



E/R Diagram Legend:

1. **user**: Represents the application's users with basic credentials.
2. **exercise**: Contains details about various exercises including their calorie burn rate.
3. **food**: Stores information about different foods including their calorie content per serving.
4. **exercise_log**: Logs which user performed which exercise, for how long, and when.
5. **food_log**: Logs the consumption details - which user consumed which food, how much, and when.

Relationships:

- **user to exercise_log**: One-to-Many (One user can have multiple exercise logs, but each log belongs to one user)
- **exercise to exercise_log**: One-to-Many (One exercise can be in multiple logs, but each log entry refers to one exercise)
- **user to food_log**: One-to-Many (One user can have multiple food logs, but each log belongs to one user)
- **food to food_log**: One-to-Many (One food can be in multiple logs, but each log entry refers to one food)