

# C597: Employee Attendance Management System

**Submitted by:**

Cantillo, Daniela M.

Escobar, Guirald Malone E.

Niones, Misty Shaine S.

Riosa, Joseph B.

**BS Information Technology 3A**

**Submitted to:**

Dr. Jayvee Christopher N. Vibar

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# 1 INTRODUCTION

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The **Employee Attendance Management System (EAMS)** is a comprehensive solution designed to automate and simplify the process of tracking employee attendance. This system aims to ensure accurate record-keeping of employee working hours, thereby enhancing productivity and operational efficiency.

EAMS is built with the understanding that every minute counts in an organization. It provides real-time insights into the attendance of employees, enabling managers to make informed decisions. The system can handle various attendance policies and is flexible enough to accommodate the unique needs of different organizations.

Moreover, EAMS reduces the administrative burden associated with manual attendance tracking. Automating this process, minimizes errors, ensures compliance, and saves valuable time that can be better utilized for strategic tasks.

In essence, the Employee Attendance Management System is a vital tool for businesses seeking to optimize their workforce management, improve accountability, and boost overall performance.

## 2 SYSTEM CAPABILITIES

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The **Employee Attendance Management System (EAMS)** is a comprehensive tool designed to streamline and automate the process of tracking employee attendance. Here's a detailed report on its capabilities:

### MAIN FEATURES

**Attendance System:** The core of EAMS, it maintains an attendance table that records the attendance data of all employees.

**Attendance Sub-System:** This includes

**Admin Login:** Allows administrators to access the system.

**Admin System Menu:** Provides administrators with various options to manage the system.

**Employee Login:** Allows employees to log into the system.

**Employee Maintenance:** Enables administrators to manage employee data.

**Log-in Report:** Generates a report of employee logins and shows the current number of online employees.

**Daily Attendance Report:** Provides a daily report of employee attendance. Users can export a copy of the report.

**Monthly Attendance Report:** Offers a monthly overview of employee attendance. Users can export a copy of the report.

**Employee Login Sub-System:** A dedicated system for managing employee logins.

### PAGES

The EAMS includes the following pages:

**Main Landing Page:** Contains two buttons for admin and employee logins.

**Admin Login Page:** Allows administrators to log into the system.

**Log-in Report:** Displays a report of employee logins and the current number of online employees

**Employee Maintenance Page:** Enables administrators to manage employee data. Administrators can view, create, edit, and delete employees.

**Daily Attendance Report:** Shows a daily report of employee attendance. Users can export a copy of the report.

**Monthly Attendance Report:** Provides a monthly overview of employee attendance. Users can export a copy of the report.

**Employee Attendance System:** The main page for employees to check their attendance.

## **NAMING CONVENTIONS**

The system uses consistent naming conventions. For instance, 'first-name' is used for files and tables, while '*first\_name*' is used for variables, classes, ids, elements, and attributes.

### 3 WORK BREAKDOWN STRUCTURE

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#### Project Planning

- 1.1. Define and sequence activities: **2 hours**
- 1.2. Develop schedule estimates: **2 hours**
- 1.3. Plan quality, resource, and communications management: **3 hours**

#### System Design

- 2.1. Define system requirements: **3 hours**
- 2.2. Create system architecture: **20 hours**
- 2.3. Design database structure: **5 hours**
- 2.4. Design user interface: **20 hours**

#### System Development

- 3.1. Development environment set-up: **2 hours**
- 3.2. Develop system deliverables: **70 hours**
- 3.3. Integrate system deliverables: **40 hours**
- 3.4. Develop user interface: **50 hours**

#### System Deployment

- 4.1. Prepare deployment environment: **2 hours**
- 4.2. Deploy system: **2 hours**
- 4.3. Conduct post-deployment testing: **10 hours**
- 4.4. Debugging: **30 hours**
- 4.5. System review: **2 hours**

#### Project Closure

- 5.1. Conduct project review: **8 hours**
- 5.2. Create system documentation learned: **8 hours**
- 5.3. Archive project documents: **2 hours**
- 5.4. Close project: **2 hours**

#### Summary:

**Project Planning:**  $2 + 2 + 3 = 7$  hours

**System Design:**  $3 + 20 + 5 + 20 = 48$  hours

**System Development:**  $2 + 70 + 40 + 50 = 162$  hours

**System Deployment:**  $2 + 2 + 10 + 30 + 2 = 46$  hours

**Project Closure:**  $8 + 8 + 2 + 2 = 20$  hours

**Total project hours:**  $7 + 48 + 162 + 46 + 20 = 283$  hours

The team consists of **4** people therefore, the average hours worked per day by each person is **2.36 hours**, or about 2 hours and 22 minutes.

## 4 DOMAIN CLASS AND USE CASE

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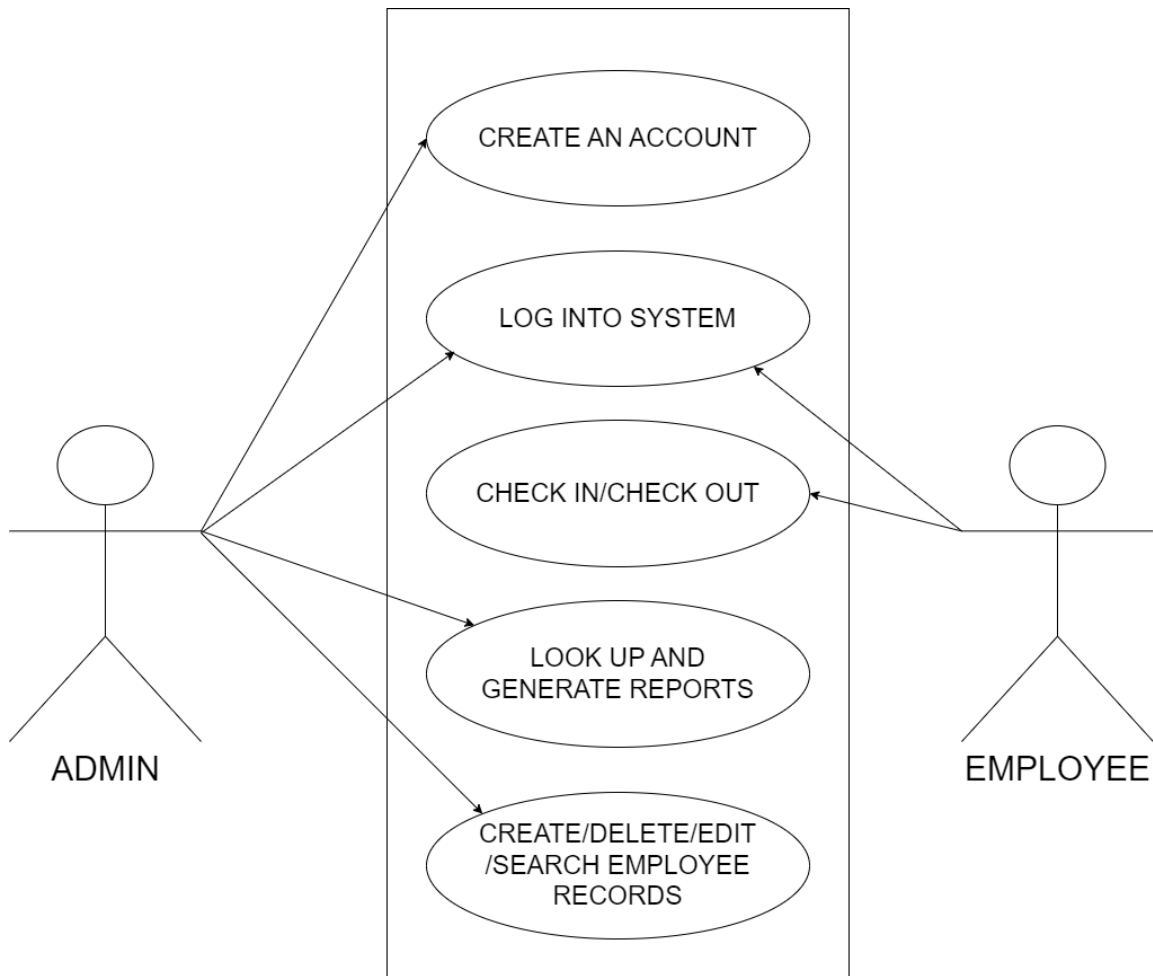
Use Case	Description
<b><i>Admin Login</i></b>	Administrators can log into the system to access admin functionalities.
<b><i>Employee Login</i></b>	Employees can log into the system to check their attendance records.
<b><i>Employee Maintenance</i></b>	Administrators can manage employee data, including adding, updating, or deleting employee records.
<b><i>View Login Report</i></b>	Administrators can view a report of employee logins.
<b><i>View Daily Attendance Report</i></b>	Administrators can generate and view a daily report of employee attendance.
<b><i>View Monthly Attendance Report</i></b>	Administrators can generate and view a monthly report of employee attendance.

