

USER MANUAL

DEVELOPMENT OF AN ATTENDANCE MONITORING SYSTEM WITH A PORTABLE RFID-BASED LOGGING DEVICE

2023

—

**Amber Brinette Lim
Justin Stuart Hipolito
Kathryn Marie Sigaya**

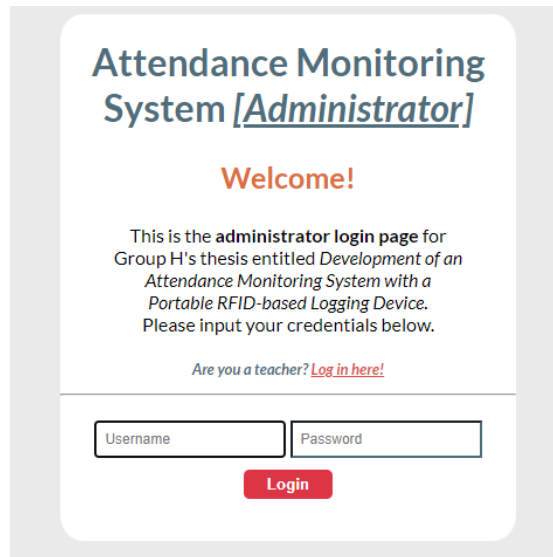
TABLE OF CONTENTS

USER MANUAL.....	1
TABLE OF CONTENTS	2
FOR ADMINISTRATORS.....	3
Creating an Account	3
Changing Account Passwords.....	5
Dropping and Exporting Databases	7
Viewing Teacher Attendance	9
FOR TEACHERS: A Guide to Using the Attendance Logging and Monitoring System	11
Uploading Class Lists	11
Taking Attendance.....	13
Teacher Enrollment.....	13
Class Attendance	14
School Event.....	17
Monitoring Attendance	19
Attendance Monitoring	19
Modifying Attendance Status	21
Exporting.....	22
Changing Password	22
Logging out.....	22
TO CANVAS: Linking the Web Application to your Course	23
External App.....	23
External URL.....	25

FOR ADMINISTRATORS

Creating an Account

1. Access the web application using a browser on the local server.
2. Log in to the administrator account.



The screenshot shows the login interface for the Attendance Monitoring System Administrator. At the top, the title "Attendance Monitoring System [Administrator]" is displayed. Below it is a "Welcome!" message. A paragraph explains that this is the administrator login page for Group H's thesis and requests credentials. A link "Are you a teacher? Log in here!" is provided. At the bottom, there are input fields for "Username" and "Password", followed by a red "Login" button.

Attendance Monitoring System [Administrator]

Welcome!

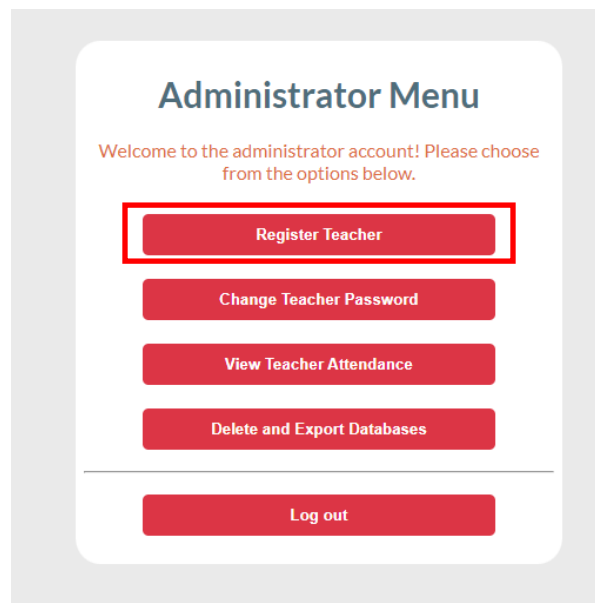
This is the administrator login page for Group H's thesis entitled *Development of an Attendance Monitoring System with a Portable RFID-based Logging Device*. Please input your credentials below.

Are you a teacher? [Log in here!](#)

Username Password

Login

3. Select the "Register Teacher" button.



The screenshot shows the Administrator Menu. It features a title "Administrator Menu" and a welcome message. Below the message are five red buttons: "Register Teacher", "Change Teacher Password", "View Teacher Attendance", "Delete and Export Databases", and "Log out". The "Register Teacher" button is highlighted with a red rectangular border.

Administrator Menu

Welcome to the administrator account! Please choose from the options below.

Register Teacher

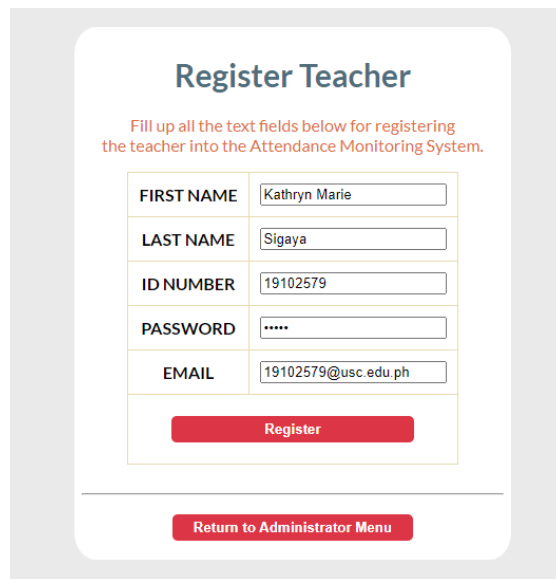
Change Teacher Password

View Teacher Attendance

Delete and Export Databases

Log out

4. Fill out all the necessary information.



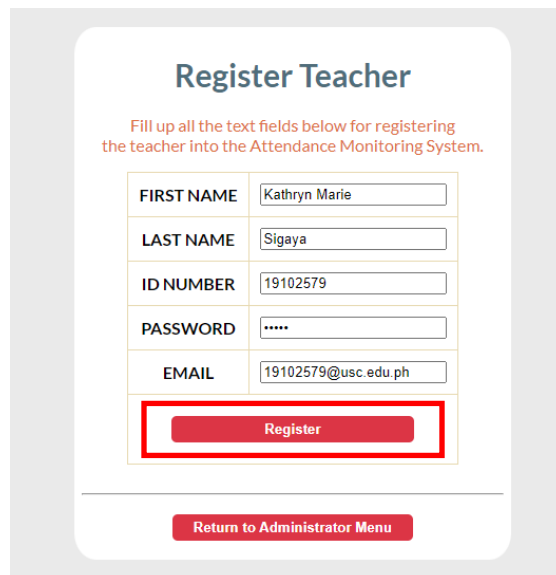
The screenshot shows a web form titled "Register Teacher". Below the title is a red instruction: "Fill up all the text fields below for registering the teacher into the Attendance Monitoring System." The form contains five input fields, each with a label and a value: "FIRST NAME" with "Kathryn Marie", "LAST NAME" with "Sigaya", "ID NUMBER" with "19102579", "PASSWORD" with "****", and "EMAIL" with "19102579@usc.edu.ph". A red "Register" button is positioned below the fields. At the bottom of the form is a red button labeled "Return to Administrator Menu".

FIRST NAME	Kathryn Marie
LAST NAME	Sigaya
ID NUMBER	19102579
PASSWORD	****
EMAIL	19102579@usc.edu.ph

Register

Return to Administrator Menu

5. Click the “Register” button.



This screenshot is identical to the one above, but a red rectangle is drawn around the "Register" button to indicate it should be clicked.

