**Domain Name: Calorie Counter**

1. User
2. Admins
3. Nutrients
4. User Goals
5. Meal Log
6. Exercise Log
7. Nutritional Goal
8. Meal Planner History
9. Feedback
10. Water Intake

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