*Table 4.1 List of Use Cases for the Employee Attendance Management System*

Object Classes	Attributes
Employee	emp id, password, full name, address, contact number, email address, contract type, shift
Attendance	atlog id, emp id, log date, in/out times, late/under-time indicators, overtime, work hours, and status (online/offline)
Admin	admin ID, username, password, and full name

*Table 4.2 List of Domain Classes for the Employee Attendance Management System*





*Figure 4.1 Use Case Diagram for the Employee Attendance Management System*

## 5 INITIAL PAGE LAYOUT

Figma was utilized for designing the initial page layout (Figure 5.1) of the Employee Attendance Management System (EAMS). The system is designed to present a modern, and user-friendly interface. It features a color scheme of blues and grays, with a mix of light hues for alerts and labels, and a clear typography for readability. The consistency of the design for each page ensures that everything is accessible and can be easily navigated by the user.

### INITIAL DESIGN

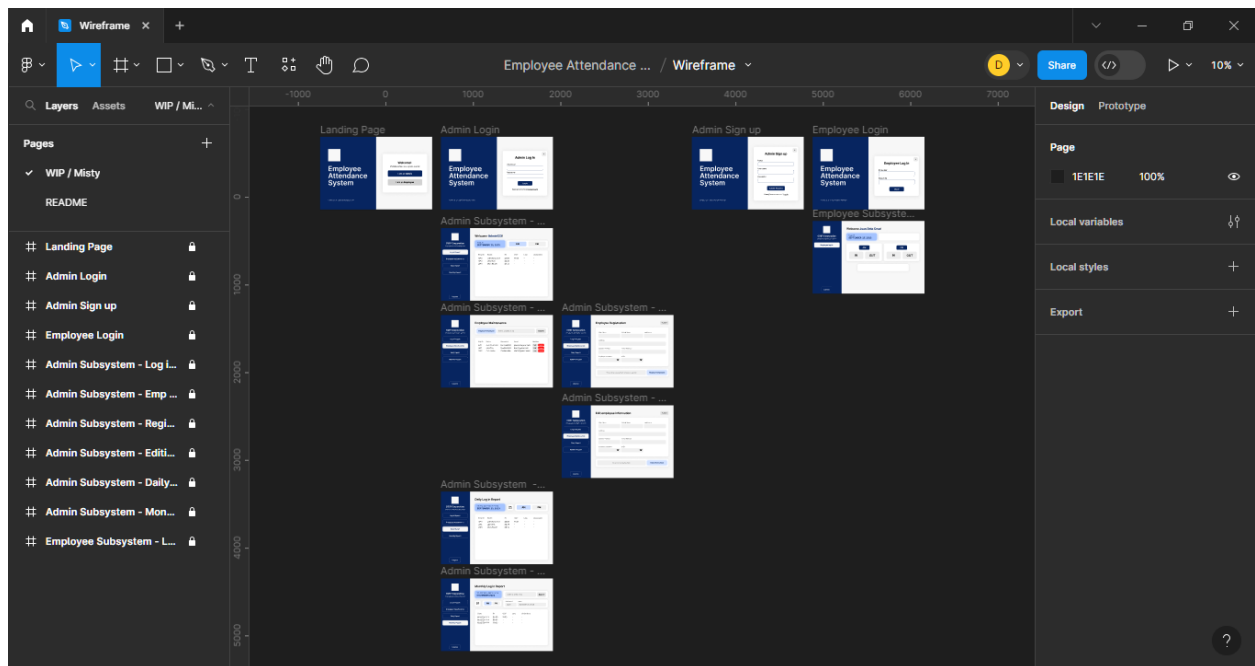


Figure 5.1: Initial layout of the system designed using Figma

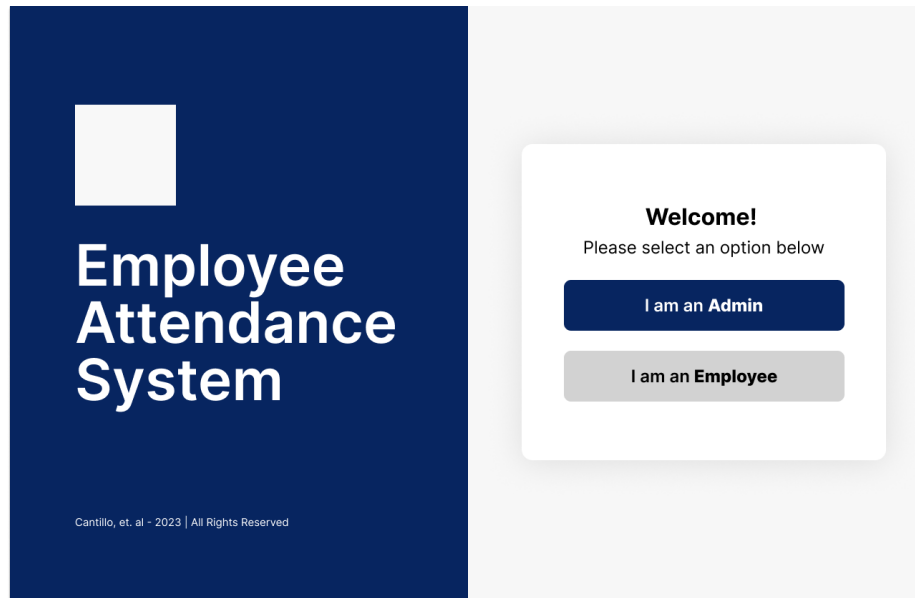


Figure 5.2: Initial Landing Page

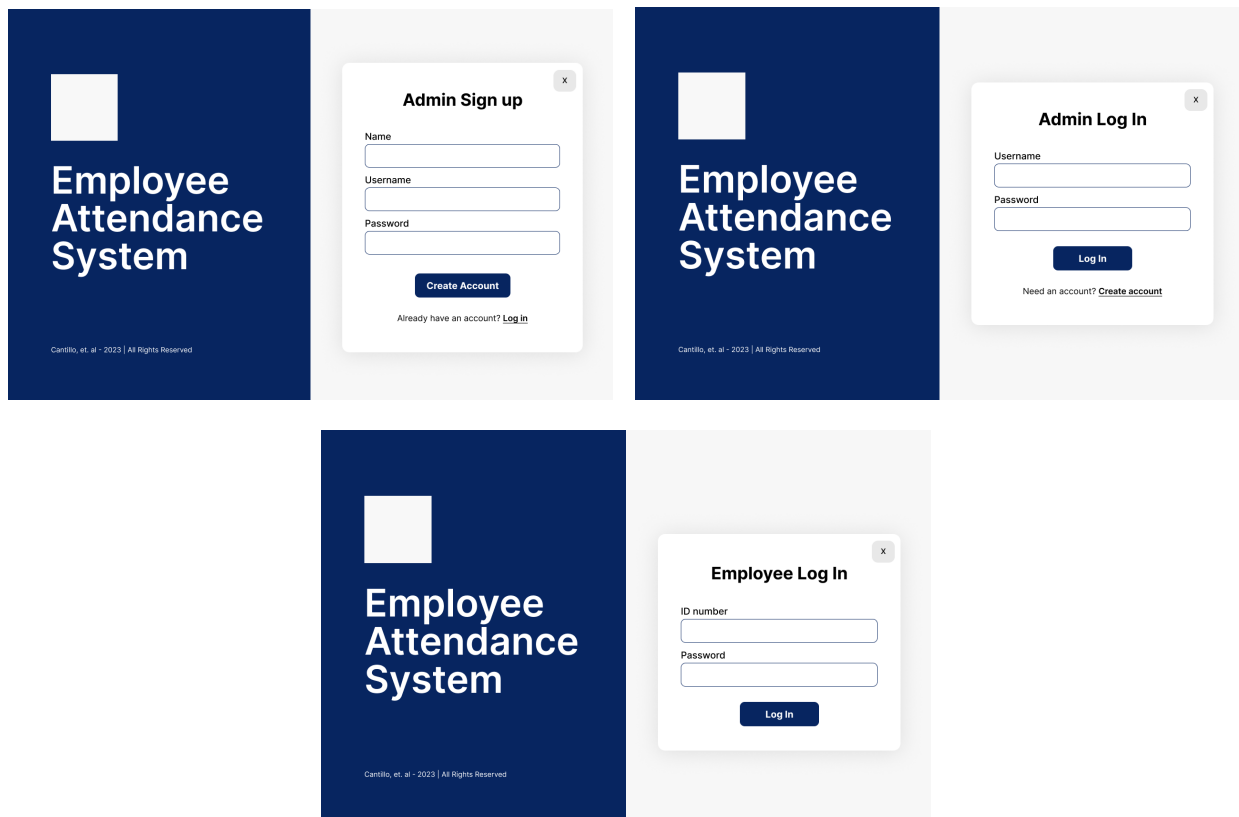
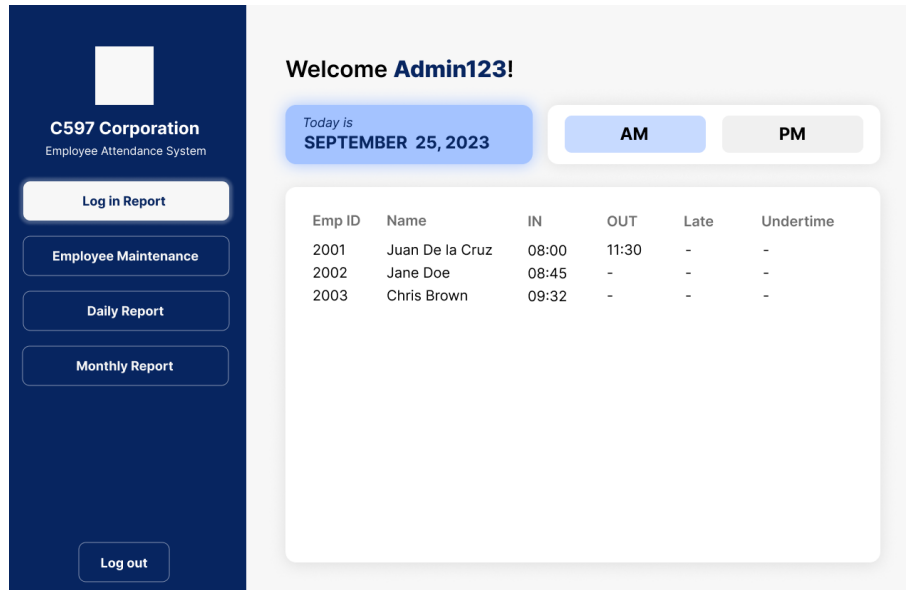