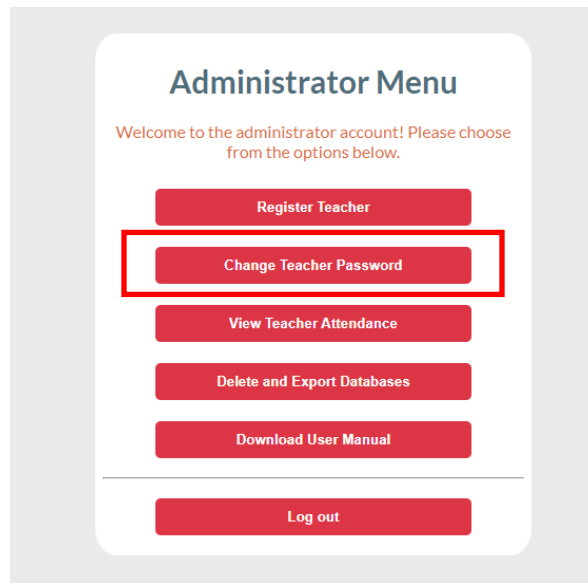
FIRST NAME	Kathryn Marie
LAST NAME	Sigaya
ID NUMBER	19102579
PASSWORD	****
EMAIL	19102579@usc.edu.ph

Register

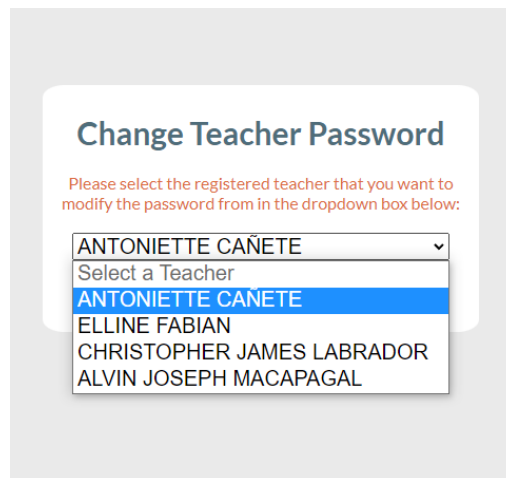
Return to Administrator Menu

Changing Account Passwords

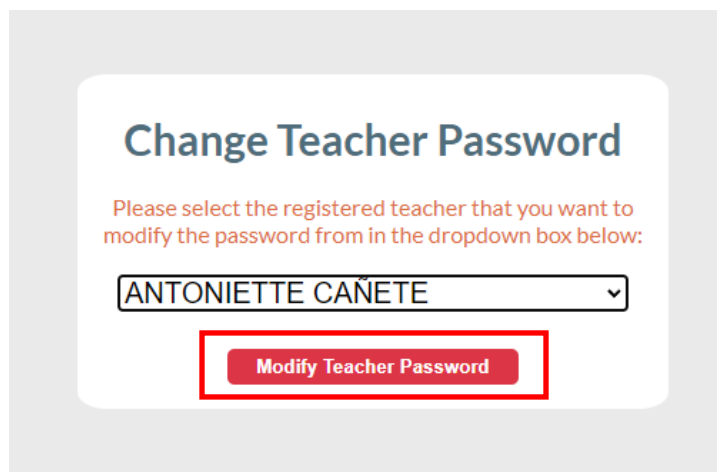
1. Access the web application using a browser on the local server.
2. Log in to the administrator account.
3. Select the “Change Teacher Password” Option on the Administrator menu.



4. Select the teacher whose password you would like to change.

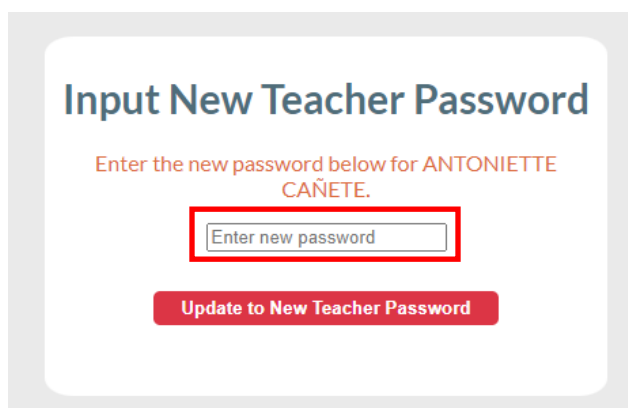


5. Click the “Modify Teacher Password” button.



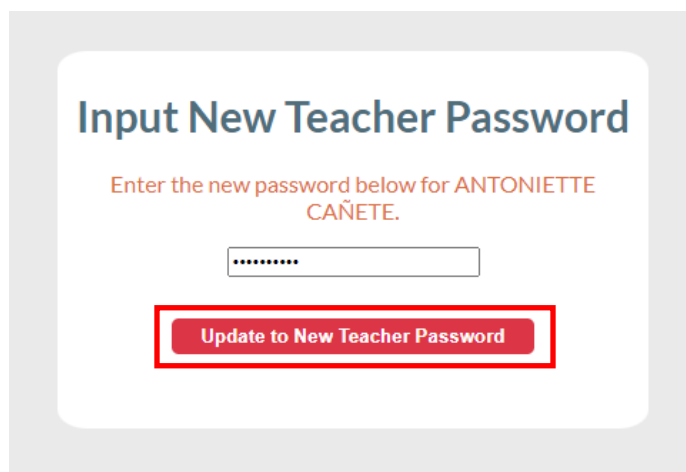
The screenshot shows a web form titled "Change Teacher Password". Below the title is a red instruction: "Please select the registered teacher that you want to modify the password from in the dropdown box below:". There is a dropdown menu with "ANTONIETTE CAÑETE" selected. Below the dropdown is a red button labeled "Modify Teacher Password", which is highlighted with a red rectangular box.

6. Enter the teacher’s new password on the input field.



The screenshot shows a web form titled "Input New Teacher Password". Below the title is a red instruction: "Enter the new password below for ANTONIETTE CAÑETE.". There is a text input field with the placeholder text "Enter new password", which is highlighted with a red rectangular box. Below the input field is a red button labeled "Update to New Teacher Password".

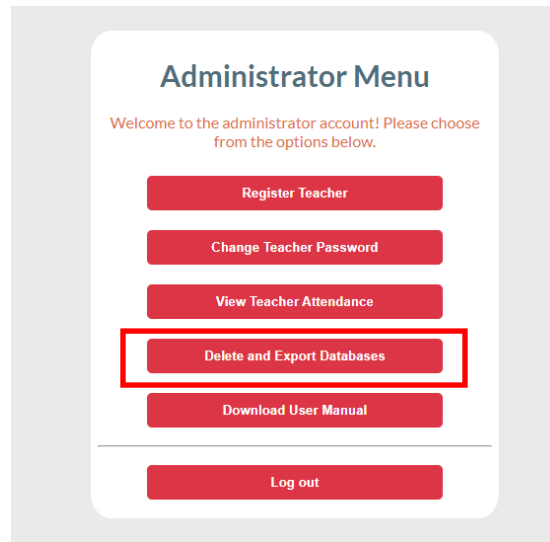
7. Click the “Update to New Teacher Password” button.



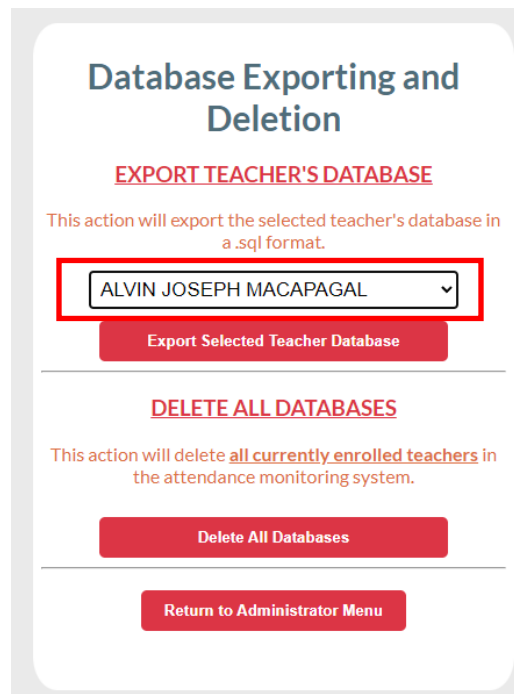
This screenshot is similar to the previous one, showing the "Input New Teacher Password" form. The text input field now contains a series of dots, indicating that a password has been entered. The red button "Update to New Teacher Password" is highlighted with a red rectangular box.

Dropping and Exporting Databases

1. Access the web application using a browser on the local server.
2. Log in to the administrator account.
3. Select the “Delete and Export Databases” Button.



