

Group 11

Sprint 0: Planning for Sprint 1

I. Overview:

We plan to build a fitness application that rewards users for exercising and staying active by tracking their burned calories and the steps they take daily. Individually, users will be able to view their tracked fitness levels and earn points to move up to higher and more challenging levels. Users will also be able to join a team and work together to beat other teams in weekly challenges. We hope to encourage physical fitness by providing a space for friendly competition.

To achieve this goal, our team will use:

- **MongoDB** as a backend database. We choose to use Mongo DB because:
 - Since we do not know the nature of all the data, and we assume that some different data may come, with mongo DB, we do not have to design the database schema.
 - We assumed the data are not critical data, so there is no need for the ACID transactions.
 - Since we would like to be able to process data from multiple users, this database type will allow us to have larger amounts of data and take up smaller amounts of space.
- **Java** as the programming language.
- **Visual Studio Code** as the IDE.
 - The static analysis tools will aid us in writing more efficient and readable code.
 - We will use Google Styles codes for clean coding.
- **GitHub** for collaboration.
 - The Professor and TAs have been added to the repository.

II. Trello Board:

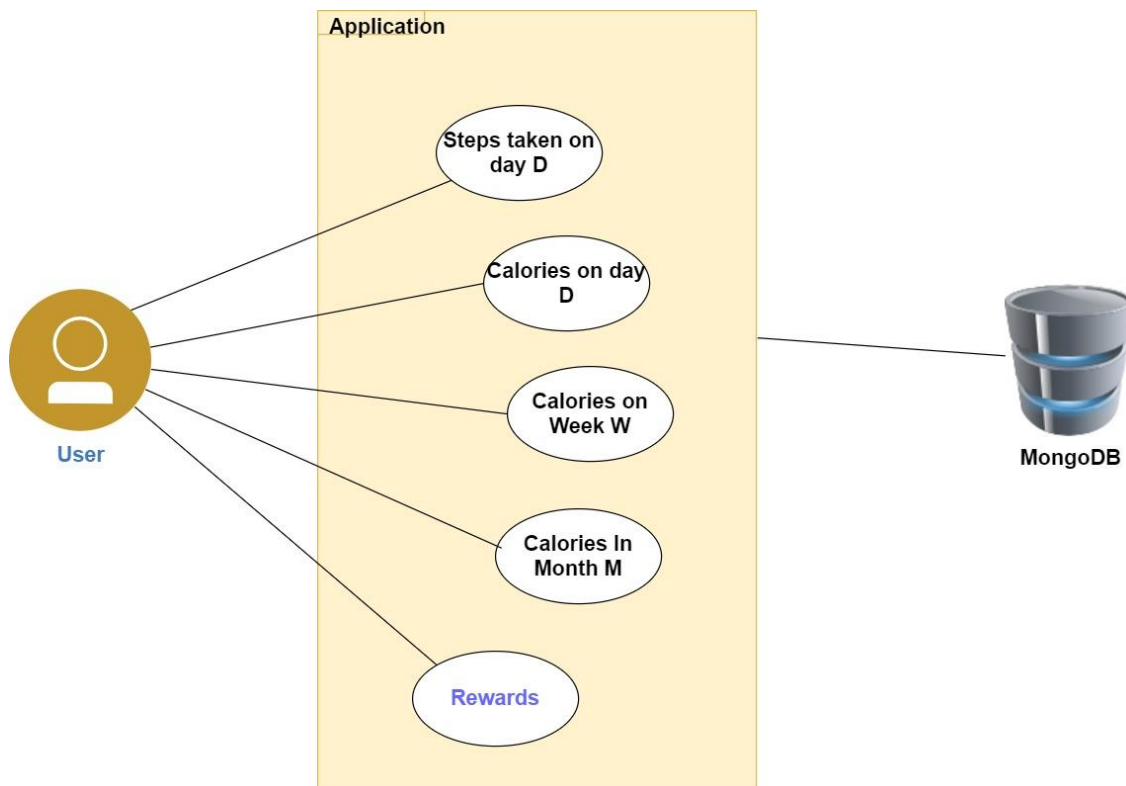
<https://trello.com/b/5KytY7Il/user-stories>

III. User Stories:

- ❖ 1 point: As a User, I should be able to track my steps of specific day.
- ❖ 2 points: As a User, I want to get rewarded for getting exercise.
- ❖ 1 point: As a User, I want to be able to track my calories burned in one day.
- ❖ 1 point: As a User, I want to be able to track my calories burned in one week.
- ❖ 1 point: As a User, I want to be able to track my calories burned in one month.

IV. Initial Design

Use Case Diagram



Data Flow Diagram/Abstractions