Figure 5.3: Initial Login and Sign up page for Admin and Employee

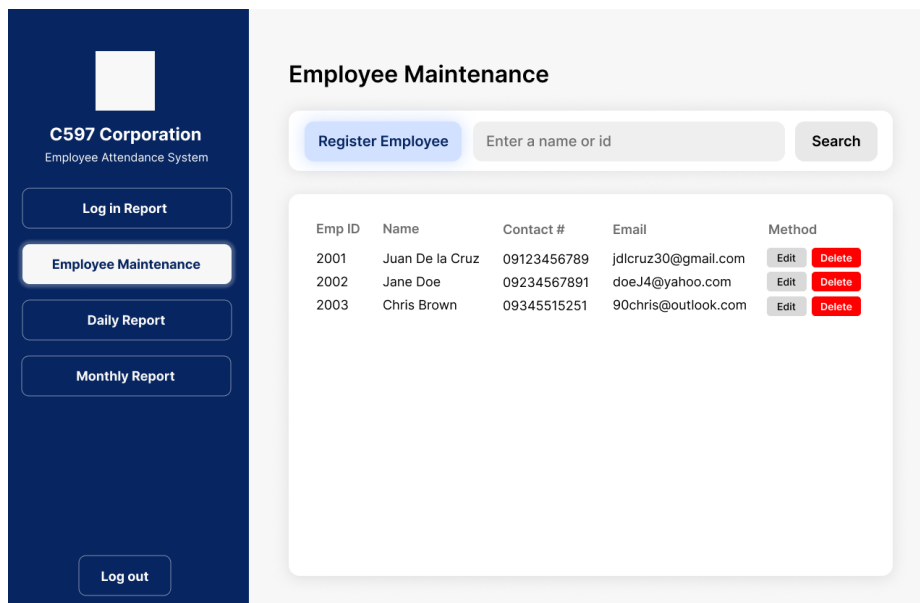
## Initial Attendance Subsystem



The screenshot shows the 'Initial View of Log in Reports' interface. On the left is a dark blue sidebar with the C597 Corporation logo and navigation buttons: 'Log in Report', 'Employee Maintenance', 'Daily Report', 'Monthly Report', and 'Log out'. The main content area is light gray and displays a welcome message 'Welcome Admin123!'. Below this, it shows the current date 'Today is SEPTEMBER 25, 2023' and two buttons for 'AM' and 'PM'. A table lists employee attendance data for three employees: Juan De la Cruz, Jane Doe, and Chris Brown, showing their Emp ID, Name, IN, OUT, Late, and Undertime.

Emp ID	Name	IN	OUT	Late	Undertime
2001	Juan De la Cruz	08:00	11:30	-	-
2002	Jane Doe	08:45	-	-	-
2003	Chris Brown	09:32	-	-	-


Figure 5.4: Initial View of Log in Reports



The screenshot shows the 'Initial Employee Maintenance' interface. The sidebar is identical to the previous figure. The main content area is titled 'Employee Maintenance' and features a 'Register Employee' button, a search input field with the placeholder 'Enter a name or id', and a 'Search' button. Below these is a table listing employee details: Emp ID, Name, Contact #, Email, and Method. Each row includes 'Edit' and 'Delete' buttons for management.

Emp ID	Name	Contact #	Email	Method
2001	Juan De la Cruz	09123456789	jdacruz30@gmail.com	<button>Edit</button> <button>Delete</button>
2002	Jane Doe	09234567891	doeJ4@yahoo.com	<button>Edit</button> <button>Delete</button>
2003	Chris Brown	09345515251	90chris@outlook.com	<button>Edit</button> <button>Delete</button>

Figure 5.5: Initial Employee Maintenance

**C597 Corporation**  
Employee Attendance System

Log in Report

Employee Maintenance


Daily Report

Monthly Report

Log out

### Daily Log in Report

Viewing log in reports during  
**SEPTEMBER 25, 2023**




AM

PM

Emp ID	Name	IN	OUT	Late	Undertime
2001	Juan De la Cruz	08:00	11:30	-	-
2002	Jane Doe	08:45	-	-	-
2003	Chris Brown	09:32	-	-	-

Figure 5.6: Initial Daily Login Report

**C597 Corporation**  
Employee Attendance System

Log in Report

Employee Maintenance


Daily Report

Monthly Report

Log out

### Monthly Log in Report

Viewing log in reports during  
**NOVEMBER 2023**



AM

PM

Enter a name or id

Search

Employee ID

Name

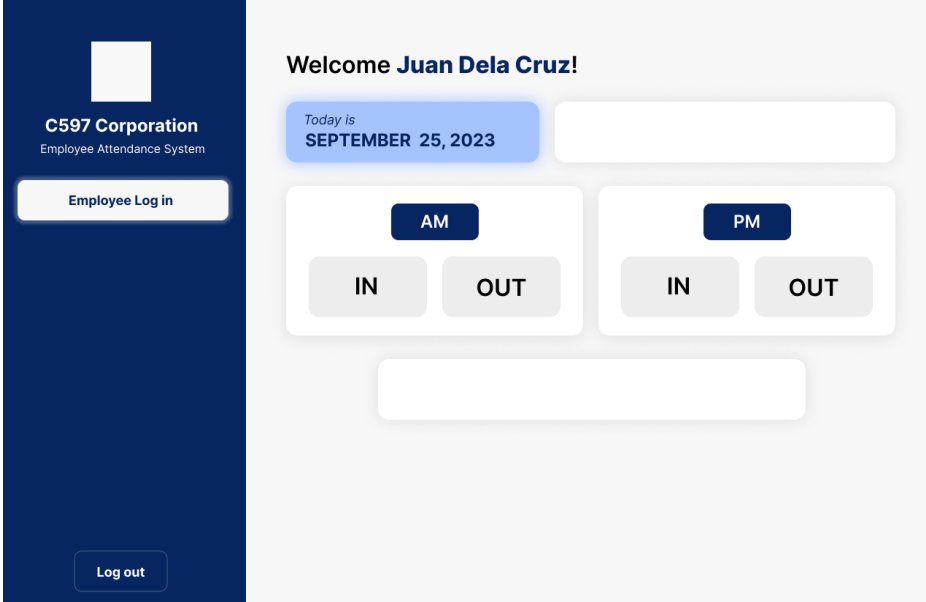
2001

JUAN DELA CRUZ

Date	IN	OUT	Late	Undertime
MM/DD/YYYY	08:00	11:30	-	-
MM/DD/YYYY	08:45	-	-	-
MM/DD/YYYY	09:32	-	-	-