4. For exporting a registered teacher's database, select the teacher at the dropdown menu.



5. Click the “Export Selected Teacher Database” button.

The screenshot shows a web interface titled "Database Exporting and Deletion". It has two main sections. The first section, "EXPORT TEACHER'S DATABASE", includes a dropdown menu with "ALVIN JOSEPH MACAPAGAL" selected and a red button labeled "Export Selected Teacher Database" which is highlighted with a red rectangle. The second section, "DELETE ALL DATABASES", includes a red button labeled "Delete All Databases". At the bottom is a red button labeled "Return to Administrator Menu".

Database Exporting and Deletion

EXPORT TEACHER'S DATABASE

This action will export the selected teacher's database in a .sql format.

ALVIN JOSEPH MACAPAGAL

Export Selected Teacher Database

DELETE ALL DATABASES

This action will delete all currently enrolled teachers in the attendance monitoring system.

Delete All Databases

Return to Administrator Menu

6. For deleting all registered teachers' databases in the web application, click “Delete All Databases” button.

This screenshot is identical to the previous one, showing the "Database Exporting and Deletion" interface. In this instance, the red button labeled "Delete All Databases" in the "DELETE ALL DATABASES" section is highlighted with a red rectangle.

Database Exporting and Deletion

EXPORT TEACHER'S DATABASE

This action will export the selected teacher's database in a .sql format.

ALVIN JOSEPH MACAPAGAL

Export Selected Teacher Database

DELETE ALL DATABASES

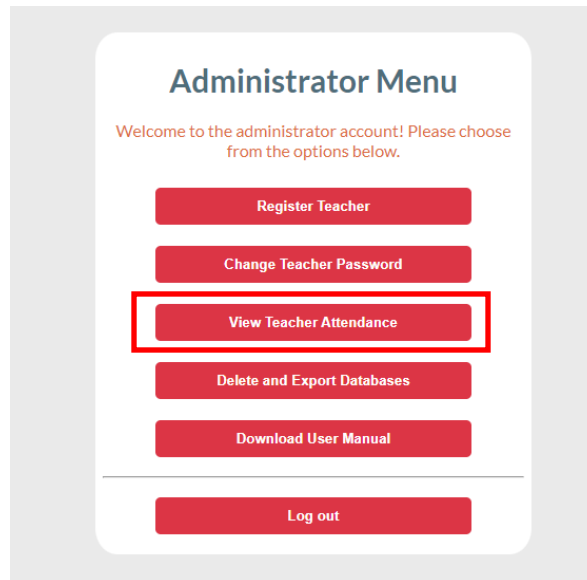
This action will delete all currently enrolled teachers in the attendance monitoring system.

Delete All Databases

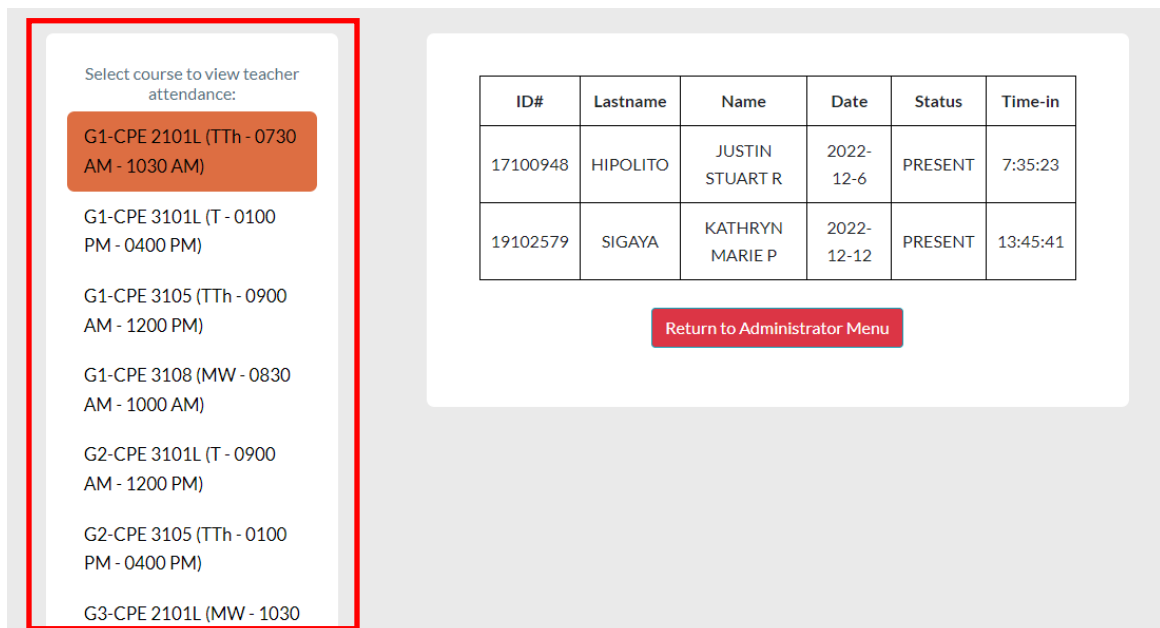
Return to Administrator Menu

Viewing Teacher Attendance

1. Access the web application using a browser on the local server.
2. Log in to the administrator account.
3. Click the “View Teacher Attendance” button.



4. Select the class you wish to check the teacher’s attendance of via the left side bar.



5. The teacher's attendance for the selected class (orange highlighted) will be displayed on the right side of the screen.

Select course to view teacher attendance:

G1-CPE 2101L (TTh - 0730 AM - 1030 AM)

G1-CPE 3101L (T - 0100 PM - 0400 PM)

G1-CPE 3105 (TTh - 0900 AM - 1200 PM)

G1-CPE 3108 (MW - 0830 AM - 1000 AM)

G2-CPE 3101L (T - 0900 AM - 1200 PM)

G2-CPE 3105 (TTh - 0100 PM - 0400 PM)

G3-CPE 2101L (MW - 1030

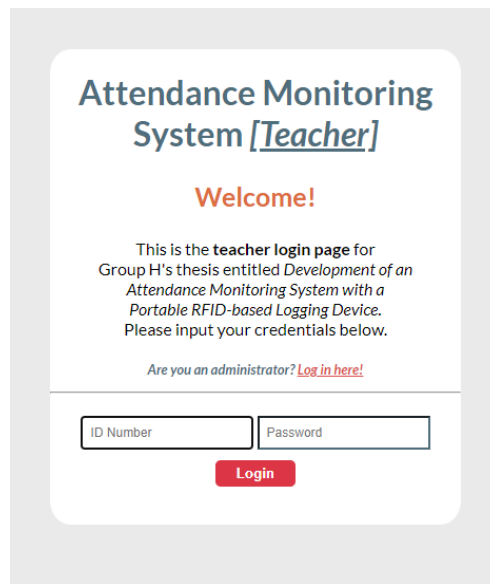
ID#	Lastname	Name	Date	Status	Time-in
	CANETE	ANTONINETTE M	2022-10-18	PRESENT	13:13:13
19101182	LIM	AMBER BRINETTE U	2022-11-15	PRESENT	13:24:24
19101182	LIM	AMBER BRINETTE U	2022-12-6	PRESENT	13:10:40

[Return to Administrator Menu](#)

FOR TEACHERS: A Guide to Using the Attendance Logging and Monitoring System

Uploading Class Lists

1. Access the web application using a browser on the local server.
2. Log in to the user account using the credentials given by the administrator.



The screenshot shows the 'Attendance Monitoring System [Teacher]' login interface. It features a 'Welcome!' message, a paragraph explaining it's the teacher login page for Group H's thesis, and a prompt to enter credentials. Below the text are two input fields labeled 'ID Number' and 'Password', and a red 'Login' button. A link for administrators is also present.

Attendance Monitoring System [Teacher]

Welcome!

