UNIVERSITY OF THE PHILIPPINES MANILA
COLLEGE OF ARTS AND SCIENCES
DEPARTMENT OF PHYSICAL SCIENCES AND MATHEMATICS
MATHEMATICAL AND COMPUTING SCIENCES UNIT

Computer Science 121: Web Programming
Second Semester A.Y. 2023—2024

MACHINE PROBLEM
Personal Website

I. Overview

Create a website that serves as "getting to know me" site and a mini to-do list application. Each feature, as much as possible, should be placed on a different page

A. Features / Web Pages

Feature	Pts	Description
Homepage	5	**(5 points)** Be creative, think of what you can put on the homepage for the two people on your team.
To-do List Mini Application	35	The user must be able to access a to-do list page. Below are the functionalities: • **(5 points)** Add a to-do • **(5 points)** Delete a to-do • **(5 points)** Complete a to-do • **(10 points)** Add a label for the to-do, detected by adding a prefix by "#" (e.g. #acads, #chores) • **(5 points)** View the list of to-dos, completed to-dos • **(5 points)** Filter the list by label. The user must be able to see the list of created labels in order to filter.
Music Page	10	**(5 points)** A page must be available, showcasing each team member's current top 5 songs. Each song must show: The album artwork, the artist, the song title. **(5 points)** The album artwork (as url), the artist, the song title data should be fetched from your database, so that it can be dynamically updated if need be.
Hobbies Page	10	**(10 points)** A page must be available, showcasing each team member's hobbies or favorite things. You may put whatever media (text, videos, pictures) to showcase them.

II.Groupings

You are to group yourselves into 2 members, one group (first registration in canvas, first served) will have 3 members

You may add yourself in a group in Canvas. The groupings section should be visible for you under the People section.

III. Tech Stack

A. Frontend

At the core, you need to use HTML and CSS.

There is no required language for FE. However, it is recommended you use TypeScript, or JavaScript.

You may use any framework you are familiar with (React, Angular)

B. Backend

Students must use Java, along with Spring (Spring Boot, JPA)

C. Database

There is no specific DBMS required for this MP. Groups may choose any of the popular RDBMS languages available (e.g. MySQL, Oracle SQL, PostgreSQL), or even as basic as txt files can suffice, as long as you are able to properly store the data.

IV.Grading Rubrics

The grade for the machine problem will be computed as follows:

$$S + D + P = 100 \text{ points}$$

S: Source Code and Required Functionalities (60 points)

The functionalities specified in the Requirements section must be completed. The lecturer must be added as a "Developer" member on GitLab/ GitHub.

D: Webpage Design (20 points)

The site must be well-designed, and easy to navigate. Grading will be adjusted based on the presentations/outputs of the other teams.

P: Presentation (20 points)

For the Machine Problem presentation, the team will be presenting their output to their lecturer.

a. Source code (10 points)
   The compilation and running of the program must be shown.
b. The program (10 points)
   Demonstrate how the system implements each of the functionalities.

Deadline and Presentation for the project is on June 15, 2024.

REVISION AND UPDATE HISTORY

DATE	DESCRIPTION
06/05/2024	Added initial MP requirements.