Figure 5.7: Initial Monthly Login Report

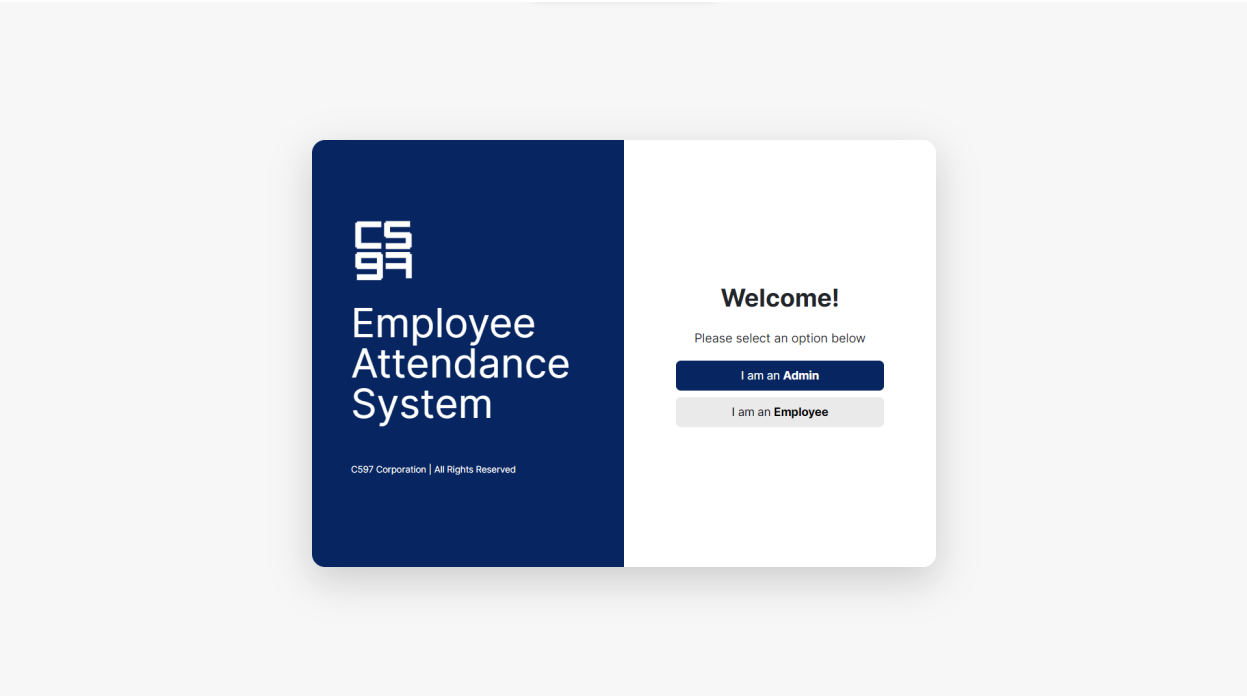
## Initial Employee Subsystem



The image shows a web interface for an employee attendance system. On the left is a dark blue sidebar with a white square placeholder for a profile picture, the text "C597 Corporation" and "Employee Attendance System", an "Employee Log in" button, and a "Log out" button at the bottom. The main content area is light gray. It features a "Welcome Juan Dela Cruz!" message, a date display "Today is SEPTEMBER 25, 2023" in a blue box, and a large empty white input field. Below these are two columns of buttons: the left column has an "AM" button above "IN" and "OUT" buttons; the right column has a "PM" button above "IN" and "OUT" buttons. At the bottom of the main area is another large empty white input field.

Figure 5.8: Initial Employee Attendance Login Page

## UPDATED DESIGN



The image shows a landing page with a dark blue sidebar on the left containing a logo, the text "Employee Attendance System", and "C597 Corporation | All Rights Reserved". The main content area is white and features a "Welcome!" message, the instruction "Please select an option below", and two buttons: "I am an Admin" (dark blue) and "I am an Employee" (light gray).

Figure 5.9: Actual Landing Page

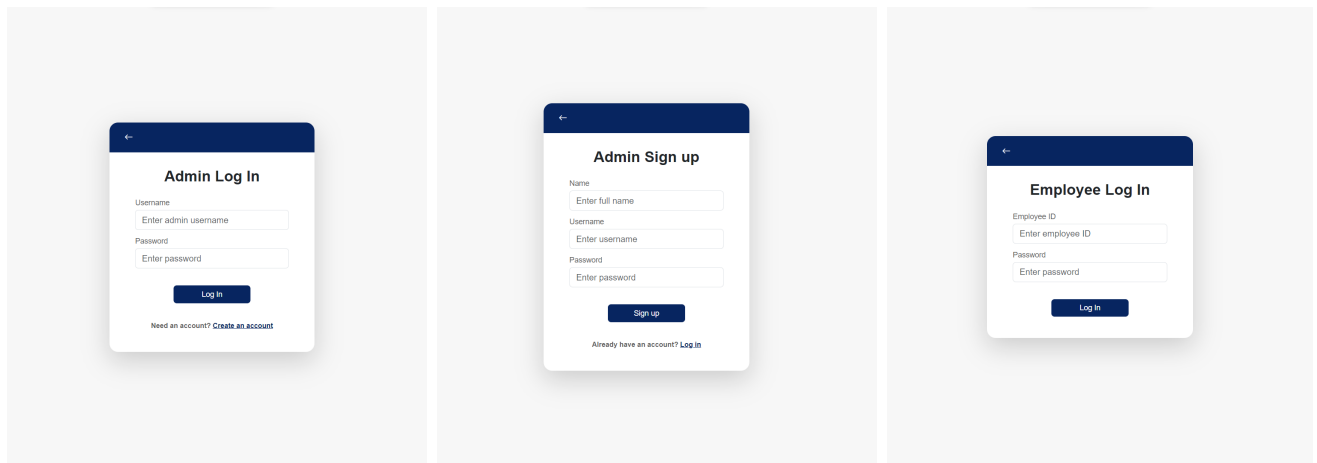


Figure 5.10: Actual Login Interface

## Actual Attendance Subsystem

**C597 Corporation**  
Employee Attendance System

Log in Report

Employee Maintenance

Daily Report

Monthly Report

Log out

**Welcome admin1!**

Today is **Tuesday**  
**DECEMBER 19, 2023**


**10:56:16 AM**

Online Employees: 2

Table legend  
■ Late  
■ Undertime  
■ Overtime

Emp ID	Full Name	Contract	Shift	AM In	AM Out	PM In	PM Out	Work Hours	Overtime	Status
16	Mason Michael Hernandez	Part Time	Morning Shift	08:00:00	12:00:00	13:00:00	17:00:00	08:00:00	00:00:00	Offline
13	Emma Grace Wright	Full Time	Day Shift	09:15:00	12:30:00	13:30:00	17:30:00	07:15:00	00:00:00	Offline
6	Olivia Rose Anderson	Part Time	Morning Shift	09:30:00	12:45:00	-	-	03:15:00	00:00:00	Online
19	Daniela M. Cantillo	Part Time	Morning Shift	10:15:30	10:17:11	-	-	00:01:41	00:00:00	Online

Figure 5.11: Actual Login Report



**C597 Corporation**  
Employee Attendance System

Log in Report

Employee Maintenance

Daily Report

Monthly Report


Log out

## Employee Maintenance

Register Employee
Search

Emp ID	Full Name	Contact Number	Email	Address	Zip Code	Contract	Shift	Options
1	John Doe Smith	555-1234	john.doe@example.com	123 Main St	1234	Full Time	Day Shift	
2	Jane Lee Johnson	555-5678	jane.johnson@example.com	456 Oak St	5678	Full Time	Day Shift	
3	Michael A. Williams	555-9012	michael.williams@example.com	789 Pine St	9012	Full Time	Day Shift	
4	Emma Grace Taylor	555-3456	emma.taylor@example.com	101 Maple St	3456	Part Time	Morning Shift	
5	William James Brown	555-7890	william.brown@example.com	202 Elm St	7890	Part Time	Afternoon Shift	
6	Olivia Rose Anderson	555-1234	olivia.anderson@example.com	303 Cedar St	1234	Part Time	Morning Shift	
7	Sophia Rae Miller	555-5678	sophia.miller@example.com	404 Walnut St	5678	Full Time	Day Shift	
8	Ethan Thomas Davis	555-9012	ethan.davis@example.com	505 Pine St	9012	Full Time	Day Shift	
9	Ava Marie Martinez	555-1234	ava.martinez@example.com	606 Oak St	1234	Full Time	Day Shift	
10	Noah Alexander Hernandez	555-3456	noah.hernandez@example.com	707 Cedar St	3456	Part Time	Afternoon Shift	
11	Mia Isabella Lopez	555-7890	mia.lopez@example.com	808 Elm St	7890	Part Time	Morning Shift	
12	Lucas Daniel Garcia	555-1234	lucas.garcia@example.com	909 Maple St	1234	Part Time	Afternoon Shift	
13	Emma Grace Wright	555-5678	emma.wright@example.com	101 Pine St	5678	Full Time	Day Shift	
14	Carter Joseph Taylor	555-9012	carter.taylor@example.com	202 Cedar St	9012	Full Time	Day Shift	