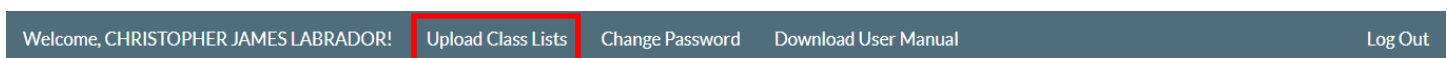
This is the **teacher login page** for Group H's thesis entitled *Development of an Attendance Monitoring System with a Portable RFID-based Logging Device*. Please input your credentials below.

Are you an administrator? [Log in here!](#)

ID Number Password

Login

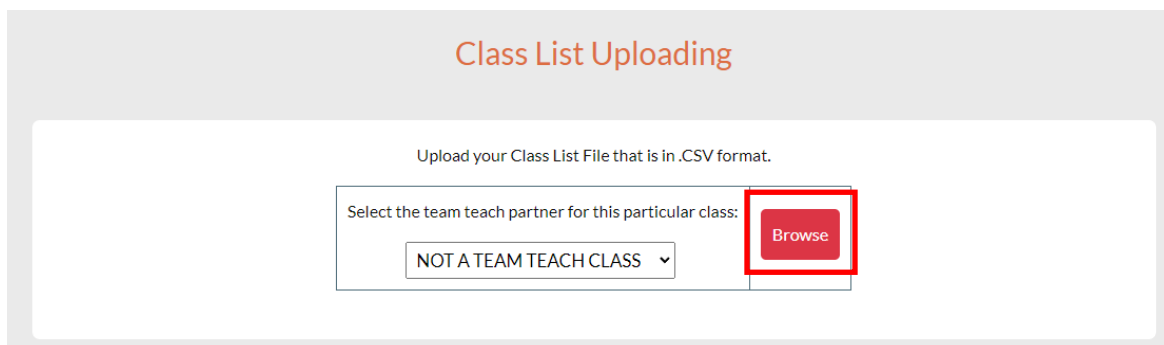
3. Click on “Upload Class Lists” found on the top navigation bar.



The screenshot shows a dark blue navigation bar with the text 'Welcome, CHRISTOPHER JAMES LABRADOR!' on the left. In the center, 'Upload Class Lists' is highlighted with a red box. To its right are 'Change Password' and 'Download User Manual'. On the far right is a 'Log Out' link.

Welcome, CHRISTOPHER JAMES LABRADOR! Upload Class Lists Change Password Download User Manual Log Out

4. Click on “Browse” and upload a .CSV file of your desired class list (**NOTE: the class list must be exported directly from USC ISMIS.**)



The screenshot shows the 'Class List Uploading' section. It instructs the user to upload a .CSV file. Below this is a form with a label 'Select the team teach partner for this particular class:', a dropdown menu currently showing 'NOT A TEAM TEACH CLASS', and a red 'Browse' button highlighted with a red box.

Class List Uploading

Upload your Class List File that is in .CSV format.

Select the team teach partner for this particular class:

NOT A TEAM TEACH CLASS Browse

5. Select whether the class is handled individually or as a team teach class via the dropdown menu.

Class List Uploading

Upload your Class List File that is in .CSV format.

Select the team teach partner for this particular class:

NOT A TEAM TEACH CLASS ▼

NOT A TEAM TEACH CLASS

ANTONETTE CANETE

ELLINE FABIAN

ALVIN JOSEPH MACAPAGAL

Browse

6. Set your personal configurations for the attendance logging process to be done on the portable device.

Set Personal Configurations

This is where you will configure your uploaded class list settings for the Attendance Logging Device to use. A Comma-Separated Values file (.CSV) will be generated at the set directory after you click the [Upload Class List and Set Configurations](#) button below.

MARK TEACHER ATTENDANCE If you wish to mark your personal attendance based on the <u>time of your class</u> , input YES. If you wish for your attendance to always be <u>PRESENT</u> regardless of the time from the start of your class, input NO.	<input type="text" value="NO"/> The default selection for this setting is <u>NO</u> .
TEACHER LATE If MARK TEACHER is set as YES, what time would you be marked LATE? The time is set in minutes.	<input type="text" value="10"/> The default time for this setting is <u>10</u> minutes.
TEACHER ABSENT If MARK TEACHER is set as YES, what time would you be marked ABSENT? The time is set in minutes.	<input type="text" value="15"/> The default time for this setting is <u>15</u> minutes.
BASE STUDENT ATTENDANCE ON TEACHER TAP If you would like your students' attendance status (PRESENT, LATE, ABSENT) to be based on the class start time, input NO. If you want their attendance to be based on your initial ID tap on the device, input YES.	<input type="text" value="YES"/> The default selection for this setting is <u>YES</u> .
STUDENT LATE How many minutes from the start of attendance until the student is marked as <u>LATE</u> ? The time is set in minutes.	<input type="text" value="15"/> The default time for this setting is <u>15</u> minutes.
STUDENT ABSENT How many minutes from the start of attendance until the student is marked as <u>ABSENT</u> ? The time is set in minutes.	<input type="text" value="30"/> The default time for this setting is <u>30</u> minutes.

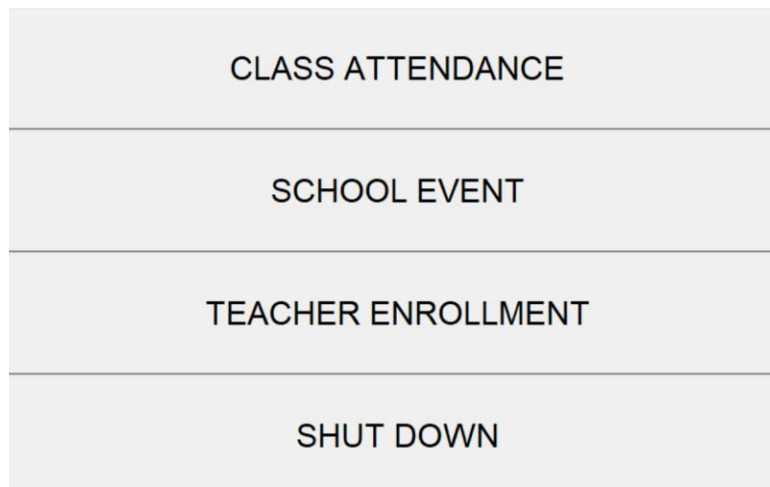
7. Select the “Upload Class List and Set Configurations” button at the bottom of the page to complete the process.

Upload Class List and Set Configurations

Taking Attendance

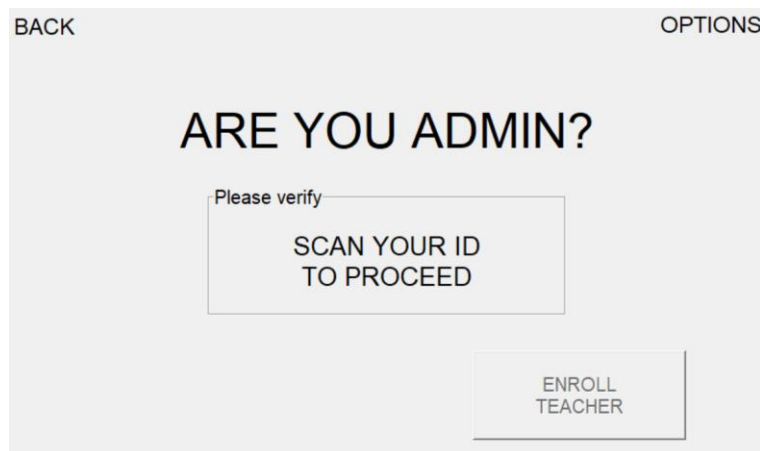
(Note: Make sure that both the local server and the portable device are turned on and connected to the internet to ensure the synchronization of necessary files for the attendance taking process.)

1. Turn on both switches found at the side of the portable device.
2. Wait for the device to boot.
3. Select the operation you wish to perform.

