
CS5500 Project Group 9

Pradeepti Reddy Tandra

Zachary Sylvane

Sam (Donghyeon) Kim

OVERVIEW

Trello Board Link

<https://trello.com/invite/b/juyOYrwV/354cac4debdfb8cd945c0b31eaed8cfe/cs5500-project-group-9>

USER STORIES

- As a fitness enthusiast, I want to provide an app with fitness data recorded in a .json file so I can see a clear record of all my fitness activities, including the type of activity, start time, end time, and calories burned.
- As someone who runs and rides a bike, I want to know how much time I spend running and riding my bike each week so that I can maintain consistent weekly habits based on that data.
- As someone who drives a lot, I want to know how many miles I travel each week / an estimate of gas used so that I can cut down on driving/spending.
- As someone who works in an office environment, I want to be reminded to take regular micro-breaks to keep me active throughout the day.
- As an active person, I want to input weight goals and know how much I need to walk each week/month in order to achieve said goals.
- As a care provider, I would like to see my patient's general activity levels graphically.
- As someone who runs and rides a bike, I want to have incremental recommendations that challenge me to run/cycle more than I did the previous week/month so that I can improve my body by burning more calories.
- As someone who runs and rides a bike, I want to know how many calories I have burned and how many miles I have traveled running versus riding a bike so that I can compare the benefits of cycling versus running.
- As someone who walks but wants to start running, I would like to keep track of how much I used to walk and how much walking I have replaced with running (running the same distance/time burns double the calories of walking) so that I can burn more calories.

INITIAL DESIGN

Tool Chain and Development Environment

Our basic tool chain is Git, Github for version control, Java in IntelliJ with the latest JDK, Trello and MongoDB for our database. Along the line, we may need to switch to a relational database based on our own personal proficiency and as we develop clarity on exactly what data we will work with. We preliminarily attempted to organize the provided .json into an appropriate table in MySQLWorkbench. We also have a long-view intention of creating some GUI, programmed either in Java with a JAR build or a web app using HTML, CSS and JavaScript.

Specify Inputs

Personal information (age, gender, weight, height), activity date, activity type, activity start time and end time, activity distance traveled, and calories burned during activity. The personal information can be entered manually; the rest will come from the provided file.

Specify Outputs

A report containing a breakdown for each exercise activity. The breakdown will display the following information about each existing activity: date, duration, distance traveled, and calories burned.

It will also display monthly and weekly results consisting of calories burned and distance traveled per requested week or month. This may be accompanied by a graphical representation and perhaps a challenge for the next month.

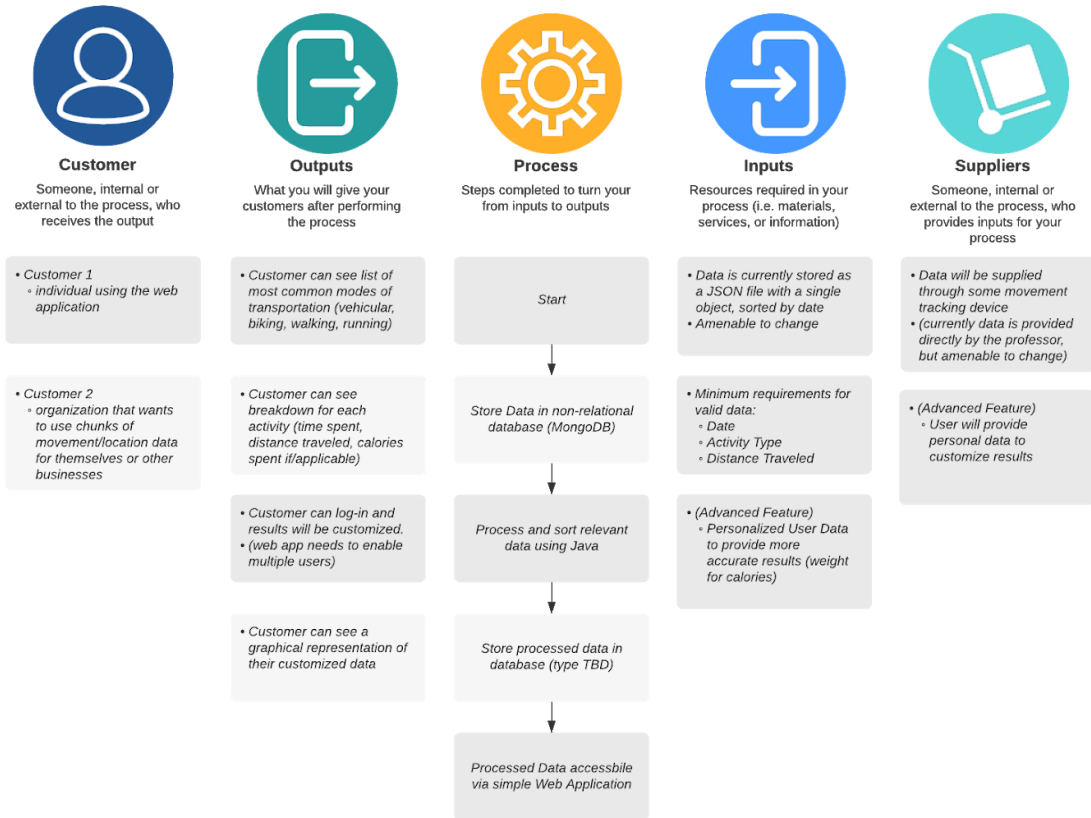
Major Abstractions and Relationships

In terms of data, we want to look at every travel activity performed on each date. For these travel activities, we want to record and store the activity type, start time, end time, and calories burned. We also want to record non-physical travel such as travel via car.

[Link to COPIS Diagram PDF \(larger image\)](#)

COPIS Diagram Project Group 9

Pradeepti Reddy Tandra, Zachary Sylvane, Donghyeon (Sam) Kim | Sprint 0



**We used a COPIS (Customer, Outputs, Process, Inputs, Suppliers) diagram to show our major abstractions and relationships because it focuses on the Customer/Outputs by prioritizing them in the diagram.