Figure 5.12: Actual Employee Maintenance Interface



**C597 Corporation**  
Employee Attendance System

Log in Report

Employee Maintenance

Daily Report

Monthly Report

Log out

## Employee Registration

Go Back

First Name
Middle Name
Last Name

Address
ZIP Code


Contact Number
Email Address

Employee Contract
Shift
Password

Fill out the required fields before you register.
Register Employee

Figure 5.13: Actual Employee Insertion Interface





**C597 Corporation**  
Employee Attendance System

[Log in Report](#)
[Employee Maintenance](#)
[Daily Report](#)
[Monthly Report](#)

Log out

## Edit Information

[Go Back](#)

First Name

Middle Name

Last Name

Address

ZIP Code

Contact Number

Email Address

Employee Contract

Shift

Full Time


Morning Shift

Password

Fill out the required fields before you submit.

Edit Information

Figure 5.14: Actual Employee Information Edit Interface



**C597 Corporation**  
Employee Attendance System

[Log in Report](#)
[Employee Maintenance](#)
[Daily Report](#)
[Monthly Report](#)

Log out

## Daily Log in Report

[Export to PDF](#)

Viewing log in reports today

DECEMBER 19, 2023

Calendar Icon

10:57:02 AM

Table legend

Late

Undertime

Overtime

Emp ID	Full Name	Contract	Shift	AM IN	AM OUT	PM IN	PM OUT	Work Hours	Overtime
16	Mason Michael Hernandez	Part Time	Morning Shift	08:00:00	12:00:00	13:00:00	17:00:00	08:00:00	00:00:00
13	Emma Grace Wright	Full Time	Day Shift	09:15:00	12:30:00	13:30:00	17:30:00	07:15:00	00:00:00
6	Olivia Rose Anderson	Part Time	Morning Shift	09:30:00	12:45:00	-	-	03:15:00	00:00:00
19	Daniela M. Cantillo	Part Time	Morning Shift	10:15:30	10:17:11	-	-	00:01:41	00:00:00

