes from other online databases.
4. Alex focused on modifying the system for listing recipes to allow the creation of dynamic pages that can be accessed through the full list view and the current implementation of the individual recipe page which shows each individual step and ingredient as a separate value.
5. Alex contributed to the development of a script and ideas for future implementations discussed in the demo video.

John Fleming

1. Contributed the video link and to discussions on future plans, focusing on the need to expand the visual aspect of the interface and deciding to take the current state of increment two as a solid final program as far as functionality is concerned.
2. Contributed to discussion of functional requirements.
3. John contributed to discussion on what languages should be used, focusing on C++ and C# but we ultimately decided that Python would suit the effective needs of the application and it was more efficient to explore methods of reducing overhead and keeping the Python code stable by writing good quality code..
4. John set up the groundwork changes to the database tables, designing and making the initial changes to setup.py to add the pantry, steps and ingredients tables. As well as working on debugging for the program in later stages of the increment.
5. John will take the lead on hosting the video for ease of creation while other group members contribute to script creation and planning discussion of what should be present in future implementations.

Justin Nahorny

1. Justin will take the lead on completing the progress report. He contributed to the main sections of the report, the description, accomplishments, challenges and plans for the next increment.
2. Contributed to discussion of non-functional requirements.
3. Justin contributed to discussion on what languages should be used, helping ultimately decide the first implementation should focus on flask and python due to their ease of implementation.
4. Justin worked on modifying the existing tables to properly track RecipeID values as well as tracking for the number of ingredients and steps for any given recipe. For this, he was involved in editing the restructuring of the AddRecipe() function to be far more advanced with error checking methods such as preventing the addition of recipes with the same name. He also worked on adding an implementation for SelectRecipe(), showing each individual recipe with pulls from multiple tables in the database using the recipeID as the primary key.
5. Justin contributed to the development of a script and ideas for future implementations discussed in the demo video.

Mason Joy

1. Contributed to discussion of future plans for the next implementation and discussion on challenges found in the first iteration.
2. Contributed to overall discussion and assisted in design of the initial diagrams used.
3. Mason will take the lead on the IT document, writing both of the sections listing languages, platforms and databases used due to the relative simplicity of this first iteration.
4. Mason focused on the AddtoPantry() function and the function to list the contents of the pantry database.
5. Mason contributed to the development of a script and ideas for future implementations discussed in the demo video.

6) Plans for the next increment

Now that we have the complete foundation of the application, the plan for increment three is to focus on it's presentation. We intend to focus on the appearance of the interface and quality of life features. Essentially, things that aren't necessary for organizing the data itself but would make it more presentable and easy to read for the users. For example, while the user has access to both a list of their current ingredients and the recipes, having the recipes actively read the user pantry to tell them whether or not they have the current stock for the recipe will be a great convenience to the user and make the application more appealing.

7) Link to video

https://www.youtube.com/watch?v=S1BMxtcN600