Defect Report

for

Glucose Genie

Version – 1.0

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Prepared by

Francisco Cruz-Urbanc

Krisi Hristova

Carson Ford

Jared Jackson

Thomas Capro

CI 493 – Senior Project

Filippos Vokolos

Description

This document identifies issues that occurred during the Glucose Genie testing phase according to the System Test Plan including test failures, how they were identified, what was done to address them, the resulting functionality of the feature being tested, and system bugs. Each test case that was initially marked as 'FAILED' during testing will be identified with their Test ID, why the test failed and a further description of how the failure was produced. Following its documentation, the issue is expected to be addressed by code changes to either pass the test or provide an alternative functionality. The test case should then be retested. In the event that the test still fails, the Test ID, test name and a description of the failure should be listed as a software bug in the last section of this document.

Test Cases

This section identifies test cases which have failed. In each instance, the reason and description of the failure is provided by the tester. A team member will then address the failure with one of the following:

- Description of the code change made to resolve the failure
- Identify the problem as a system bug
- Include a description of the changed needed to fix the issue if there is not enough time to implement the resolution of the issue.

1. **GLUC-007-001: Spanish version of application**

Test ID	GLUC-007-001	Test Name	Spanish Version of Application
Description		If the user's phone is set to Spanish, then the application should automatically be in Spanish when it is opened.	
Pre-Conditions		The user's phone has its primary language set to Spanish.	
Steps		1. Open the application. 2. View every custom screen (for example, main page, recipes page, etc.) 3. Check that everything is in Spanish instead of English.	
Post-Conditions		None.	
Test Status		FAILED	

Creator	Francisco Cruz-Urbanc	Date Created	04/27/2025
Tester	Krisi Hristova	Date to Test by	05/14/2025

Description of failure:

1. Displayed text on the Grocery List page is not translated when the grocery list is **empty**.
2. Recipe content that was previously saved from when the phone was in English is displayed in English.

Issue Resolution:

1. **GLUC-007-001 - Translate Newer Pages to Spanish**

   Status: COMPLETE

   Resolver: Krisi Hristova

   PR Link: GLUC-007 [part 2] - Translate Newer Pages to Spanish

   Update app text translations to account for text displayed in Grocery List page when the grocery list is empty.

2. **Saved English vs Spanish recipes.**

   Saved recipe content is in English because previously saved recipes have their content (recipe names, ingredient lists) saved from an English recipe and are displayed in English in the following pages: Saved Recipes, Weekly Meal Plan, Grocery List.

   The team has decided that presenting previously saved English recipes displayed as English when the language is switched to Spanish is okay and can be viewed as a feature. Depending on the strategy implemented to search for Spanish recipes from the failing *GLUC-007-003: Spanish Version of API*, Spanish recipes that come from a different API in Spanish should be saved in Spanish and displayed in Spanish if the language settings are in English. If a translator API is implemented, then the content pulled from the recipe API should always be in the correct language of the device settings. Since we have not implemented either at this state of the project, it is considered a feature.

   The test steps have been updated in the original Test Plan to account for this.

   Original Step 3: Check that everything is in Spanish instead of English.

New Step 3: Check that all page names, recipe descriptors, pop-messages, nutrient descriptors and other content not including actual recipe content is translated into Spanish.

2. **GLUC-003-001: Display recipe information correctly**

Test ID	GLUC-003-001	Test Name	Display Recipe Information Correctly	
Description		When a user clicks on a recipe from the search results, the individual recipe page should display the recipe's full information.		
Pre-Conditions		User is logged in and has app open on search page with available recipes.		
Steps		1. Search for a recipe 2. Tap on a recipe image from results 3. Observe the individual recipe page that loads.		
Post-Conditions		The page displays recipe name, image (or placeholder), meal type, ingredients list, nutritional information and a link to the full recipe online.		
Test Status		FAILED		
Creator		Thomas Capro	**Date Created**	04/27/2025
Tester		Krisi Hristova	**Date to Test by**	05/15/2025

Description of failure:

1. Instructions of any selected recipe are not listed.

2. Opening individual recipe view from "Saved Recipes" or "Grocery list" page does not display the recipe's image but clicking on the recipe from "Recipe Search" or adding it from the Weekly Meal Plan does.