Figure 5.15: Actual Login Report Page

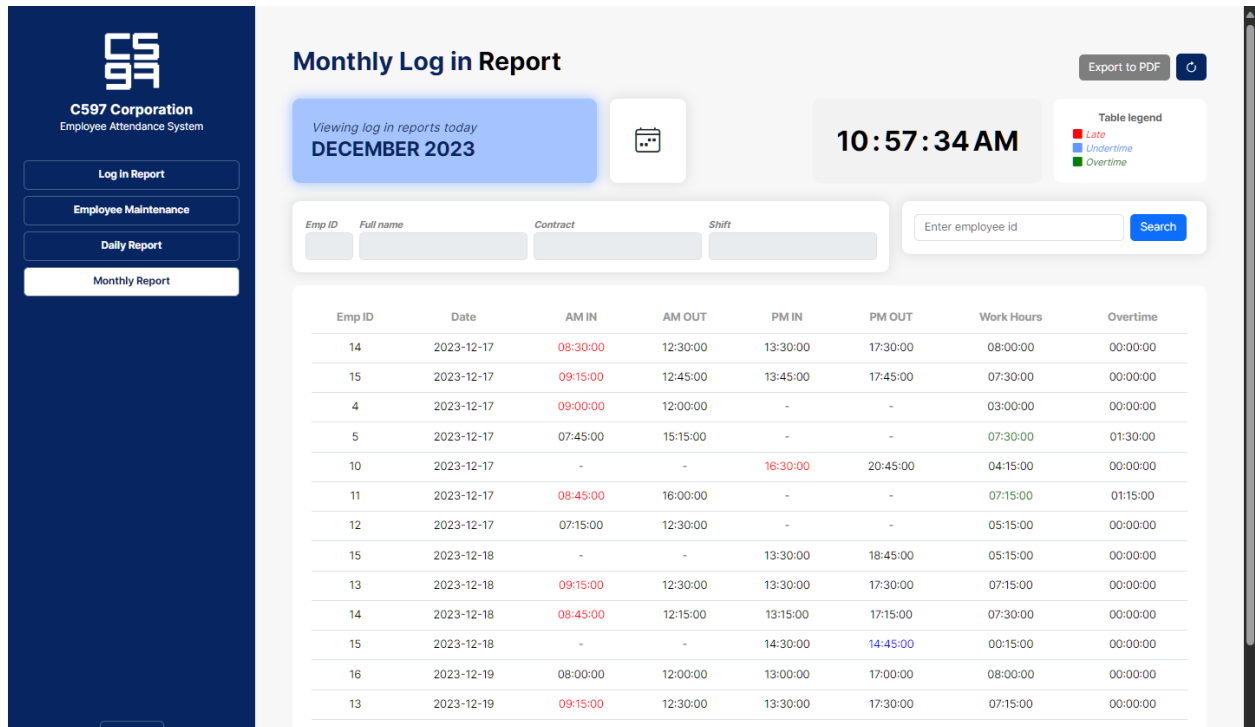


Figure 5.16: Actual Monthly Login Report Page

## Actual Employee Subsystem

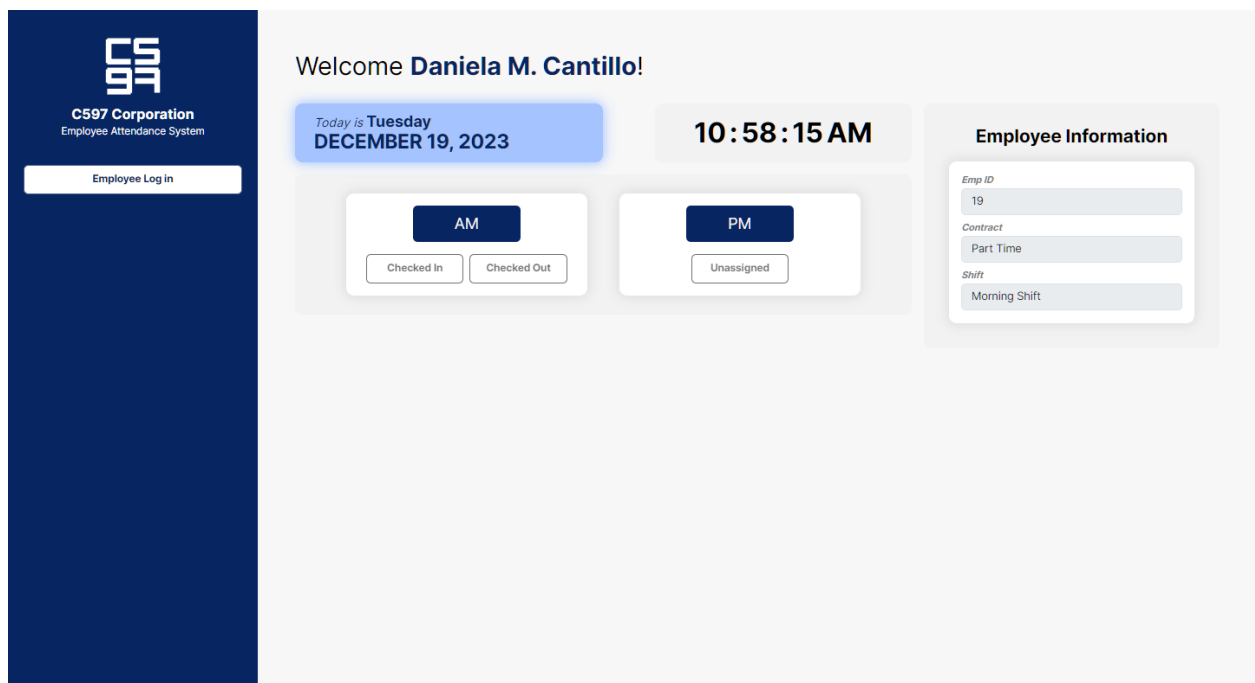


Figure 5.16: Actual Employee Time-In Interface

## 6 DATABASE DESIGN

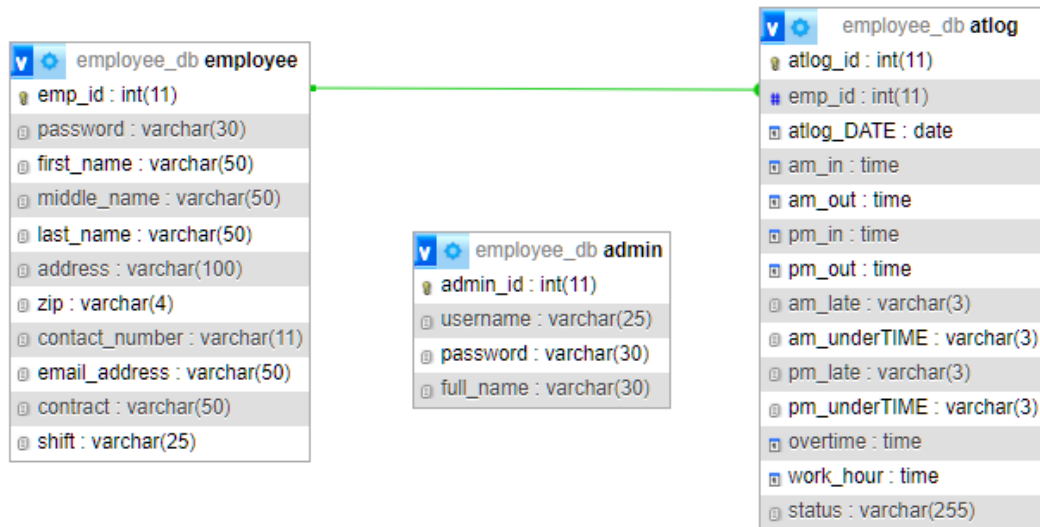


Figure 6.1 Database Schema

Table Name	Attributes
<b>admin</b>	admin_id :integer{key} username:string password: string full_name: string
<b>employee</b>	emp_id: integer {key} password: string first_name:string middle_name:string last_name:string address:string zip:string contact_number:string email_address:string contract:string shift:string
<b>atlog</b>	atlog_id: integer{key} emp_id:integer{foreign key} atlog_date:date

	am_in:time am_out:time pm_in:time pm_out:time am_late: string am_underTIME:string pm_late:string pm_underTIME:string overtime:time work_hour:time
--	--

*Table 6.1 Database Design for the Employee Attendance Management System*

**employee\_db** - The database that stores all the employee-related information.

**employee** - An entity that represents an employee. Each employee has the following attributes:

**emp\_id** - A unique identifier for the employee.

**password** - The employee's password for security purposes.

**first\_name** - The employee's first name.

**middle\_name** - The employee's middle name.

**last\_name** - The employee's last name.

**address** - The employee's address.

**zip** - The employee's postal code.

**contact\_number** - The employee's contact number.

**email\_address** - The employee's email address.

**contract** - The employee's employment contract type.

**shift** - The employee's work shift.

**admin** - An entity that represents an administrator. Each administrator has the following attributes:

**admin\_id** - A unique identifier for the administrator.

**username** - The administrator's username for login.

**password** - The administrator's password for security purposes.

**full\_name** - The administrator's full name.

**atlog** - An entity that represents an attendance log. Each attendance log entry has the following attributes:

**atlog\_id** - A unique identifier for the attendance log entry.

**atlog\_DATE** - The date of the attendance log entry.

**am\_in** - The time the employee clocked in for the morning shift.

**am\_out** - The time the employee clocked out for the morning shift.

**pm\_in** - The time the employee clocked in for the afternoon shift.

**pm\_out** - The time the employee clocked out for the afternoon shift.

**am\_late** - A flag indicating whether the employee was late for the morning shift.

**am\_underTIME** - A flag indicating whether the employee worked less than the expected time for the morning shift.

**pm\_late** - A flag indicating whether the employee was late for the afternoon shift.

**pm\_underTIME** - A flag indicating whether the employee worked less than the expected time for the afternoon shift.

**work\_hour** - Counts the number of hours the employee has rendered.

**overtime** - Counts the number of the employee has overimed.

**status** - Tells if the employee is online or offline.

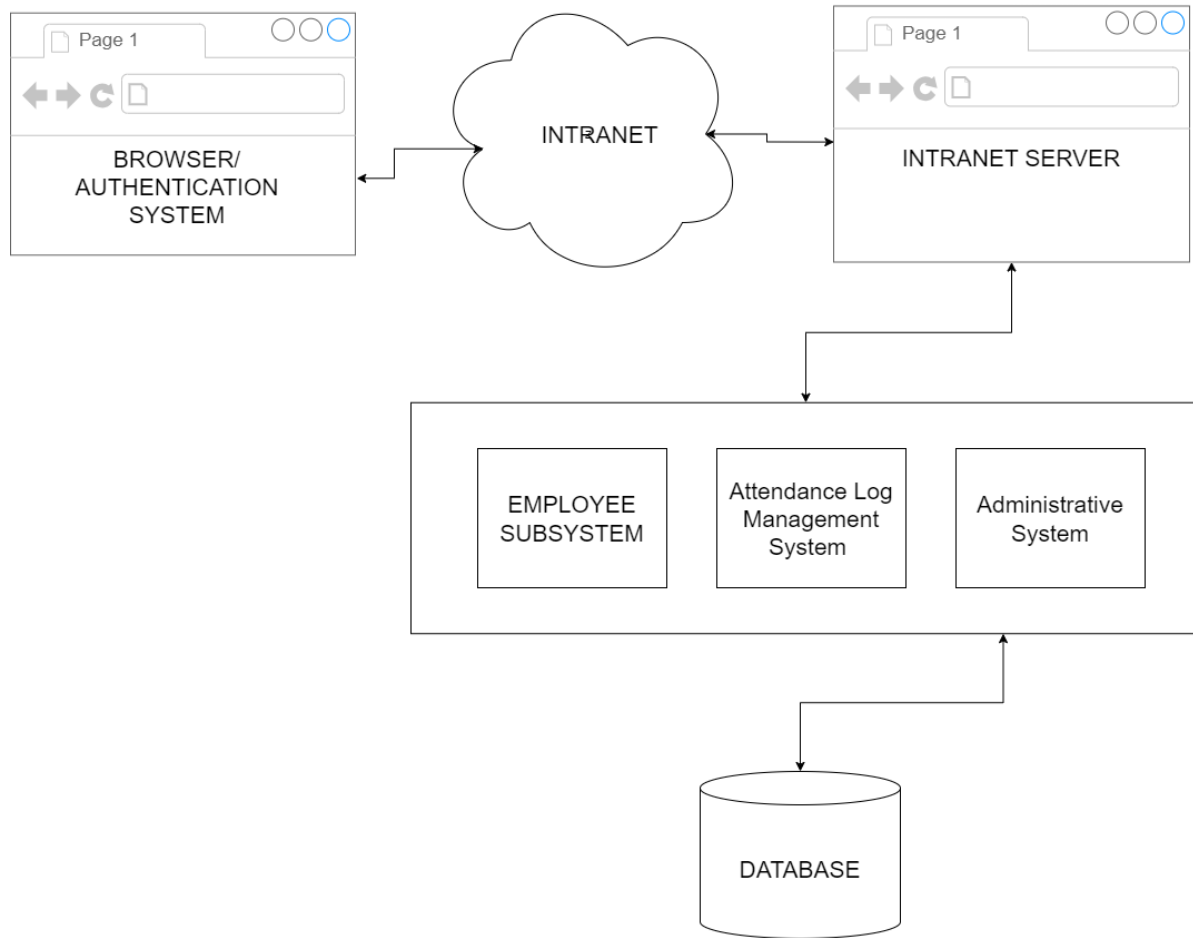
#### **NOTE:**

In this ERD, there is no relationship established between the employee and admin entities. In addition, there is a relationship established between the employee and atlog entities. This means that an employee's attendance log can be accessed through their unique identifier (emp\_id) which is also a foreign key on the atlog table.

Once you delete an employee, the records that were previously stored in the atlog table will not be deleted. However, you cannot access the foreign key (emp\_id) anymore of the deleted employee as it is already deleted in the employee table.

## 7 SOFTWARE COMPONENT DIAGRAM

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*Figure 7.1 Employee Attendance Management System Software Component Diagram*

- 1. Intranet Server:** The server hosts all the Intranet-related services. It is responsible for storing, processing, and transmitting data within the organization's intranet.
- 2. Administrative System:** This system manages all the users and resources within the Intranet. It ensures proper access and security of data and systems.
- 3. Browser / Authentication System:** This system allows employees to access the Intranet by providing their credentials. It also ensures secure access to the

intranet.

