



### **Pahiram Services**

Machine Project Specifications  
for the course on  
Web Application Development  
(CCAPDEV)

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April 5, 2020

## CCAPDEV MP Specifications

### PAHIRAM SERVICES

Rental system for lockers and equipment such as umbrellas, extension cords, VGA and HDMI cables, and markers.

### FEATURES

#### Register

A user must first register an account to be able to rent a locker and several equipment. Only Lasallians can create an account, and to ensure the credibility of the users, the web app integrates Google user authentication and restricts the domain email to *dlsu.edu.ph*, while also providing the ID number to complete the account registration.

#### Log in

The user logs in to the web app through his *dlsu.edu.ph* Google account. After, the user may begin to rent lockers and equipment, view pending rental requests, and manage ongoing rentals.

#### Log out

The user's session ends when he/she logs out.

#### View terms

This feature displays the *Terms and Conditions* (T&C) agreements associated with the locker and equipment rental services.

#### View about us

This feature shows the mission and vision statements of the web application.

In addition, it displays the list of NPM modules used in the creating the web app.

### Student Features

#### Locker rentals

A student can only have 1 active locker rental. He may select a small or big locker in any of the following locations listed in the web application. The locker feeds are color-coded to represent their respective statuses:

- vacant
- occupied
- uncleared
- broken

Upon reserving, the locker will be marked *occupied* and a *pending* reservation will be created. If the student fails to pay and submit the requirements on time, the reservation will be *denied* and the locker slot will be reopened, i.e. set to *vacant*.

#### Equipment rentals

A student can only have 2 active equipment reservations. Furthermore, each reservation corresponds to one equipment and the borrowing date is strictly the next school day upon

reserving. The equipment should be returned on or before 6pm of the day the equipment is borrowed. Students with unsettled clearance (reservations with *uncleared* status) cannot use this feature. The following penalty charges may apply:

- Php 50 - Returning of borrowed materials beyond 6:00 pm (Increments of Php20 per day).
- Php 150 - Damaged or lost equipment (A replacement will also be needed).

### **View current reservations and rentals**

The student may view his/her current locker reservations and equipment rentals in a neatly organized page. They are presented with the option to manage his/her pending requests. *Uncleared* reservations show the unsettled charges for damaged/loss equipment and late return of borrowed equipment. Also, remarks from the student representative can be viewed if applicable.

### **Cancel equipment reservation**

A student can cancel an equipment reservation anytime as long as the reservation status is *pending* or *for pickup*. Modifying the type of equipment to be borrowed in the reservation will need the student to cancel the reservation and create a new one.

### **Cancel locker reservation**

The student can cancel a locker reservation anytime as long as the reservation status is *pending* or *to pay*.

## **Administrator-Exclusive Features**

### **Set locker status**

Only the administrator can update the locker status to *vacant* or *broken*. As mentioned previously, the locker feeds are color-coded (see: **locker rentals**).

### **Manage reservations**

A reservation can have one of the following statuses:

- pending
- for pickup (strictly for equipment reservations)
- to pay (strictly for locker reservations)
- on rent
- denied
- unclear
- returned

The student representative can change the status of the reservations.

Additionally, a remark can be included in the reservation.

### **Update locker and equipment inventory**

Setting the status of a reservation to *denied* or *returned* (see: **manage reservations**) will automatically increment the equipment stock (for equipment reservations) or set locker status to *vacant* (for locker reservations).

### **Add panel**

The administrator can add a locker panel by inputting the panel type, locker range, and the building and floor in which the panel is placed.

### **Remove panel**

The administrator can delete a locker panel on a specific floor and building given that there are no occupied lockers in the panel.

### **Add new equipment**

The administrator can add new equipment by inputting the name, quantity, and image of the equipment.

### **Edit equipment stock**

The administrator can edit the quantity of the equipment. The change will only be applied if the quantity is set to a number greater than or equal to the number of equipment currently *on rent*.

### **Remove equipment**

The administrator can delete a specific type of equipment as long as no stocks are rented.

### **Removed features**

- Presence of floor layout to complement the live locker feed (*Reason: this would not allow for smooth addition/deletion of panels as it would require a person to manipulate an image file*).

### **General**

Good user experience. Visitors can easily navigate without help, all information are easy to access. Good visual design. Design suits the theme of the application, and is cohesive and consistent across the whole application.