Recipe for Success

developer's guide

CSE110M260T4

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1. Contents

2. Overview

2.1   Customers:
This app was developed for Chang Gwoun, Shuo Liu, Xiejiashan Wang, Ana Radic, and So mang Jung (Team #8).

2.2   Description:
This app is connected to a searchable database of recipes and ingredients and gives the user the ability to search through them. The app opens to an interface with two tabs: one that allows the user to enter part of a recipe (the default tab) and one that allows the user to search the recipes by ingredient. Once the user clicks search on either tab, the app will show a list of recipes that fit the search terms. Clicking on a recipe will take the user to the recipe detail page, which displays an image, the recipe's rating, an overview, an ingredient list, and the directions for the recipe.

2.3   Key Features:
● Live database holds over 100 recipes and ingredients
● Search database by recipe name or keyword
● Search database by ingredients
● Each recipe has its own page with a description, image, rating, ingredient details, and directions
● Rate each recipe out of 5 stars, and store rating in database

3. User Stories

3.1   As a user, I want to be able to search for recipes by name so that I can find the recipe I want to make.

3.2   As a user, I want to be able to view a single recipe so that I can easily follow the recipe.

3.3   As a user, I want to be able to search for a recipe with one or more ingredients so that I can find a recipe based on ingredients I already have

3.4   As a user, I want to view a recipe's rating so that I can see how good a recipe is.

3.5   As a user, I want to be able to rate a recipe so that others can see how good a recipe is.

4. Scenarios

4.1   Given that I am at the search bar, when I type in the name of a recipe and press search then any recipe name matching my search should be shown.

4.2   Given I have typed one or more ingredients into my "search by ingredients" function, when I click search by the entered ingredient(s) then all of the recipe names that include the ingredient(s) that I searched for should be shown.

4.3   Given I have searched for a recipe and see a list of resulting recipes, when I click on a recipe I will see a picture of the recipe, a rating, description, ingredients and instructions/directions for making the recipe.

4.4   Given a user searched recipe or a list of ingredients that have no current recipe matches, the screen will display "No Results Found".

4.5   Given a partial recipe name, the user can find any recipe that contains the search term.

5. Use

Recipe Search

The user is able to click here and enter either a partial or full name of the recipe they are looking for

After entering their recipe title, the user can click on the yellow search button to see the results of their search

User can choose to either search by recipe title or search by ingredient

Recipe for Success

SEARCH BY RECIPE   SEARCH BY INGREDIENT

Looking for a Recipe?

Enter name of recipe

SEARCH

Ingredients Search

Users are also able to search by ingredients. To do so, they can click in the search bar and enter an ingredient

As users add ingredients to search for such as "chicken" and "parmesan," they appear below the search bar

To enter a list of ingredients, users can click "Add" and add their search term to the growing list of ingredients

Click on "Search" to see the results of the search

Recipe for Success

SEARCH BY RECIPE   SEARCH BY INGREDIENT

Search by Ingredients

Enter name of ingredient   ADD

chicken, parmesan

SEARCH

Search Bar

The user is also able to search for recipes using the search bar at the top of the page

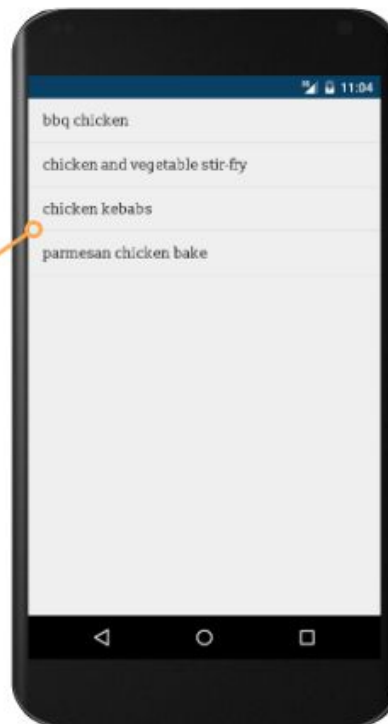After entering a recipe the user can press the enter key on their keyboard to start the search

If the user decides they want to search by ingredient instead they can click the search by ingredients tab

Search Results

After searching for a recipe by title, a list of recipes that contain that search term are displayed
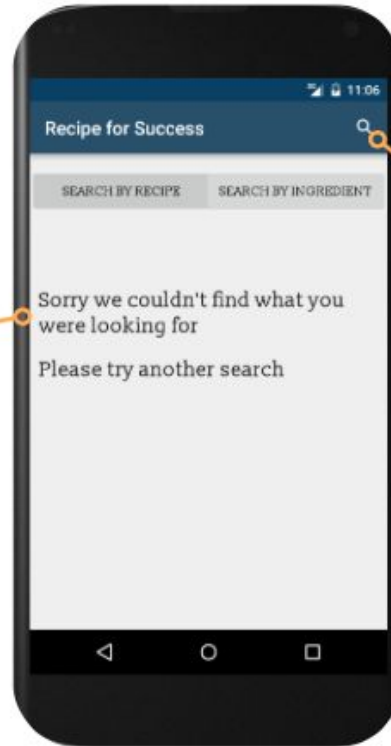
After searching for a recipe by ingredient or list of ingredients, recipes that match those ingredients are displayed to the user

The recipe title can be clicked on to display a detailed recipe page

Not found

If the user enters a search query that does not match a recipe, then an error message appears instructing them to try a new search

