**Introduction:** Imagine you're a cooking enthusiast working at EYCA. After a long day of solving complex problems and developing innovative solutions, you unwind by cooking and experimenting with new recipes. You'd love to share your culinary creations with your colleagues and also discover what they're cooking up. This is where "Programa tu Paladar" comes in, a platform where EYCA employees can share and discover recipes, connect with other food lovers, and learn from each other.

**Application Usage:**

* **User Registration and Profile:**
  + As a user, you sign up for the application by creating a profile that includes your name, location (optional), a brief bio about your culinary interests, and a profile picture.
  + You can edit your profile at any time to update your information.
* **Exploring and Searching for Recipes:**
  + Upon accessing the application, you're greeted with a clean and attractive interface displaying featured and most recent recipes.
  + You use the search function to filter recipes by ingredients, cuisine type, preparation time, or difficulty.
  + Each recipe includes a photo, the name of the dish, preparation time, a list of ingredients, step-by-step instructions, nutritional information, and comments and ratings from other users.
* **Recipe Management:**
  + Feeling inspired, you decide to share your "Costa Rican Mango Ceviche" recipe. You create a new entry in the application, upload a tempting photo of your dish, and detail the ingredients and steps needed to prepare it.
  + The application allows you to edit or delete your recipes at any time.
* **Social Interaction:**
  + You browse through other users' recipes and find one that catches your eye. You leave a comment congratulating the author and save the recipe to your personal collection to try later.
  + You rate the recipes you've tried, providing a score and feedback that will help other users decide what to cook.
* **Notifications and Communication:**
  + You receive notifications when other users comment on or rate your recipes, or when your favorite recipes are updated by their authors.
  + The application also allows you to follow other users and receive updates on their new recipes or activities.
* **Security and Privacy:**
  + The application ensures that your personal information is protected and allows you to control who can see your recipes and profile.

**Detailed Information:**

* **Recipes:**

recipe\_id: A unique identifier for each recipe. The SERIAL keyword is used in PostgreSQL to create an auto-incrementing integer. In MySQL, you would use INT AUTO\_INCREMENT.

author\_id: The user ID of the recipe's author, linking to the user\_accounts table.

title: The title of the recipe.

description: A text description of the recipe, which can include background information or tips.

ingredients: A text field listing the ingredients. This could be normalized into a separate table if you want to support more complex operations like searching by ingredient.

instructions: Step-by-step cooking instructions.

prep\_time: Preparation time in minutes.

cook\_time: Cooking time in minutes.

total\_time: A generated column that automatically calculates the total time by adding prep\_time and cook\_time.

servings: The number of servings the recipe makes.

created\_at: The timestamp when the recipe was created.

updated\_at: The timestamp when the recipe was last updated.

image\_url: A URL to the recipe's main image. This could be stored in a separate table if you want to support multiple images per recipe.

fk\_author: A foreign key constraint that links author\_id to the user\_accounts table.

* **Users:**

user\_id: A unique identifier for each user. The SERIAL keyword is used in PostgreSQL to create an auto-incrementing integer. In MySQL, you would use INT AUTO\_INCREMENT.

username: The user's chosen username. It's unique and not nullable.

email: The user's email address. It's unique and not nullable.

hashed\_password: The user's password after being hashed for security reasons.

created\_at: The timestamp when the account was created. It defaults to the current timestamp.

updated\_at: The timestamp when the account was last updated. It automatically updates to the current timestamp whenever the row is updated.

profile\_picture\_url: A URL to the user's profile picture. This is optional and can be null.

bio: A text field for the user's biography or description. This is optional and can be null.

is\_active: A boolean flag to indicate whether the account is active. It defaults to true.

last\_login: The timestamp of the user's last login. This is optional and can be null.

The script also includes optional indexes on the username and email columns to improve the performance of queries that search by these fields.

**Additional Considerations:**

* The application should be accessible and easy to use on both mobile and desktop devices.
* It must comply with data security and privacy regulations.
* The interface should support internationalization so that EYCA employees in different countries can use it in their preferred language.