

# Project Group 1

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## Trello Link:

<https://trello.com/b/ytqCp3R9/2021-cs5500-full-summer>

## Github Link:

<https://github.com/telvinzhong/Java-Database-Analytics>

## User Stories:

1. A user wishes to receive a subset of the data limited by location, so he or she inputs a restriction (Latitude above a certain coordinate) and the output is the set of data matching this (4 points)
2. A user wishes to get data directly from the dataset, such as how long he or she spent walking on a particular day. He or she enters the date and receives the number representing the time they spent walking that day (3 points)
3. A user may want to be able to be able to modify existing data and add new data points (2 points)

## Initial Design:

Inputs: storyline.json file

Outputs:

Data in database (we use mongodb to store the data)

Data abstracted into java objects

Data model structure (major abstractions):

Think of days as the primary key, with each day broken down into metadata (total time spent active/lazy) and segments of activity. Different activities are stored as segments which in turn make up days.

Day				
	date			
	activities			
		name		
		group		
		duration		
		distance		
		steps		
		calories		
		manual		
		startTime		
		endTime		
		trackPoints		
	segments			
		type		
		startTime		
		endTime		
		place		
			id	
			name	
			type	

			location	
				lat
				lon
			foursquareId	
			foursquareCategoryId	
		lastUpdate		
		activities		
	caloriesIdle			
	lastUpdate			

Programming language:

We will use java as the main programming language in this project.

External libraries:

Gson

JDBC

## Brainstorm possible ideas for data use:

- Travel from places to places, where and Location
- Contain Walking, transport or biking
- Has Distance, Steps, calories burns
- The exactly Date for the plan or exercise date showing 1000+ datas stores inside the Json file.



**Maybe we can use the data for some kind of thing that interacts with the user, when the user enters for example 11/12/2008 did i go to the school by walking? Or something else. the answer should pop up, or something like what did i do that day? Did I go biking? And how many calories did I burn??**