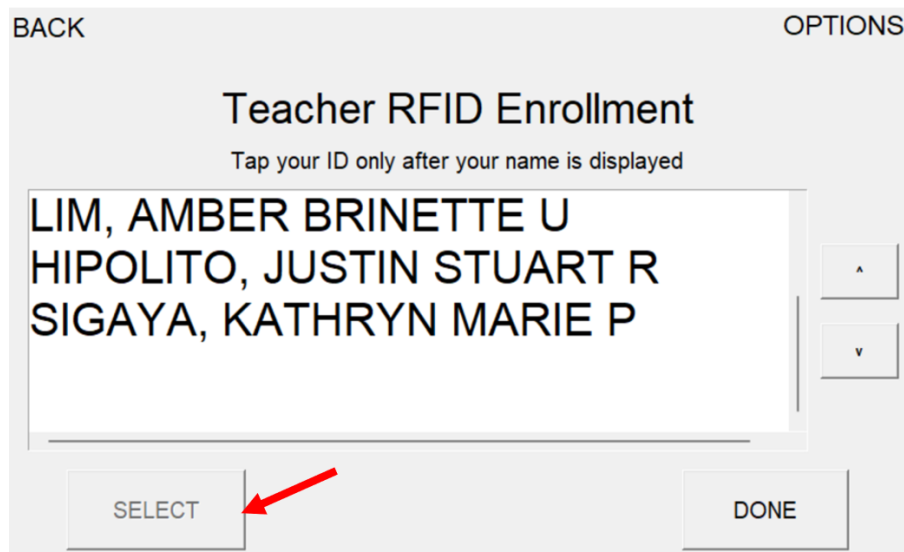


Teacher Enrollment

1. The administrator must tap their USC ID on the scanner found on the right side of the LCD screen to begin teacher enrollment.



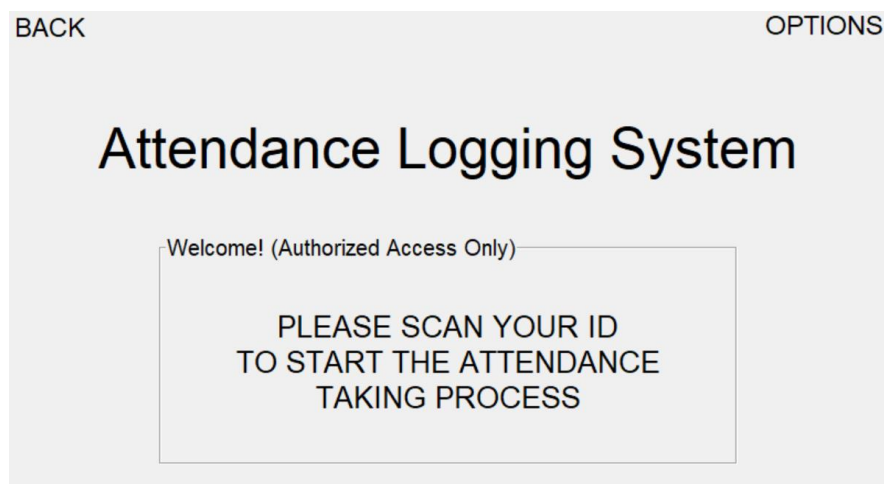
2. After clicking “Enroll Teacher”, select the name of the teacher you wish to enroll into the database and click on the button found on the lower left corner of the screen. The text will change to “Scan” or “Overwrite” depending on whether the teacher’s ID has already been enrolled or not.



3. When the enrollment of teachers is finished, select “Done”.

Class Attendance

1. The screen will display a prompt for authorized users to tap their ID on the scanner.



2. Select the class you wish to take attendance of. Else, select the “Substitute Teacher” option.

A screenshot of a user interface with a light gray background. At the top left is the text "BACK" and at the top right is "OPTIONS". In the center, the text "HELLO USER" is displayed above "Please select your class:". Below this is a list box containing three items: "CPE TEST_G1_T - 0100 PM - 0400", "CPE TEST_G2_Th - 0130 PM - 0430", and "CPE TEST_G3_MWF- 0730 PM - 0800". To the right of the list box are two small buttons labeled "A" and "V". Below the list box is a button labeled "SUBSTITUTE TEACHER".

3. If not a substitute teacher, skip to Step 4. Else, select the teacher you wish to substitute. After selecting the teacher, go back to Step 2.

A screenshot of a user interface with a light gray background. At the top left is the text "BACK" and at the top right is "OPTIONS". In the center, the text "HELLO USER" is displayed above "Please select who you are substituting:". Below this is a list box containing three items: "LIM, AMBER BRINETTE U", "HIPOLITO, JUSTIN STUART R", and "SIGAYA, KATHRYN MARIE P". To the right of the list box are two small buttons labeled "A" and "V".

4. Verify the details of the class selected and select either “Student Enrollment” or “Attendance Taking”.

BACK OPTIONS

Please verify your selection:

COURSE CODE: CPE TEST
GROUP: G3
SCHEDULE: MWF- 0730 PM - 0830 PM

STUDENT ENROLLMENT ATTENDANCE TAKING

Student Enrollment

5. Select the name of the student you wish to enroll into the database and click on the button found on the lower left corner of the screen. The text will change to “Scan” or “Overwrite” depending on whether the student’s ID has already been enrolled or not.
6. Repeat Step 5 until all students are enrolled.
7. The “Create Attendance Log” option allows the user to generate an attendance log file based on the student's enrollment process. If an attendance log is not needed, click “Done”.

BACK OPTIONS

Student RFID Enrollment

Tap your ID only after your name is displayed

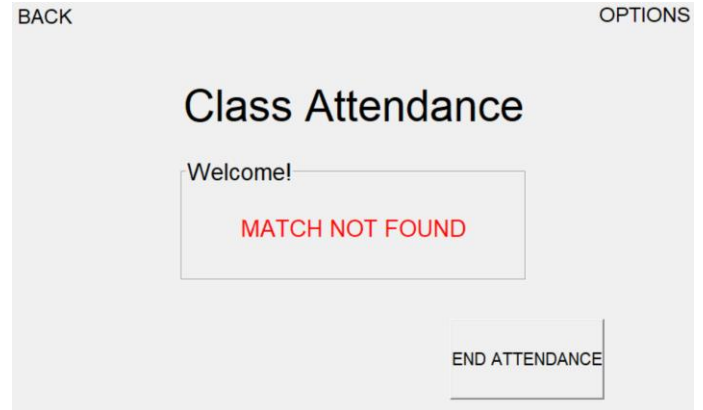
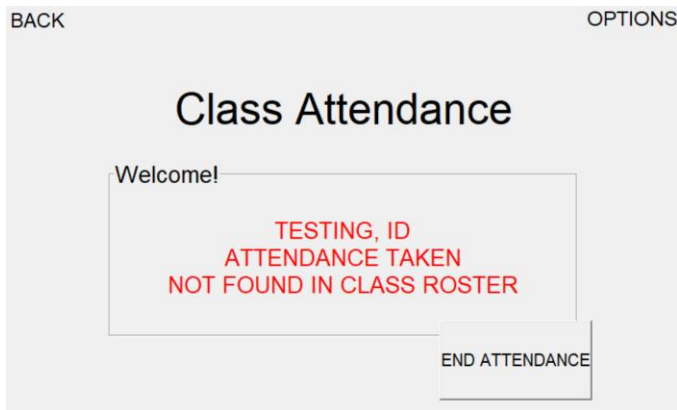
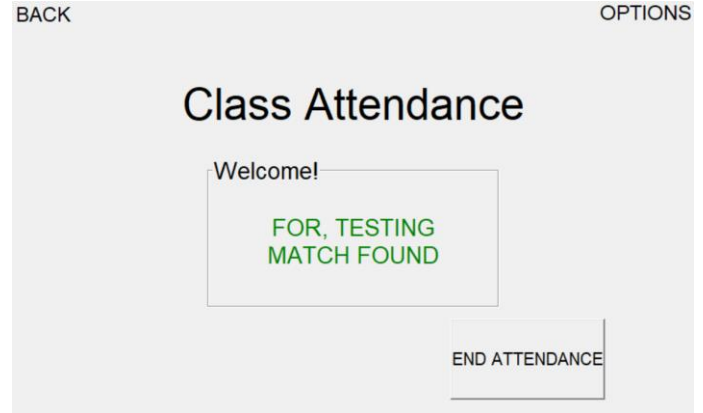
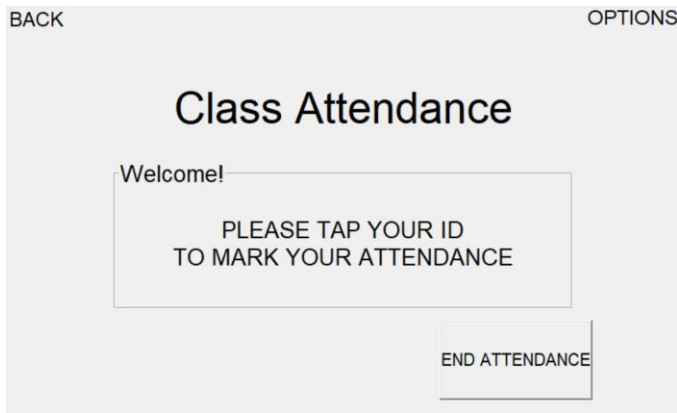
FOR, TESTING
DUMMY ID, TEST
MOCK, TRIAL
TESTING, ID