Issue Resolve:

1. Instructions are not displayed because the external Edamam Recipe Search API does not offer recipe instructions in its HTTP responses. Instead, a user can view recipe instructions by clicking "View Full Recipe" Button on the individual recipe display page which takes the user to the original website which the recipe is pulled from through a redirection to a web-browser like Safari.

   New Post-Condition: The page displays recipe name, image (or placeholder), meal type, ingredients list, nutritional information and a link to the full recipe online.

2. **GLUC-003-001 - Display Recipe Image Correctly on Every Applicable Page**

   Status: COMPLETE

   Resolver: Krisi Hristova

   PR Link: GLUC-003-001 Display Recipe Images on all pages

   Address image display for saved recipes after navigating out of meal plan or saved recipes page.

3. **GLUC-010-002: Prevent duplicate saves**

Test ID	GLUC-010-002	Test Name	Prevent Duplicate Saves		
Description		Test that saving a recipe already saved does not create duplicate entries in the backend.			
Pre-Conditions		User already saved the recipe once.			
Steps		1. Attempt to save the same recipe again. 2. Check backend database for recipe entries under the user.			
Post-Conditions		No duplicate recipe is added. Either the server rejects the request gracefully or ignores it.			
Test Status		FAILED			
Creator		Thomas Capro	**Date Created**	04/27/2025	
Tester		Krisi Hristova	**Date to Test by**	05/27/2025	

Description of failure:

Selecting to save a recipe after it has already been saved by the user displays another instance of the recipe in the "Saved Recipes" page. The button to "Save Recipe" still appears on the individual recipe display even when that recipe has previously been saved. Upon further investigation, clicking on the "duplicated' recipe to show the individual recipe display, shows a button "Unsave Recipe". Clicking this button unsaves the duplicate recipe while the previous instance of the same recipe that was saved still stays in the list of saved recipes.

The following steps were taken during the test:

1. Selected a recipe from the "Recipe Search" page which took me to the individual view of the recipe and clicked "Save Recipe" button. Button changed to "Unsave Recipe"

2. Navigated to "Saved Recipes" page without logging out.

3. The correct recipe was listed that was just saved.

4. Navigated back to "Recipe Search" page and clicked on the same recipe to open the individual recipe display.

5. Clicked "Save Recipe" (button does not say "Unsave Recipe").

6. Navigated back to "Saved Recipes" page.

7. Recipe is saved a second time and is listed at the bottom of the list of saved recipes.

Issue Resolve:

Upon saving a recipe, it must be added to a backend database which will be fetched from saving, prompting the UI to update the recipe as saved already and prevent the user from saving the same recipe twice. This solution should also involve background processes that check if a recipe already exists in saved recipes before trying to save it.

Status: IN_PROGRESS

Resolver: Francisco Cruz-Urbanc

View PR for progress: GLUC-010-002/003 Implement AWS backend to store saved recipes

4. GLUC-010-003 Fetch and Display Saved Recipes

Test ID	GLUC-010-003	Test Name	Fetch and Display Saved Recipes	
Description		Ensure that saved recipes can be fetched correctly and displayed in the "Saved Recipes" section.		
Pre-Conditions		User has one or more recipes saved.		
Steps		1. Login. 2. Navigate to the Saved Recipes page. 3. Verify list content against backend data.		
Post-Conditions		Displayed recipes match backend data (correct names, images, etc.).		
Test Status		FAILED		
Creator		Thomas Capro	**Date Created**	04/27/2025
Tester		Francisco Cruz-Urbanc	**Date to Test by**	05/27/2025

Description of failure:

If the user has saved recipes in the past, they are correctly displayed on the Saved Recipes page.

However, there is no backend presence of this data, meaning the data is only saved locally.

Issue Resolution:

Saving a recipe needs to save it to an AWS database instead of just locally, this way the user will

still have access to their saved recipes if they log in from a different phone.