4. **Attendance Log Management System:** This system enables employees to track their attendance within the organization.
5. **System Management System:** This system allows administrators to monitor and manage all aspects of the Intranet. It provides them with tools to manage users, resources, and other intranet-related data.
6. **Database:** The database is used to store all the data related to the Intranet, such as user information, attendance logs, etc. This ensures that the data is available for various operations within the Intranet.

These components work together to create a seamless and efficient intranet system for an organization.

## 8 ADDITIONAL FEATURES

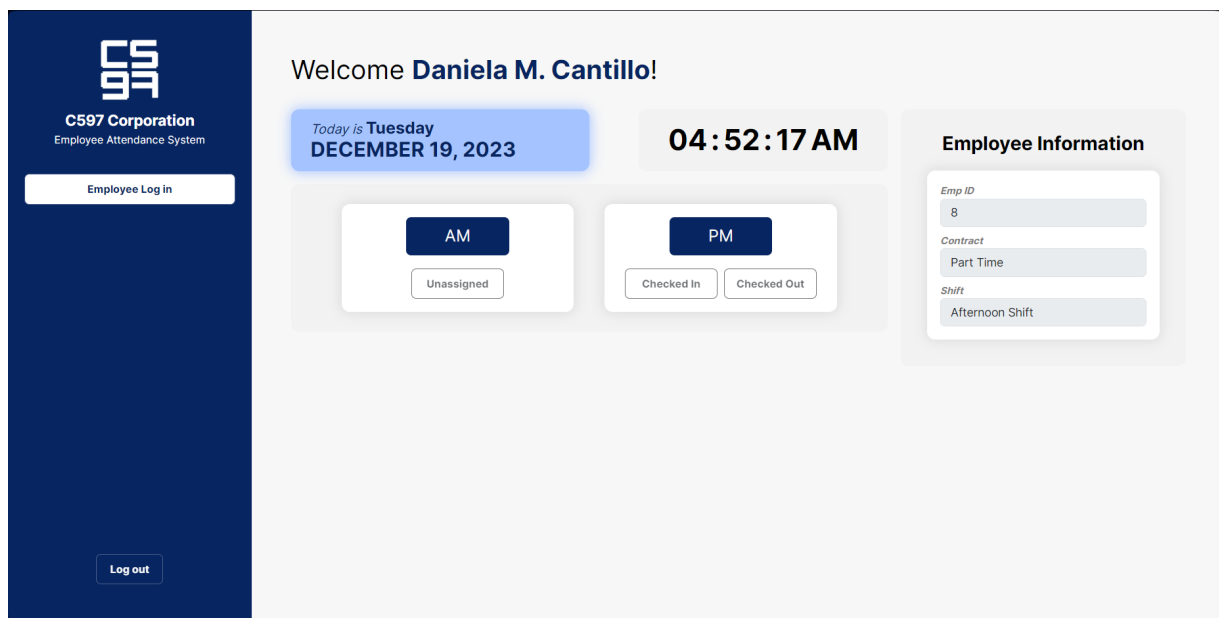
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The Employee Attendance Management System (EAMS) is designed with a focus on user experience and data security. It incorporates several additional features that not only enhance its functionality but also make it more user-friendly.

These features include a locking mechanism, account creation for new admins, password prompts for employees, and visual highlights for late arrivals and early departures. Each of these features plays a crucial role in ensuring the system is efficient, secure, and easy to use.

Below is a detailed description of each feature added.

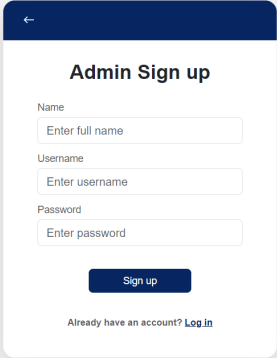
**Locking Mechanism:** This feature enhances the system's security by automatically locking the buttons in the employee subsystem once employees have logged in. This prevents unauthorized actions and ensures that only the intended tasks are performed during a session.



*Figure 8.1: Locking mechanism feature of the Employee Attendance Subsystem*

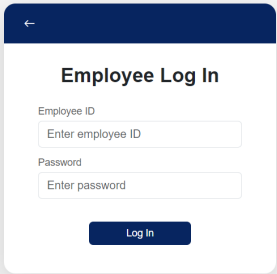
**Admin Account Creation:** The system provides an option for new administrators to create their own accounts. This feature facilitates easy onboarding of new admins and allows them to have immediate access to the system's functionalities.



A mobile app interface for an "Admin Sign up" page. It features a dark blue header with a back arrow. The title "Admin Sign up" is centered. Below it are three input fields: "Name" with placeholder "Enter full name", "Username" with placeholder "Enter username", and "Password" with placeholder "Enter password". A dark blue "Sign up" button is positioned below the fields. At the bottom, a link "Already have an account? Log in" is displayed.

*Figure 8.2: Sign up page for admins*

**Password Prompt:** To protect the privacy and security of employee data, the system prompts employees to enter their passwords when they log in. This ensures that only authorized individuals can access the system.

A mobile app interface for an "Employee Log In" page. It features a dark blue header with a back arrow. The title "Employee Log In" is centered. Below it are two input fields: "Employee ID" with placeholder "Enter employee ID" and "Password" with placeholder "Enter password". A dark blue "Log In" button is positioned below the fields.

*Figure 8.3: Employee log in page*

**Late Highlight:** The system is designed to automatically highlight the time-in of employees in red if they are late. This visual cue makes it easy for both employees and managers to identify instances of late arrival, enabling timely corrective actions.

**Undertime Highlight:** Similarly, the time-out of employees is highlighted in blue if they leave early, or “undertime”. This helps in tracking early departures and ensuring adherence to the organization’s work hours policy.

**Overtime Highlight:** Likewise, the work hours of employees is highlighted in green if they leave later, or “overtime”. The number of hours that the employee has overtime is also shown for easy tracking.

**Welcome admin1!**

Today is **Tuesday**  
**DECEMBER 19, 2023**

**04:53:13 AM**

Table legend  
■ Late  
■ Undertime  
■ Overtime

Emp ID	Full Name	Contract	Shift	AM In	AM Out	PM In	PM Out	Work Hours	Overtime
12	Dawn Cruz Bande	Full Time	Morning Shift	-	-	-	-	00:00:00	00:00:00
9	Dee Monde Razon	Full Time	Day Shift	09:07:37	10:07:46	13:07:53	22:08:44	10:01:00	00:01:00
8	Daniela M. Cantillo	Part Time	Afternoon Shift	-	-	04:21:58	04:21:59	00:00:01	00:00:00
10	Minzy Grado Mendez	Part Time	Morning Shift	03:59:32	03:59:39	-	-	00:00:07	00:00:00
11	Alex Mlddle Mendez	Part Time	Afternoon Shift	-	-	04:22:33	04:22:35	00:00:02	00:00:00

Figure 8.4: Highlight feature when logged in late, logged out early and overtime

**Work Hours Display:** The number of hours that an employee works is shown in the report to easily find the number of hours that an employee rendered.

Emp ID	Date	AM IN	AM OUT	PM IN	PM OUT	Work Hours	Overtime
8	2023-12-18	-	-	-	-	00:00:00	00:00:00
11	2023-12-18	-	-	-	-	00:00:00	00:00:00
12	2023-12-19	-	-	-	-	00:00:00	00:00:00
9	2023-12-19	09:07:37	10:07:46	13:07:53	22:08:44	10:01:00	00:01:00
8	2023-12-19	-	-	04:21:58	04:21:59	00:00:01	00:00:00
10	2023-12-19	03:59:32	03:59:39	-	-	00:00:07	00:00:00
11	2023-12-19	-	-	04:22:33	04:22:35	00:00:02	00:00:00

Figure 8.5: Work Hours column

**Shifting Schedules:** This feature allows administrators to define and manage shifting schedules for employees. Employees can be assigned to specific shifts based on their contract type or organizational requirements.











Emp ID	Full Name	Contact Number	Email	Address	Zip Code	Contract	Shift	Options
1	John Doe Smith	555-1234	john.doe@example.com	123 Main St	1234	Full Time	Day Shift	 
2	Jane Lee Johnson	555-5678	jane.johnson@example.com	456 Oak St	5678	Full Time	Day Shift	 
3	Michael A. Williams	555-9012	michael.williams@example.com	789 Pine St	9012	Full Time	Day Shift	 
4	Emma Grace Taylor	555-3456	emma.taylor@example.com	101 Maple St	3456	Part Time	Morning Shift	 
5	William James Brown	555-7890	william.brown@example.com	202 Elm St	7890	Part Time	Afternoon Shift	 

Figure 8.6: Shift Schedules based on the contract type

**Report Generation:** This feature enables administrators to export attendance data and reports to PDF format. Users can select a date range, specific employees, or other criteria before exporting the data. The exported PDF includes attendance logs and the date and specific criteria that were made before exporting.