5 6

SELECT CREATE ATTENDANCE LOG DONE

Attendance Taking

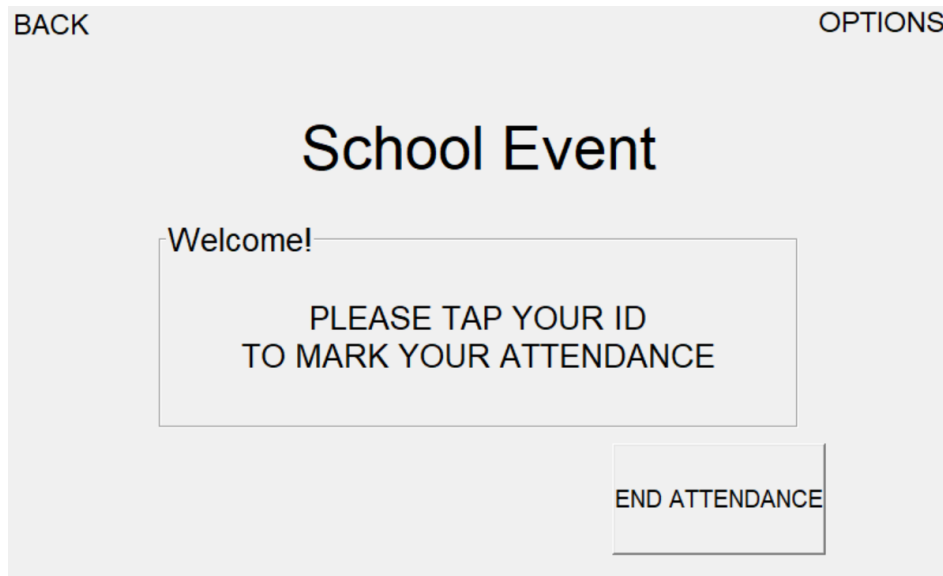
8. Allow students to tap their ID on the scanner to begin the attendance taking process. The display will change momentarily to indicate the detection of the student's ID.



9. Repeat Step 5 until all students have scanned.
10. The final attendance log files will be created once the “End Attendance” button has been clicked. Otherwise, the class will automatically end based on the official end time of the class.

School Event

1. The screen will display a prompt for authorized users to tap their ID on the scanner.
2. Once verified, students can begin tapping their IDs on the device for attendance taking.

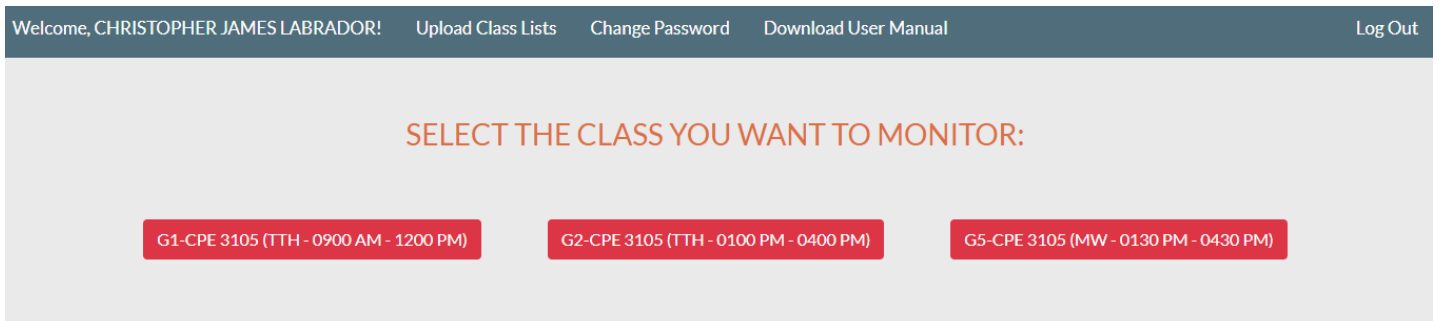


3. Repeat Step 2 until all students have scanned.
4. Clicking the “End Attendance” button will stop the attendance taking process and create the attendance log file for the school event.

Monitoring Attendance

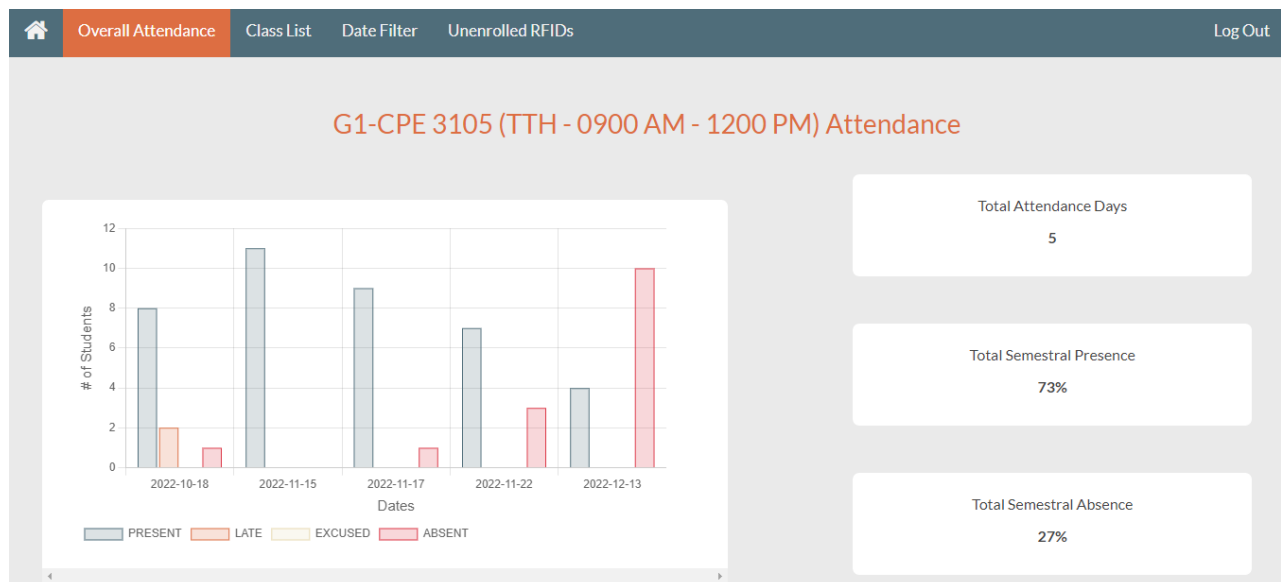
Attendance Monitoring

1. Access the web application using a browser on the local server.
2. Log in to the user account using the credentials given by the administrator.
3. Select the class whose attendance you would like to monitor.



