

# Final Project Retrospective

## Changes made from feedback:

Based on the feedback received on the proposal, the following changes were made:

- The *trigger* **update\_recipe\_timestamp** was renamed to **trg\_update\_recipe\_timestamp** according to convention.
- The *procedure* **find\_recipes** was renamed to **usp\_find\_recipes** according to convention.

## Challenges encountered:

A significant challenge occurred during the creation of the procedure **usp\_find\_recipes**. While executing the query to create the procedure, I encountered the following error:

*#1558 - Column count of mysql.proc is wrong. Expected 21, found 20. Created with MariaDB 100108, now running 100428. Please use mysql\_upgrade to fix this error*

The recommended solution was to run the *mysql\_upgrade* file, which I was unable to on my system.

## Resolution:

To solve the above problem, I tried running the *mysql\_upgrade* file. When this was unsuccessful, I executed the SQL script on a different system with a compatible MariaDB/MySQL version. I was able to successfully create the *procedure* in this case, below is a screenshot of a demo query that I was able to run.

The screenshot shows a database query interface. At the top, a SQL query is entered: `CALL usp_find_recipes('Chicken', 'Italian', NULL);`. Below the query, there are links: [\[ Edit inline \]](#), [\[ Edit \]](#), and [\[ Create PHP code \]](#). Below these links, there are controls for displaying the results: a checkbox for "Show all", a "Number of rows:" dropdown set to "25", and a "Filter rows:" search box with the text "Search this table". Below these controls, there is a button labeled "Extra options". The results are displayed in a table with the following columns: **recipe\_id**, **name**, **cuisine**, **description**, **cook\_time\_mins**, **rating**, and **last\_updated**. The table contains one row of data: 

recipe_id	name	cuisine	description	cook_time_mins	rating	last_updated
2	Chicken Alfredo	Italian	White sauce pasta with chicken.	30	4	2025-04-16 18:10:31

. Below the table, there are more controls: a checkbox for "Show all", a "Number of rows:" dropdown set to "25", and a "Filter rows:" search box with the text "Search this table".

### **Problem Solving:**

I was able to successfully solve the real-world problems mentioned in the proposal:

- **Recipe Search:** The *procedure* **usp\_find\_recipes** allows the user to effectively search for recipes by ingredients, cuisine or other keywords. This addresses the difficulty of finding specific recipes in the database.
- **Favourite Recipes:** The *view* **top\_rated\_recipes** can be used to identify the most successful/liked recipes. This addresses the problem of forgetting what my most liked recipes are.

### **Future Plans:**

Several improvements can be made in the database **cookbook\_db** in the future:

- **Ingredient Units:** A 'unit' column could be added to the *recipe\_ingredients* table describing the measurements in *grams, cups, tbsp, etc.*
- **Advanced Search:** I can further improve the *procedure* **usp\_find\_recipes** to allow searching by *cook\_time\_mins*.
- **Add Recipe Images:** Add functionality to store URLs for images associated with each recipes.