

RecyPy:

Future Work

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Introduction

RecyPy is a web application used for sharing recipes. Similar to a cross between a social media app and a recipe database, in this system users will be able to create an account. Using this account, they will be able to post their own recipes, as well as “follow” other users or “star” their recipes. This creates a personalized experience for each user, as well as a foundation for further implementations, such as a rating system for individual recipes and the ability to categorize them. Users will be able to view a feed of recipes from the people they follow, as well as search new recipes in the search bar.

This document provides an overview of the future work for this application, specifically in terms of the software requirements and user stories that we have yet to satisfy, as well as a plan to continue development. As a brief summary, 35% of requirements have been met (21 of 60), while 32.26% of user stories have been satisfied (10 of 31). This reflects that the system as a whole is roughly 33% complete in terms of user requirements.

However, it is important to note that a significantly larger portion of the total work to develop this system has been completed than these metrics reflect. Many design and planning documents have been completed, making future development quicker and easier. Additionally, work included in developing the environment for this system (back end logic, database design) is not well reflected in these requirements and user stories. As such, the given percentages miss a significant amount of supporting work.

Incomplete Requirements (39 of 60 remain)

Functional

Posting Recipes

- The system shall allow users to post images with their recipes.
- The system shall allow users to post tutorial videos with their recipes.
- The system shall allow users to see comments from recipes they posted.
- The system shall allow users to see how many people have viewed recipes they posted.
- The system shall track how many users view a recipe.
- The system shall allow users to add nutrition facts to their recipes.
- The system shall allow recipes to specify the brand of ingredients.
- The system shall allow ingredients to link to external store pages.
- The system shall allow users to tag their recipes with an estimated preparation time.
- The system shall allow users to tag their recipes with the recipe's country of origin.
- The system shall allow users to tag their recipes with the recipe's difficulty.

Viewing Recipes

- The system shall allow users to comment on recipes.

Finding Recipes

- The system shall allow users to filter recipes by their estimated preparation time.
- The system shall allow users to filter recipes by the number of ingredients required.
- The system shall allow users to filter recipes by the recipe's country of origin.
- The system shall allow users to filter recipes by the user who posted the recipe.
- The system shall allow users to filter recipes by whether they are pet friendly.
- The system shall allow users to filter recipes by the recipe's difficulty.
- The system shall allow users to sort recipes by average rating.
- The system shall allow users to sort recipes by how recently they were posted.
- The system shall allow users to sort recipes by the number of ingredients required.
- The system shall allow users to sort recipes by the recipe's difficulty.

Shopping Lists

- The system shall allow users to create shopping lists.
- The system shall allow users to add individual ingredients to their shopping lists from a recipe.
- The system shall allow users to add all ingredients from a recipe to their shopping list.
- The system shall allow advertisers to see users' shopping lists.

Other

- The system shall allow advertisers to show ads to users.

Non-Functional

Security

The system shall use HTTPS to communicate between components and the user.

The system shall prevent unauthorized users from seeing other users' data 99% of the time.

Efficiency

The system shall be able to handle 1,000 simultaneous inquiries 95% of the time.

Reliability

The system shall backup all data such that at least 95% of content is preserved if the original database is wiped 99% of the time.

Size

The system shall enforce that posted images be at least 124 x 124 in resolution.

The system shall enforce that posted videos be at least 160 x 120 in resolution.

The system shall enforce that posted videos be no more than 250MB in size.

The system shall store images such that each takes less than 5 MB.

Ease of Use

The system shall be intuitive enough that new users can accomplish any goal possible in the system within 3 minutes of navigating to the website 90% of the time.

The system shall enable users to find a recipe meeting any 2 criteria within 10 minutes 95% of the time.

The system shall alert users if they attempt to post a recipe violating any size requirements.

The system shall allow users to save recipes they find such that they can navigate to them from the home page within 10 seconds 95% of the time.

Use Cases (21 of 31 remain)

- As a college student with one roommate, I want to find cheap recipes with small portion sizes so that I can eat home cooked meals on a budget without always having leftovers.
- As somebody on a tight schedule, I want to find recipes that I can make quickly so that I can get on with my day.
- As a poor planner, I want to find recipes I can make with the ingredients I have so that I don't have to plan my meals in advance.
- As somebody who cares about my health, I want to make sure I have nutrition facts about recipes I make so that I can eat healthier.
- As a picky eater, I want to save recipes I like for later so I can make them again.
- As an intense competitor, I want to see how my recipes stack up against other similar ones to validate myself as a chef.
- As a food company, I want to slip branded ingredients into recipes so I can sell more of my product.
- As an adventurous eater, I want help finding the ingredients needed to make unfamiliar recipes so I can try foods that I wouldn't normally come across.
- As an exchange student, I want to find recipes from my home country so I can make myself comfort food.
- As a fan of cooking shows, I want to find recipes from my favorite celebrity chefs so I can cook along with my favorite shows.
- As a pet owner, I would like to find recipes so that I can put my pets on a raw diet or give them homemade treats.
- As somebody with a friend from a different culture, I would like to try to make a dish they're familiar with so I can make them feel comfortable.
- As a traveler, I would like to learn how to make dishes that I've tasted before so I can expand my repertoire.
- As someone who doesn't have the time to cook everyday, I would like to find recipes that will give me leftovers so I can get more out of one meal.
- As a child whose parents work a lot, I would like to find simple recipes that will teach me how to cook for myself so I can be somewhat self sufficient.
- As an ER worker, I would like to find recipes for food that tastes ok warmed up so that it's ok if I get interrupted mid meal.
- As someone who packs lunches for others, I would like to find recipes that other users say will keep well throughout the day.
- As someone who takes care of children, I would like to find recipes for healthy snacks so I can make the children treats.
- As a meal planner, I want to save a list of recipes so I can plot out my meals for the week.
- As a meal planner, I would like to make a shopping list of the ingredients I need to make recipes I've saved so I can get all my shopping for a week done in one trip.

- As a grocery store, I would like to show ads for foods at my store based on what ingredients are on somebody's shopping list so I can sell more food.

Future Work

In general, the plan for continuing to develop this system is fairly simple. Our primary objectives are to implement:

- A comment system
- An algorithm to display recipes
- Following/follower system

With these aspects added to the system, a much larger chunk of the system development will have been completed. In order to complete them, we simply need to actually write the code to support functionality that is already well defined, which is always easier.