CS5500 Project Group 9: Product Delivery

Pradeepti Reddy Tandra Zachary Sylvane Sam (Donghyeon) Kim

Overview

Trello Board Link

 $\underline{\text{https://trello.com/invite/b/juyOYrwV/354cac4debdfb8cd945c0b31eaed8cfe/cs5500-project-group-9}$

Project GitHub Repository

https://github.com/CS5500-Project-Group-9/project

FINAL USER STORIES & FEATURES

As someone that uses a phone app to track my active lifestyle, I want to be able to directly upload a json file and import my phone data directly on the site UI	We implemented a basic UI, where a user can click a button and upload a JSON. The file must be named as per the specifications.
As the CTO, I would like this project to have a REST API, so that it can be accessed and utilized by outside users. (adapt what we have completed to REST API protocols and naming/packaging conventions)	We correct our endpoints to handle the standard REST API requests.
As a web app visitor, I want to be able to sort my activities ascending/descending. (this feature can be added to page 1, clicking calorie column will sort by calories for instance.)	We implemented a sorting query into our database and retrieve that data to the user represented in the UI.
As a webapp user, I would like the ability to be able to add new Exercise information	We implemented CRUD operations through a simple GUI.
As the CTO, I want to see a high-level visualization of the program to see if we can integrate it into our other projects.	We created a final UML class Diagram of our current working implementation.

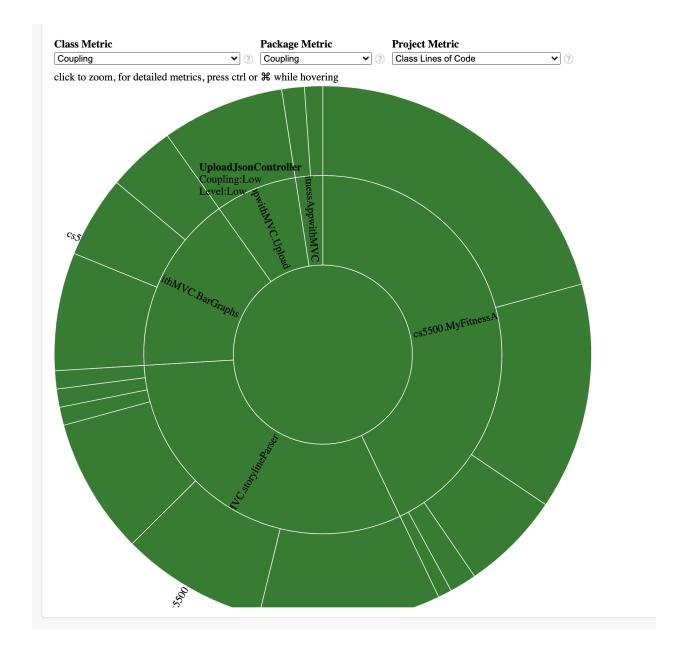
As someone who works in technical sales, I would like the program to be able to provide data visualizations that are appealing to customers.

We implemented several different data visualizations using Thymeleaf and charting libraries such as Highcharts.

Code and Test Metrics

Below you will see our screenshots for a static analysis of our code provided by CodeMR. As you can see we have solid results across the board in all categories. This lines up with the modular design of our code, which you can see in this <u>UML Class Diagram</u>. The utilization of the Model, View, Controller (MVC) pattern was particularly helpful for decoupling and adhering to the solid responsibility principle.





Testing

While we do have some unit tests for our classes, the most obvious and effective testing was done by visually inspecting our UI, to make sure our CRUD operations were functioning as expected. This approach follows the idea (detailed in the book *Software Engineering at Google*), which insisted that testing should focus on behaviors and not methods. We created some unit tests to ensure that our repository was working correctly, but focused on carefully inspecting the UI.

Final Product Documentation

A detailed set of instructions on how to set up and run our program is in our Readme on our <u>Github page</u>. There you will find our source code, how to get up and running and any known issues.