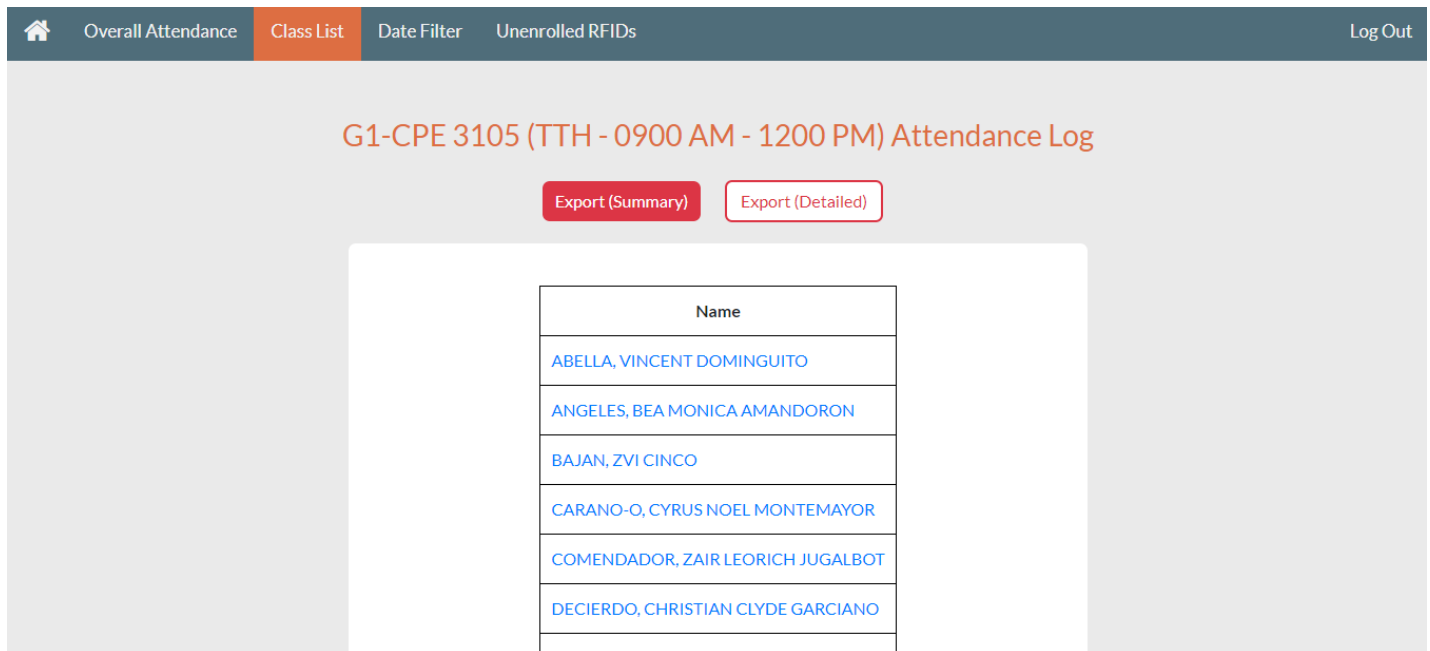
Overall Attendance

- To have an overview of the attendance taken from the start to present, select “Overall Attendance” on the top navigation bar.



Class List

- The “Class List” option displays the list of students belonging to the selected class. Individual student monitoring can be done if you click on the name found on the list.



The screenshot shows the 'Class List' tab selected in the navigation bar. The page title is 'G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance Log'. Below the title are two buttons: 'Export (Summary)' and 'Export (Detailed)'. A table displays a list of student names, each as a clickable link.

Name
ABELLA, VINCENT DOMINGUITO
ANGELES, BEA MONICA AMANDORON
BAJAN, ZVI CINCO
CARANO-O, CYRUS NOEL MONTEMAYOR
COMENDADOR, ZAIR LEORICH JUGALBOT
DECIERDO, CHRISTIAN CLYDE GARCIANO
REYES, MARIEL GARCIA

Date Filter

- The “Date Filter” option allows the user to filter out the attendance days based on a range of selected dates.



The screenshot shows the 'Date Filter' tab selected in the navigation bar. The page title is 'G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance Log'. Below the title, there are two date input fields labeled 'FROM:' and 'TO:', each with a calendar icon. A 'Filter' button is positioned to the right of the 'TO:' field.

Unenrolled RFIDs

- The “Unenrolled RFIDs” option displays the list of students who tapped their IDs on the device during attendance taking, but whose RFIDs were not enrolled into the database.

- The user can update the unknown RFID tags using the edit button found on the lower right portion of the screen.
- To edit, the user needs to select the RFID and input the necessary details (ID number, surname, and name) in order to modify the data stored in the database.

The screenshot shows a web interface with a navigation bar at the top containing a home icon, 'Overall Attendance', 'Class List', 'Date Filter', 'Unenrolled RFIDs' (highlighted in orange), and a 'Log Out' button. Below the navigation bar, the page title is 'G1-CPE 3105 (TTH - 0900 AM - 1200 PM) Attendance'. On the left, there is a date selection dropdown labeled 'Select date to view details' with '2022-12-13' selected. To the right, a table displays attendance data for the selected date.

RFID	Date	Status	Time-in
154190923389	2022-12-13	PRESENT	11:16:13
298984955491	2022-12-13	PRESENT	11:15:32
794970462167	2022-12-13	PRESENT	11:15:44
864424597674	2022-12-13	PRESENT	11:16:1

A red circular edit button with a pencil icon is located at the bottom right of the table area.

Modifying Attendance Status

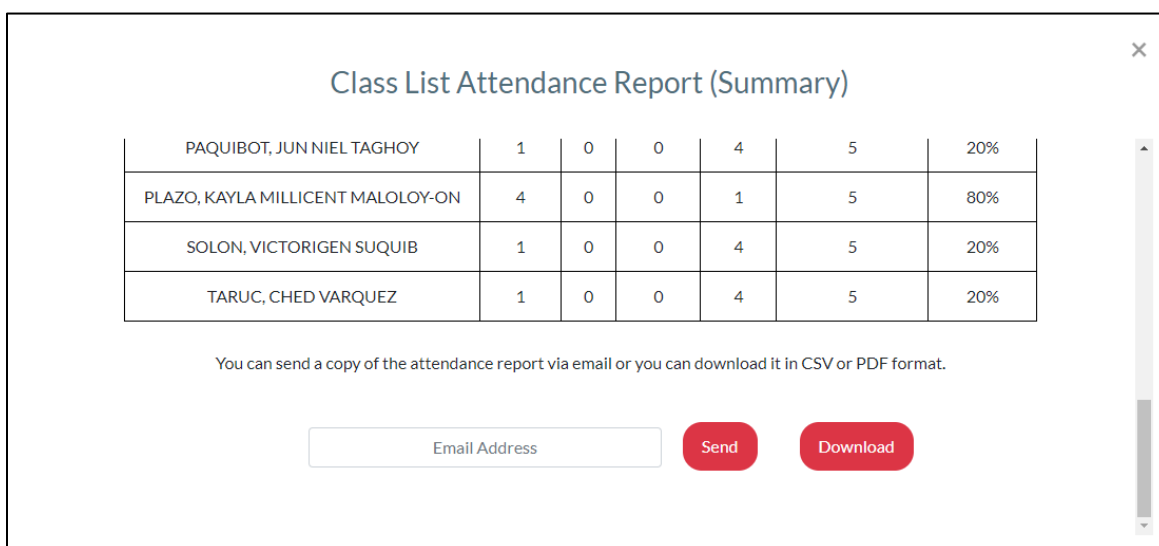
1. Navigate to the “Class List” page and select the student of your choice.
2. Click on the edit button found on the lower right portion of the screen.
3. Pick the date of attendance and select the new attendance status that you want to modify the previous one into. There are 4 options to be chosen from: present, late, excused, and absent.

The form is a simple interface for updating attendance. It contains two dropdown menus. The first is labeled 'Date' and has 'Select Date' as its placeholder text. The second is labeled 'Status' and has 'Select Status' as its placeholder text. Below these two dropdowns is a red button with the text 'UPDATE' in white capital letters.

Exporting

(Note: The exporting option is available in 3 pages: Class List, Date Filter, and in the individual student monitoring page.)

1. To export, click on the “Export” button. The reports generated can either be a summarized or detailed version, depending on the user’s choice.
2. At the bottom of a pop-up window, the user can decide to send the generated report via email or through local download.