Recipe for Success

SEARCH BY RECIPE   SEARCH BY INGREDIENT

Sorry we couldn't find what you were looking for

Please try another search

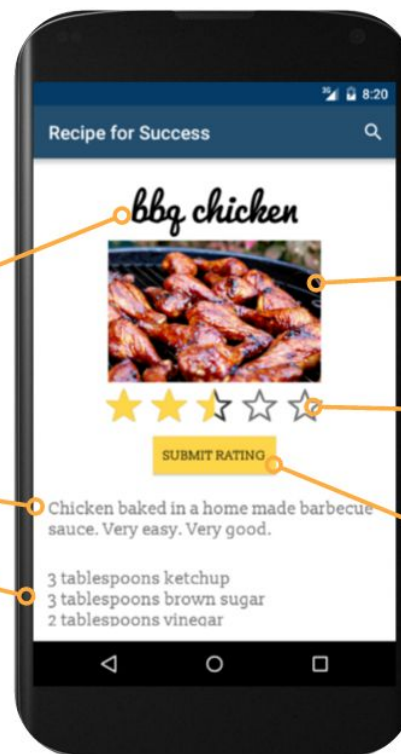Search icon can be used to enter a new search term

Recipe Details

When the user has selected a recipe, they are able to view the detailed page for that recipe. This page includes:

Recipe Title

Recipe Description

Recipe Ingredients

Recipe for Success

bbq chicken

Chicken baked in a home made barbecue sauce. Very easy. Very good.

3 tablespoons ketchup
3 tablespoons brown sugar
2 tablespoons vinegar

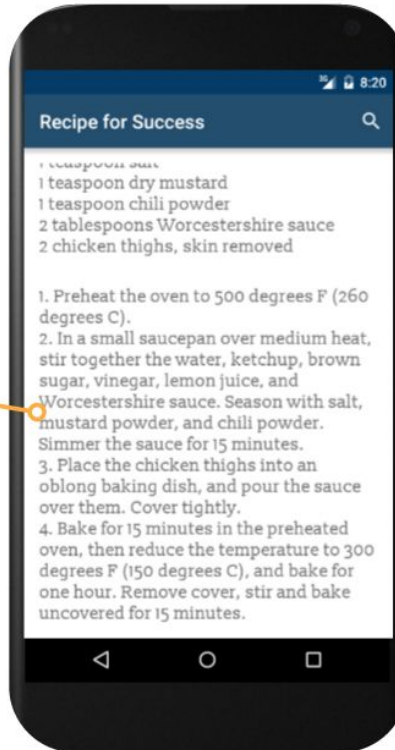SUBMIT RATING

Recipe picture

Current recipe rating (out of 5 stars)

Users can click on the stars to rate the recipe and then submit their rating

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Recipe Details cont.

As users scroll down the page, they can see:

Recipe Directions

6. Testing

6.1   Behavior-driven Testing

For the testing part of our app, we used the framework Espresso. It allows us to create automated UI tests for our Android app. Espresso tests run on actual emulator and behave as if a real user were using our app.

Our scenarios helped us to drive goal-oriented behavior-based testing. We first tested if the application was actually able to run. Then, we tested if we could access our database and if we could retrieve ingredients and recipes from Parse. Finally, we tested our 5 scenarios listed below.

Here is an explanation of our 5 scenario tests.
1. Given I have typed one or more ingredients into my "search by ingredients" function, when I click search by the entered ingredient(s) then all of the recipe names that include the ingredient(s) that I searched for should be shown.

We tested this scenario with two ingredients that are both included in two different recipes to ensure that the add button and the multiple ingredients search are working. Espresso searches for an ingredient, clicks on the add button, searches for a second ingredient, clicks on the add button again and then clicks on the search button. In our test, two recipes comes up and Espresso clicks on one of them and make sure that the recipe page is displayed.

2. Given that I am at the search bar, when I type in the name of a recipe and press search then any recipe name matching my search should be shown.

For this scenario, Espresso enters the full title of a recipe existing in the database and tests if our app displays this recipe name. Then Espresso clicks on this title and makes sure that the recipe description is displayed.

3.   Given I have searched for a recipe and see a list of resulting recipes, when I click on a recipe I will see a picture of the recipe, a rating, description, ingredients and instructions/directions for making the recipe.

For this test case Espresso searches for a recipe and clicks on the matching name. Then, by scrolling down the recipe description page, it makes sure that the title, the picture, the rating, the description, the ingredients and the directions are displayed.

4. Given a user searched recipe or a list of ingredients that have no current recipe matches, the screen will display "No Results Found".

There are two test classes for this scenario. Espresso searches for the recipe cupcake (1st test) and for the ingredient celery (2nd test) that aren't in the database and then makes sure that the screen is displaying "No Result Found".

5. Given a partial recipe name, the user can find any recipe that contains the search term.

This scenario is similar to the third one but only searches for partial matches to a user entered recipe name. For this, Espresso searches for part of a recipe name and tests if our app displays each recipe name including what it searched for. Espresso clicks on of the recipe name and makes sure that the recipe description is displayed.

Here is a summary of our tests:

Test Summary

8	0	59.438s	100%
tests	failures	duration	successful

Packages   Classes

Package	Tests	Failures	Duration	Success rate
com.ucsd.cse110.recipeforsuccess	8	0	59.438s	100%

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