

Github URL: <https://github.com/users/kabilaw/projects/1/views/1>

User Stories:

- As a user, I want the ability to see all of my activities for a given day so that I may optimize the amount of time spent on each activity.
- As a user, I want the ability to filter each of my activities by type (i.e., move, place, transport, etc.) so that I can better understand where I'm choosing to spend my time.
- As a user, I want to filter activities done during a provided timeframe (i.e., M-F, during the month of June, quarterly, etc.).
- As a user, I want a day-to-day breakdown of activities on a dashboard.
- As a user, I want to list a single activity on a specific day to view more details about it.

Inputs:

The daily activities dataset is the source of input. The dataset provides data for one user across multiple different days.

1. **Date** of the activity, in the format "YYYYMMDD"
2. **Summary**: Summary of the activity, including the following fields:
 - Activity type: Type of activity, such as "walking" or "transport"
 - Group: Group to which the activity belongs, such as "walking" or "transport"
 - Duration: Duration of the activity in seconds
 - Distance: Distance covered in the activity
 - Steps: Number of steps taken in the activity
 - Calories: Number of calories burned in the activity
3. **Segments**: Information about different segments of the activity, including:
 - Type: Type of segment, such as "place" or "move"
 - Start Time: Start time of the segment in the format "YYYYMMDDTHHMMSSZ"
 - End Time: End time of the segment in the format "YYYYMMDDTHHMMSSZ"
 - Place: Place information, including the following fields:
 1. ID: ID of the place
 2. Name: Name of the place
 3. Type: Type of place, such as "home" or "foursquare"
 4. Location: Latitude and longitude of the place
 - Activities: Information about the activities within the segment, including the fields listed in the Summary section
 - Last Update: Time of the last update of the segment in the format "YYYYMMDDTHHMMSSZ"

Major abstractions:

We'll filter the data by field (such as type and other compelling attributes) along with the date to derive a relationship, if one exists.

Outputs:

We would like to generate meaningful insights about the users daily activities. We would like to generate visual representations of the outputs for each individual user. The outputs could be the calculated summary statistics for the activities performed, such as the total duration, distance, steps, and calories burned for each activity type.

Programming language and external libraries identified:

- Programming language: JAVA
- Framework: Spring / Springboot

Potential change: The use of JavaScript/TypeScript along with Express or nestJS framework

If we need to create a UML diagram, we can use Lucid

https://lucid.app/lucidchart/db7b6d86-b383-401e-b6bd-0d1f3fbb2aa/edit?viewport_loc=175%2C-5%2C1952%2C931%2C0_0&invitationId=inv_06e1c24f-8a07-4c8e-87c5-3cb5d5927625