PAQUIBOT, JUN NIEL TAGHOY	1	0	0	4	5	20%
PLAZO, KAYLA MILLICENT MALOLOY-ON	4	0	0	1	5	80%
SOLOON, VICTORIGEN SUQUIB	1	0	0	4	5	20%
TARUC, CHED VARQUEZ	1	0	0	4	5	20%

You can send a copy of the attendance report via email or you can download it in CSV or PDF format.

Email Address

3. After selecting the exporting option, the user will be prompted to decide what file type to send the report as. File types available are .PDF and .CSV.

Changing Password

1. Contact the administrator to change your account password.

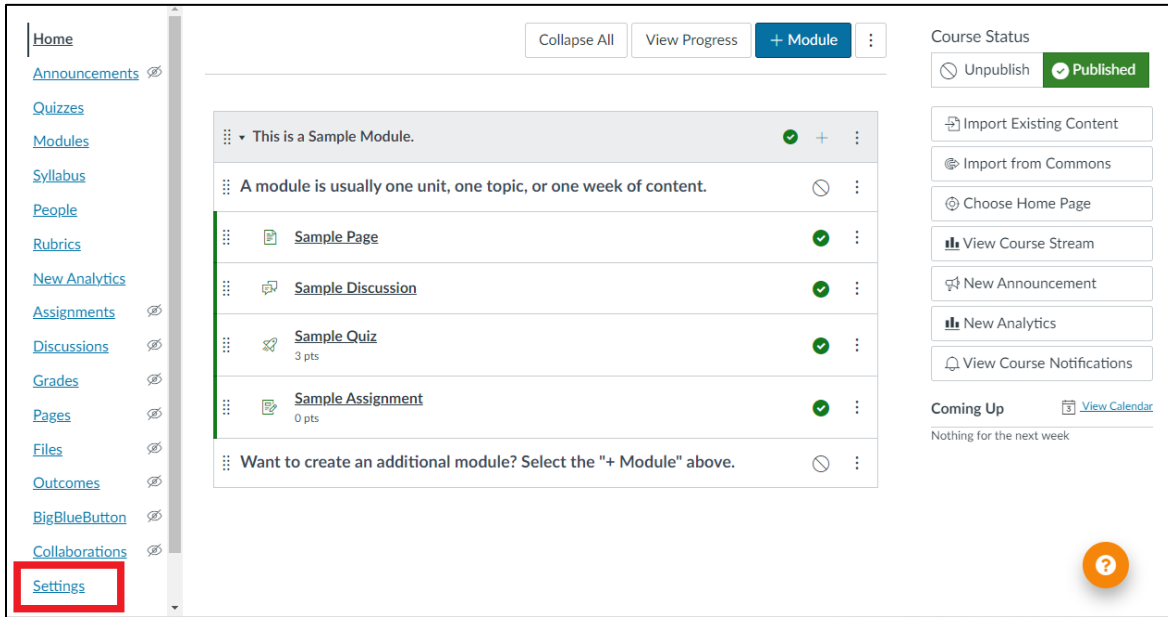
Logging out

1. To log out of your account, simply click on the “Log out” option found on the right side of the top navigation bar.

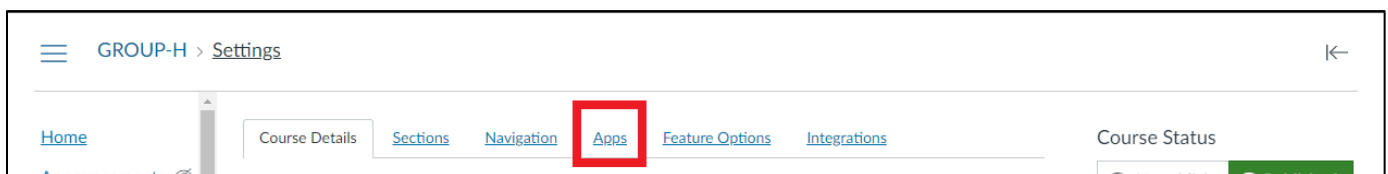
TO CANVAS: Linking the Web Application to your Course

External App

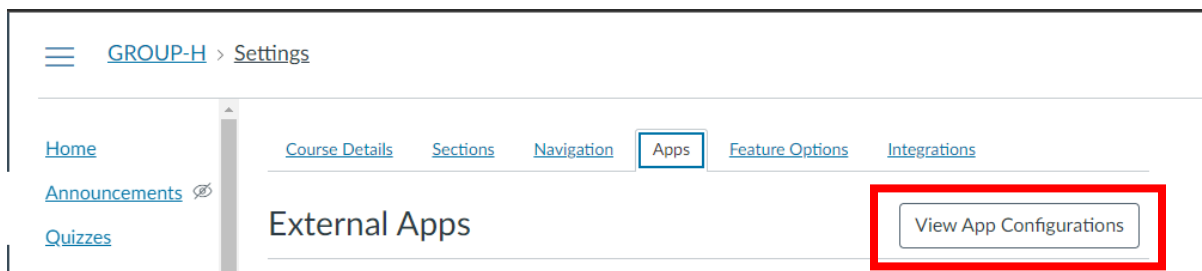
1. To make the Web Application appear on the selection tab of your course, first select the “Settings” tab in said course.



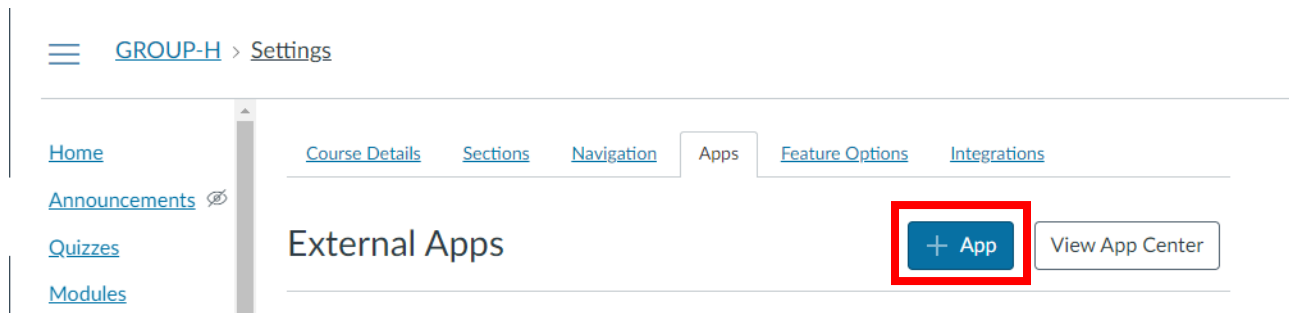
2. Select “App” tab inside Settings.



3. Select “View App Configurations”.



4. Click “+ App”.



5. Fill out the boxes shown below and submit.

Add App

×

Configuration Type

Manual Entry

Name

Attendance Monitoring System

Consumer Key

secret

Shared Secret

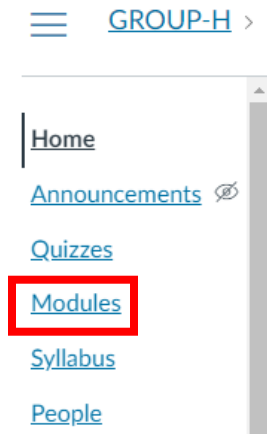
secret

Launch URL

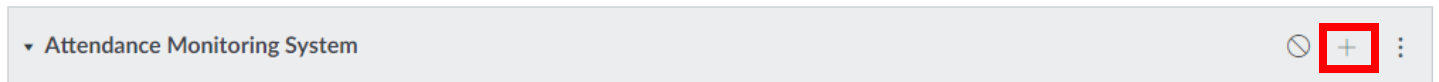
http://localhost/teacher-login.php

External URL

1. Select the “Modules” tab in your course.



2. Select the “+” button.



3. Fill out the boxes shown below and click “Add Item”.

Add Item to Attendance Monitoring System

Add External URL to Attendance Monitoring System

Enter a URL and page name to add a link to any website URL to this module.

URL: http://localhost/teacher-login.ph

Page Name: Attendance Monito

☐ Load in a new tab

Indentation: Don't Indent

Cancel

Add Item