USE CASE

FitBit Fitness Tracker Data features recorded data of 30 users over a 2-month period of their physical activity and sleep patterns. Using the provided data, we can analyze trends of users' daily routines and what is defined as "healthy" to help FitBit better understand their consumers' patterns. Below are some guidelines we have defined as healthy versus unhealthy for the sake of this project:
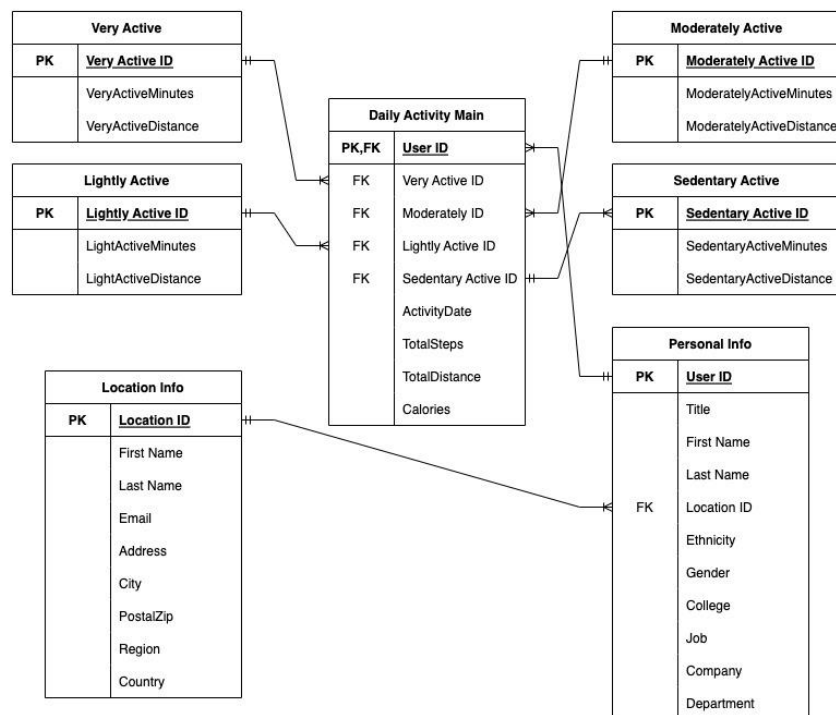
- If distance is greater than 8 miles, calories is greater than 1000, and steps is greater than 10,000 then the person is considered to be high-burning calories and is very healthy.
- Else if distance is between 4 and 8 miles, calories is between 500 and 1000, and steps is between 5,000 and 10,000 then the person is considered to be medium-burning calories and is moderately healthy.
- Else if distance is less than 4 miles, calories is less than 500, and steps is less than 5,000 then the person is considered to be low-burning calories and is not healthy.
- Overall, if the person walks less than 5,000 steps, they are considered not to be healthy.

It is important to note that age and gender is unknown for this study, which could prove to be a limitation in analyzing the data. However, we will be assigning each ID to the demographic information randomly generated. While we understand that this would not applicable in the real-world, for the purpose of this project, we will assume that the information generated matches directly to the original data information.

BUSINESS RULES

- User is identified by a unique ID.
- If the user wears the FitBit, activity date, total steps, total distance, and total calories is recorded.
- A user also has recorded activity. Each user can only have one activity for each of the four categories: very active, moderately active, lightly active, or sedentary.
- Each category of activity has a corresponding distance and time.
- Each user also has personal information attached, which also expands to include location information.

ERD

DATA DICTIONARY

Tables	Primary/Foreign Keys	Attributes	Data Types
DailyActivityMain	PKs - User ID FKs- User ID, Very Active ID, Moderately Active ID, Lightly Active ID, Sedentary Active ID	ID, ActivityDate, TotalSteps, TotalDistance, Calories	int, text, int, double, int
LightlyActive	PK - Lightly Active ID	LightlyActiveId, LightActiveDistance, LightlyActiveMinutes	bigint, double, bigint
SedentaryActive	PK - Sedentary Active ID	SedentaryActiveId, SedentaryActiveDistance, SedentaryMinutes	bigint, double, bigint
ModeratelyActive	PK - Moderately Active ID	ModeratelyActiveId, ModeratelyActiveDistance, FairlyActiveMinutes	bigint, double, bigint
VeryActive	PK - Very Active ID	VeryactiveId, VeryActiveDistance, VeryActiveMinutes	bigint, double, bigint
PersonalInfo	PK - User ID FK - Location ID	Id, Title, first_name, last_name, race/ethnicity, gender, College, Job, Company, Department, LocationId	bigint, bigint, text, text, text, text, text, text, text, text, text, bigint
LocationInfo	PK - Location ID	Id, first name, last name, email, address, city, postalZip, region, country, locationId	bigint, bigint, text, text, text, text, text, bigint, text, text, bigint