Sprint 1 Scoping

CS5500 Project

Group Name: Fire Emblem

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Introduction

Activity Engage is a Web Application for users to keep track of daily activities and gain valuable insights into their habits and routines. A user can log in his/her account to view analytical data on the dashboard, for example, daily fitness level, common locations visited, and other key metrics. Based on the information provided, users can improve their exercise focus, stay efficient and organized, or simply better understand themselves.

Development Tools

For the development of this application, we have decided to utilize Java as the primary programming language. The Spring Framework will be employed to ensure the modern web programming model, while MongoDB will serve as the backend key-value database offering the necessary flexibility to accommodate the uncertain input data schema. Furthermore, we may incorporate Google Map API for location analysis.

To optimize collaboration among team members, we will leverage a combination of GitHub Project Board, Git Repo, and Trello Board to streamline communication and project management. The relevant links for those tools are listed below:

GitHub Project Board: https://github.com/users/xinyisherryz/projects/1

Git Repo: https://github.com/xinyisherryz/cs5500-fire-emblem

Trello Board: https://trello.com/b/Rk1GKh9W/cs5500-fire-emblem

User Stories

As a user, I want to:

1. Understand my daily activities and gain some insights from each activity category so that I can better understand my activity level. (2 points)
2. Know which location I visited most in a particular time period so that I can learn my preferences and habits. (1 point)

3. Know how much I exercise each day so that I can organize my exercise routine toward a specific goal. (1 point)
4. See the trends of a particular activity and corresponding recommendations so that I can efficiently manage my schedule. (2 point)
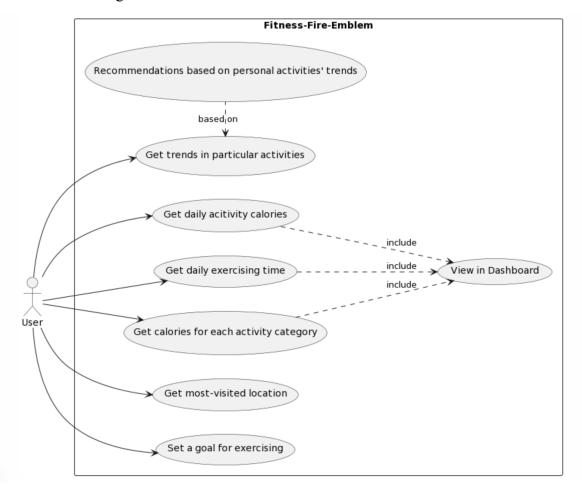
Initial Design

Inputs: a raw JSON file that contains location data and exercise activities.

Outputs: a responsive web application that allows users to view and analyze activities.

1. User can login and see dashboard of daily activity statistics (with graphical representation if possible)
2. User can choose and see categorized activity (calories, etc.)
3. User can see most-visited location
4. User can set goals for exercising
5. User can see trends in particular activities

Major abstractions and relationships:

1. Use case diagram

2.   Sequence diagram of a user calling web application