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GitHub Link: ClayCarp/SoftwareDesign-SpringBoot1Lab

High Level Purpose Statement:

My goal for this lab is to create a simple web application that uses Spring Boot with Java. I wish to create a simple application that tracks a person's desired tasks. Maven is used for the backend dependency manager for the server and frontend uses simple html and css code. This project will allow a user to keep track of simple tasks they wish to complete and are given a time to set a goal.

Experimental Design:

The goal for this lab is to make a simple task tracking system that uses Java classes to keep track of data entered. I will use the spring boot initializer to set up a Maven directory to begin the project. Then I will create a simple frontend design for the tracking system. Once the frontend is done I will begin to start adding the Java code to implement the basics of a task tracker.

Resources Available:

Spring Boot Initializer
YouTube Tutorials
Code from previous labs

Time Estimate:

I will spend about 4 hours on the project. I will follow along with YouTube videos to figure out how to build a simple web application that can keep track of people's tasks/goals.

Experiment Notes:

Spring Boot Initializer makes it very simple to set a directory to get started working with Java classes that correlate to web design. I wanted to keep the project simple and keep databases out of the mix. The Java classes do well with keeping track of the data using arrays. If I were to implement the project in a bigger proportion then I would most likely experiment using MongoDB.

Results:

The project was very simple and easy to create. My goal was to get something started so I could work on it in the future. By using spring boot with maven, I was able to set up the backend and implement the basic logic for tracking tasks and goals. The frontend, built with HTML and CSS, provided a simple user interface for interacting with the task tracker. I was able to test basic features like adding tasks and setting deadlines. While I kept the project minimal, it served

as a solid foundation. Overall, this initial version provided valuable insight into how spring boot works in web application development and helped me create a structure that I can expand on.

Consequences for the Future:

In the future, I can see myself implementing a Mongo database for bigger sizes of data. I also see myself adding more features to the website to expand on the design.

Steps For Setup:

1)
cd demo

2)
mvn clean install

3)
mvn spring-boot:run

4)
Go to web browser and type in http://localhost:8080/ once the code is running