Status: IN_PROGRESS

Resolver: Francisco Cruz-Urbanc

View PR for progress: GLUC-010-002/003 Implement AWS backend to store saved recipes

5. **GLUC-014-006 Weekly Meal Planner Resets After New Week**

Test ID	GLUC-014-006	Test Name	Weekly Meal Planner Resets After New Week	
Description		When a week passes, the user's meal plan should reset to an empty meal plan.		
Pre-Conditions		User is logged in and has the app open on home page		
Steps		1. The user clicks on the weekly meal planner button 2. When the page loads, the meal plan should be empty and the days of the week should reflect the current week		
Post-Conditions		-		
Test Status		FAILED		
Creator		Jared Jackson	**Date Created**	04/26/2025
Tester		Francisco Cruz-Urbanc	**Date to Test by**	05/16/2025

Description of failure:

When a new week begins, the weekly meal plan does not reset; it maintains all of the daily meals

from the last week.

Issue Resolution:

Status: COMPLETE

Resolver: Jared Jackson

PR Link: GLUC-014-006 - Reset Weekly Meal Plan every Sunday

When a new week begins (On Sundays, as we have the week starting on Sundays), the weekly meal plan should reset all meals and display empty meal boxes for the new week.

6. **GLUC-007-003 Spanish Version of API Data**

Test ID	GLUC-007-003	Test Name	Spanish Version of API data	
Description		If the user's phone is set to Spanish, then the application should automatically make API calls to the Spanish version of the API and display recipes translated to Spanish.		
Pre-Conditions		The user's phone has it's primary language set to Spanish.		
Steps		1. Open the application 2. Click on the Recipes Search button 3. Check that the recipes that have been fetched are in Spanish instead of English.		
Post-Conditions		None.		
Test Status		FAILED		
Creator		Francisco Cruz-Urbanc	**Date Created**	04/27/2025
Tester		Francisco Cruz-Urbanc	**Date to Test by**	05/25/2025

Description of failure:

After switching the app's language to Spanish and going to the Recipes Search page, no recipes are displayed. This is because the API call has been switched to Spanish, and the current API that we are using, Edamam API, has a database for Spanish recipes that is empty.

Issue Resolution:

Two Potential Solutions:

1. **Spoonacular API**
   a. Spoonacular lets you request recipe search results and full recipe details in different languages by adding a language=es parameter.

GET https://api.spoonacular.com/recipes/complexSearch

?query=your_food_or_recipe

&apiKey=your_key

&language=es

   b. That will return recipe titles, ingredient lists, and instructions all in Spanish. You
      can then fetch a specific recipe's full Spanish-language instructions via its ID.
      GET https://api.spoonacular.com/recipes/{id}/information

      ?apiKey=your_key

      &language=es

2. **FatSecret Platform API**

   a. FatSecret maintains a global food database with support for 24 languages
      including Spanish. Any search you make for recipes will return food items and
      nutrition/recipe content in Spanish when you set the request's locale to es_ES.
      GET https://platform.fatsecret.com/rest/server.api

      ?method=recipes.search

      &search_expression=your_recipe_or_food

      &format=json

      &language=es_ES

      &oauth_consumer_key=your_key

      &oauth_signature=your_signature

7. **GLUC-007-002 Spanish Version of Authentication**

Test ID	GLUC-007-002	Test Name	Spanish Version of Authentication		
Description		If the user's phone is set to Spanish, then the AWS-hosted authentication page should be in Spanish.			
Pre-Conditions		The user's phone has its primary language set to Spanish.			
Steps		1. Open the application (sign out if needed) 2. Sign in 3. Check that sign in page is in Spanish			
Post-Conditions		None.			
Test Status		FAILED			
Creator		Francisco Cruz-Urbanc	Date Created	04/27/2025	

Tester	Francisco Cruz-Urbanc	Date to Test by	05/25/2025

Description of failure:

While the app itself contains Spanish translations, the AWS-hosted authentication page does not have a Spanish version, so it appears in English even when the phone is set to Spanish.

Issue Resolution:

We need to create a custom login / sign up page instead of using the AWS-hosted authentication page so that we can provide translations when the phone is set to Spanish.

System Bugs

This section identifies all bugs found through system testing and additional usage of the Glucose Genie application. It is assumed that there was not enough time to resolve these bugs before the end of the project due date of June 4th.

1. No Spanish recipes found when polling the Edamam Recipe Search API. So, searching for recipes when language settings are in Spanish yields no displayed recipes. This issue can be addressed in the future.