CCAPDEV Term 3, AY 2024 – 2025

Machine Project – Project Specifications Document

Groupings: At most 4 members in a group

SPECIFICATIONS

For the entirety of the MCO, your task is to create a web application based on the given set of web applications described below. The list describes the minimum features required to be implemented for the project, but the group may (and is encouraged) to implement additional features and capabilities for their selected project.

The MCO will be split into three different phases, each with their own expectations on the project's progress. You may refer to the phases' respective documents for the specifics on its deliverables.

The project is at most done in groups of 4. During the development phases, copying other group's work is not allowed and is punishable by a grade of 0.0 for the entire CCAPDEV course. A discipline case will be filed with the Discipline Office in case of academic dishonesty.

Lab Reservation System

The following describes the features of a computer laboratory slot (seat) reservation web application. Groups must include at least three computer labs in the system. The minimum features required to be implemented for this project is as follows:

- *View Slot Availability*
    - A user may choose a computer lab and see the current available seats of the chosen lab. The user may opt to see the availability of the lab at other times for the next 7 days. A user must be a student user to reserve a seat.
    - Note: Users may see who reserved a seat, as long as the reservee did not make the reservation anonymously. Clicking on a user's name should link to that user's profile. Availability must also update periodically so that the user does not need to refresh every time.
- *Register*
    - A visitor must register if they want to reserve a lab slot. Here, a visitor must enter their DLSU email and a password. There should be 2 kinds of accounts, the student who can reserve lab slots, and the lab technician that can block a time slot for walk-in students.

- *Login*
    - After registering properly, a visitor may log-in. Upon logging in, the option to reserve a slot will be open. The user is given the option to be "remembered" by the website. When the user chooses this option, every log in and visit to the website will extend their "remember" period by 3 weeks.
- *Logout*
    - The user may log out from their account. This should cut short the "remember" period if it exists and clears any session-related data.
- *Reserve*
    - Students can reserve slots that have not yet been taken. Lab slots are in intervals of 30 minutes. The student also has the option whether to reserve anonymously or not. The student can reserve more than one slot, and all the lab slots will be made under one reservation. A student may not reserve a previously reserved slot.
- *Reserve for a student*
    - Lab technicians can make a reservation for walk-in students.
- *Remove reservation*
    - Lab technicians can remove reservations of students who do not show up within 10 minutes of the reservation. This facility is only available 10 minutes of the actual reservation time. This will cancel the whole reservation.
- *Edit reservation*
    - A student can edit reservations they previously made.
    - Lab technicians can edit any reservations.
- *See reservations*
    - A user may check their reservations. They can see details such as the seat number, the laboratory, the date and time of request, and the date and time of reservation.
- View / Edit User profile
    - Registered users may edit their own profile, which includes a profile picture and description. Additionally, the profile should also list the student's current reservations.
    - Users may also view another user's public profile, but they are not able to edit it.
- Delete User Account
    - Students have the option to delete their own user, ultimately deleting their account and cancelling any pending reservations they may have.
- *Search for users / free slots*
    - Users can view all the available slots given a provided date and time, and the lab.

- *General*
    - Good user experience. Visitors can easily navigate without help; all information is easy to access. Good visual design. Design suits the theme of the application and is cohesive and consistent across the whole application.
    - Good programming practice and proper structure of code. This may include following coding conventions and applying design patterns.

IMPORTANT: Note that for every instance of a create feature that adds data in the database of the web application, there should be corresponding features that will allow the corresponding user to read, update, and delete the data from the database. For example, if you have a feature that allows the user to create a post, the user should also be allowed to read/view the post, update/edit the post, and delete/remove the post.

WORKING WITH GROUPMATES

For this project, you are encouraged to work in groups of at most 4 members. Make sure that each member of the group has approximately the same amount of contribution for the project. Problems with groupmates must be discussed internally within the group, and if needed, with the lecturer.

USE OF AI

Following the policy of DLSU on use of AI, any AI generated output should be properly declared and commented on the source code and the student should not claim ownership of the output. Any AI generated code should still be clearly understood by the members of the group. AI generated output should only make up the minority of the output submitted as the objective of the project is for the students to learn how to code and not how to prompt AI. Specifically, AI generated code should not be used in the actual reservation and related processes of the system.

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Machine Project – Phase 1

Groupings: At most 4 members in a group
Deadline: June 18, 2025 (Wednesday) 06:00 PM
Percentage: 20%

Deliverables:
`zip` file containing all files for the machine project

Submission guidelines: Submit the zip file to AnimoSpace
Filename format: `CCAPDEV-Phase1-Group<#>.zip`

SPECIFICATIONS

Your task is to create the front-end portion of your selected web application.

Phase 1 – Front-End Development

- For this phase, the group is required to develop the front-end view of their selected web application using HTML, CSS, and JavaScript.
- Aside from base CSS and JavaScript, the group should also use interface libraries like Bootstrap, meteor, and React, among others.
- All views by all users should be visible and navigable from the index webpage. The group is required to implement the front-end view of all features described in the project specifications document. The back-end logic of the minimum features is not yet required to be implemented in this phase.
- Data may be hardcoded for now. There should be at least 5 sample data for each applicable feature. Data encoded should be life-like, thus no lorem ipsum generated paragraphs. For example, in the lab reservation web application, there should be at least 5 sample users, 5 sample laboratories, and 35 sample slots per laboratory in the web application.
- Students should collaborate through their group's GitHub repository. The repository will be used as reference in case problems arise with group collaborations.

WORKING WITH GROUPMATES

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the project. Problems with groupmates must be discussed internally within the group, and if needed, with the lecturer.

CRITERIA FOR GRADING

1. Completeness of output with respect to specifications given
2. Professionalism and attention to detail of visual components and presentation of the page
3. Correctness and ease of navigation of the site which includes choice of UI components and its suitability to the task at hand.
4. Content should be realistic and not seem like random data to approximate look and feel of a deployed application.
5. Proper use of third party libraries in the user interface.