

Domain Name: Calorie Counter

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Attributes and data types:

1. Users:

- User ID (Primary Key) - Integer
 - A unique identifier for each user in the system.
- Username - String
 - The username chosen by the user for their account.
- Email - String
 - The email address associated with the user's account.
- Password (hashed and salted) - String
 - A securely hashed and salted representation of the user's password.
- Age - Integer
 - The age of the user in years.
- Gender - String
 - The gender of the user (e.g., Male, Female, Other).
- Weight - Float
 - The weight of the user in kilograms or pounds (depending on the chosen unit).
- Height - Float
 - The height of the user in centimeters or inches (depending on the chosen unit).

- Creation Date - Date/Time
 - The date and time when the user's account was created.
- Status (active/inactive) - Boolean
 - Indicates whether the user's account is active (true) or inactive (false).

2. Admins:

- Admin ID (Primary Key) - Integer
 - A unique identifier for each administrator in the system.
- Username - String
 - The username chosen by the admin for their account.
- Email - String
 - The email address associated with the admin's account.
- Password (hashed and salted) - String
 - A securely hashed and salted representation of the admin's password.
- Creation Date - Date/Time
 - The date and time when the admin's account was created.
- Status (active/inactive) - Boolean
 - Indicates whether the admin's account is active (true) or inactive (false).

3. Nutrients:

- Nutrient ID (Primary Key) - Integer
 - A unique identifier for each nutrient in the system.
- Nutrient Name - String
 - The name or label of the nutrient.
- Daily Recommended Intake - Float
 - The recommended daily intake of the nutrient in grams, milligrams, or micrograms.
- description - String

- A description of the nutrient's function or role in the body.
- Sources - String
 - A description of common food sources containing the nutrient.
- Health Benefits - String
 - A description of the health benefits associated with the nutrient.
- Potential Risks - String
 - A description of potential risks or adverse effects related to excessive intake of the nutrient.

4. User Goals:

- Goal ID (Primary Key) - Integer
 - A unique identifier for each user goal in the system.
- User ID (Foreign Key) - Integer
 - The foreign key linking the goal to a specific user's ID.
- Goal Name - String
 - The name or title of the user's health and fitness goal.
- Calorie Target - Integer
 - The target daily calorie intake specified by the user for their goal.
- Start Date - Date
 - The date when the user starts working towards the goal.
- End Date - Date
 - The date when the user plans to achieve the goal.
- Progress - Float
 - The progress made towards the goal, represented as a percentage.
- Description - String
 - A description or additional details about the user's goal.
- Is Completed (boolean) - Boolean

- Indicates whether the goal has been achieved (true) or not (false).

5. Meal Log:

- Log ID (Primary Key) - Integer
 - A unique identifier for each meal log entry in the system.
- User ID (Foreign Key) - Integer
 - The foreign key linking the meal log entry to a specific user's ID.
- Meal Type - String
 - The type of the meal (e.g., Breakfast, Lunch, Dinner, Snack).
- Date/Time - Date/Time
 - The date and time when the meal was logged.
- Food Item - String
 - The name or description of the food item consumed.
- Quantity - Float
 - The quantity or serving size of the food item consumed.
- Calories - Integer
 - The number of calories in the consumed food item.
- Carbohydrates - Float
 - The amount of carbohydrates in the consumed food item.
- Protein - Float
 - The amount of protein in the consumed food item.
- Fat - Float
 - The amount of fat in the consumed food item.

6. Exercise Log:

- Log ID (Primary Key) - Integer
 - A unique identifier for each exercise log entry in the system.
- User ID (Foreign Key) - Integer
 - The foreign key linking the exercise log entry to a specific user's ID.
- Exercise Type - String
 - The type or name of the exercise activity performed.
- Date/Time - Date/Time
 - The date and time when the exercise activity was performed.
- Duration (in minutes) - Integer
 - The duration of the exercise activity in minutes.
- Calories Burned - Integer
 - The number of calories burned during the exercise activity.
- Distance (if applicable) - Float
 - The distance covered during the exercise activity (if applicable).
- Average Heart Rate (if applicable) - Integer
 - The average heart rate during the exercise activity (if applicable).
- Notes - String
 - Additional notes or comments about the exercise activity.
- BMI - Float
 - The Body Mass Index (BMI) calculated based on the user's weight and height.

7. Nutritional Goals:

- Goal ID (Primary Key) - Integer
 - A unique identifier for each nutritional goal in the system.
- User ID (Foreign Key) - Integer
 - The foreign key linking the nutritional goal to a specific user's ID.
- Nutrient - String
 - The name or label of the nutrient targeted by the goal.
- Target Amount - Float
 - The target amount of the nutrient in grams, milligrams, or micrograms.
- Progress - Float
 - The progress towards meeting the target nutrient amount is represented as a percentage.
- Start Date - Date
 - The date when the user starts working towards the nutritional goal.
- End Date - Date
 - The date when the user plans to achieve the nutritional goal.
- Is Completed (boolean) - Boolean
 - Indicates whether the nutritional goal has been achieved (true) or not (false).
- Notes - String
 - Additional notes or comments about the nutritional goal.

8. Meal Planner History:

- Planner ID (Primary Key) - Integer
 - A unique identifier for each entry in the meal planner history.
- User ID (Foreign Key) - Integer

- The foreign key linking the meal planner entry to a specific user's ID.
- Date - Date
 - The date when the meal planning was done.
- Planned Meals (string) - String
 - Text representation of the planned meals for the day (e.g., JSON or plain text).
- Total Calories - Integer
 - The total calories planned for the day.
- Total Carbohydrates - Float
 - The total carbohydrates planned for the day.
- Total Protein - Float
 - The total protein planned for the day.
- Total Fat - Float
 - The total fat planned for the day.
- Additional Nutrient Totals (e.g., Fiber, Vitamins) - String
 - Text representation of additional nutrient totals planned for the day.
- Notes - String
 - Additional notes or comments about the meal planning.

9. Feedback:

- Feedback ID (Primary Key) - Integer
 - A unique identifier for each feedback and rating entry in the system.
- User ID (Foreign Key) - Integer
 - The foreign key linking the feedback and rating entry to a specific user's ID.
- Feedback Text - String
 - The text of the feedback provided by the user.
- Rating - Integer
 - The rating given by the user (e.g., on a scale of 1 to 5).

- Date/Time - Date/Time
 - The date and time when the feedback and rating were submitted.
 - Response (if applicable) - String
 - The response provided by the website's admin (if applicable).
 - Admin Response (if applicable) - String
 - The response or comment provided by the website's admin (if applicable).
 - Status (open/closed) - Boolean
 - Indicates whether the feedback status is open (true) or closed (false).
 - Notes - String
 - Additional notes or comments related to the feedback.
10. Water Intake Log:
- Log ID (Primary Key) - Integer
 - A unique identifier for each water intake log entry in the system.
 - User ID (Foreign Key - Users) - Integer
 - The foreign key linking the water intake log entry to a specific user's ID.
 - Date/Time - Date/Time
 - The date and time when the water intake was logged.
 - Amount (in milliliters or ounces) - Float
 - The amount of water consumed, measured in milliliters or ounces.
 - Notes - String
 - Additional notes or comments about the water intake.

ER DIAGRAM