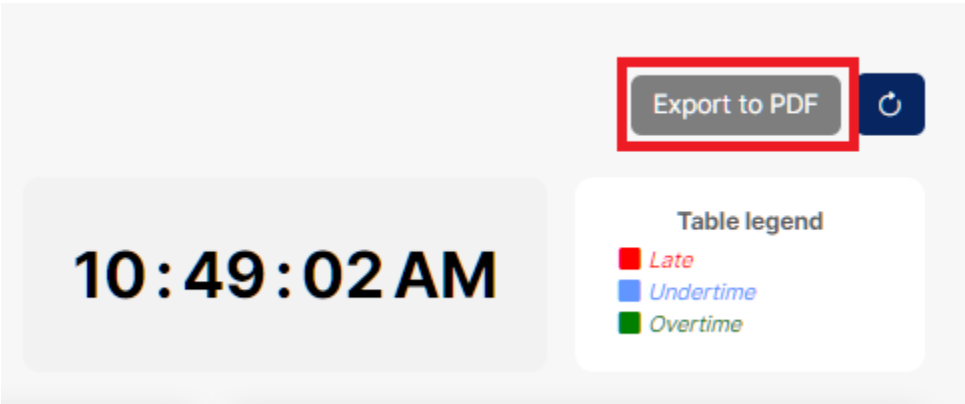


Figure 8.7: Export to pdf button

## DECEMBER 2023 Monthly Report

Emp ID	Date	AM IN	AM OUT	PM IN	PM OUT	Work Hours	Overtime
14	2023-12-17	08:30:00	12:30:00	13:30:00	17:30:00	08:00:00	00:00:00
15	2023-12-17	09:15:00	12:45:00	13:45:00	17:45:00	07:30:00	00:00:00
4	2023-12-17	09:00:00	12:00:00	-	-	03:00:00	00:00:00
5	2023-12-17	07:45:00	15:15:00	-	-	07:30:00	01:30:00
10	2023-12-17	-	-	16:30:00	20:45:00	04:15:00	00:00:00
11	2023-12-17	08:45:00	16:00:00	-	-	07:15:00	01:15:00
12	2023-12-17	07:15:00	12:30:00	-	-	05:15:00	00:00:00
15	2023-12-18	-	-	13:30:00	18:45:00	05:15:00	00:00:00
13	2023-12-18	09:15:00	12:30:00	13:30:00	17:30:00	07:15:00	00:00:00
14	2023-12-18	08:45:00	12:15:00	13:15:00	17:15:00	07:30:00	00:00:00
15	2023-12-18	-	-	14:30:00	14:45:00	00:15:00	00:00:00
16	2023-12-19	08:00:00	12:00:00	13:00:00	17:00:00	08:00:00	00:00:00
13	2023-12-19	09:15:00	12:30:00	13:30:00	17:30:00	07:15:00	00:00:00
6	2023-12-19	09:30:00	12:45:00	-	-	03:15:00	00:00:00
17	2023-12-18	09:30:00	12:45:00	13:45:00	17:45:00	07:15:00	00:00:00
18	2023-12-18	-	-	04:15:00	04:30:00	00:15:00	00:00:00
14	2023-12-18	07:45:00	12:15:00	13:15:00	17:15:00	08:30:00	00:00:00
19	2023-12-19	10:15:30	10:17:11	-	-	00:01:41	00:00:00

Figure 8.8: Sample Monthly Report

**Online Employees Display:** This feature provides real-time visibility into employees who are currently online or actively using the attendance system.

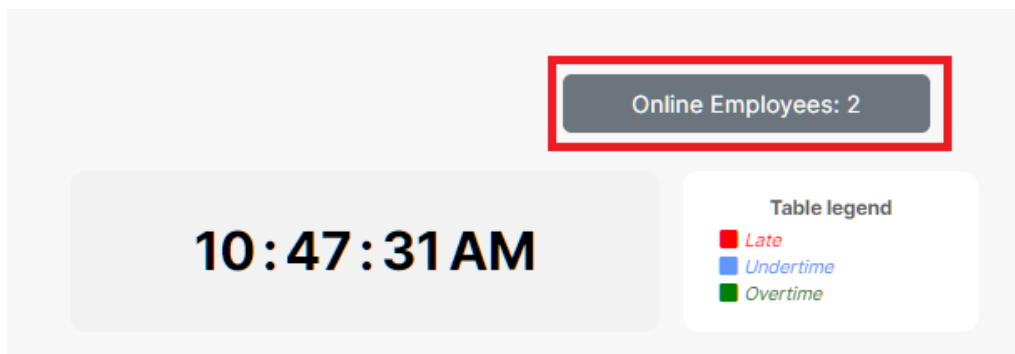


Figure 8.9: Online Employees Display

## 9 DEVELOPMENT JOURNAL

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ROLES	DESIGNATED PERSON
Project Manager	Daniela Cantillo
UI/UX Designer	Misty Shaine Niones
Database Manager	Guirald Malone Escobar
Backend Programmer	Joseph Riosa

**Github Repository:** <https://github.com/Dee-17/Employee-Attendance-Management>

**Project Initiation:** The project was initiated with the goal of developing a web-based employee attendance management system. The project scope and deliverables were identified. For easy communication and handling of files, it was then decided to use Github, thus, the Github repository was created.

**Planning:** The system's features and functionalities were planned. This includes the Attendance System, Attendance Sub-System, Employee Login Sub-System, and additional features like handling late arrivals or undertime and managing separate shifts. It was concluded that we would first be trying to finish all the deliverables and just add the additional features after the minimum requirements were met.

**Design:** The interface design phase involved creating the system architecture, designing the database structure, and planning the user interface using Figma. During the actual coding, we also used Bootstrap (version 5.3) to aid us with designing.

**Development:** The system was developed using various technologies and was coded mostly in php. The pages were first created to be html files and were just later on converted into php. Key features such as the Admin Login, Employee Login, Employee Maintenance, Login-in Report, Daily Attendance Report, and Monthly Attendance Report were implemented. This took the longest time to make the system as seamless as possible. As time went on, several more additional functionalities were added especially after the critiquing of the system.

**Testing:** The system was tested to ensure it functions as expected. Any bugs or issues identified were fixed and were documented using the bug tracking report.

**Maintenance:** Ongoing maintenance is performed to ensure the system continues to function effectively.





Figure 9.3: Frequency of commits made by each team member on the main branch as of December 14, 2023

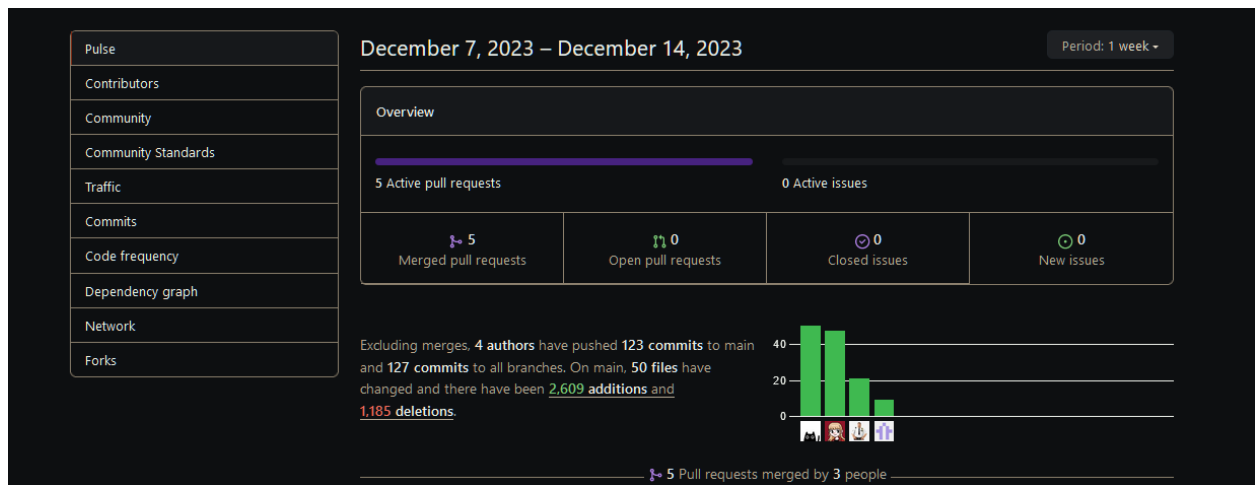


Figure 9.4: Pull requests made by each team member

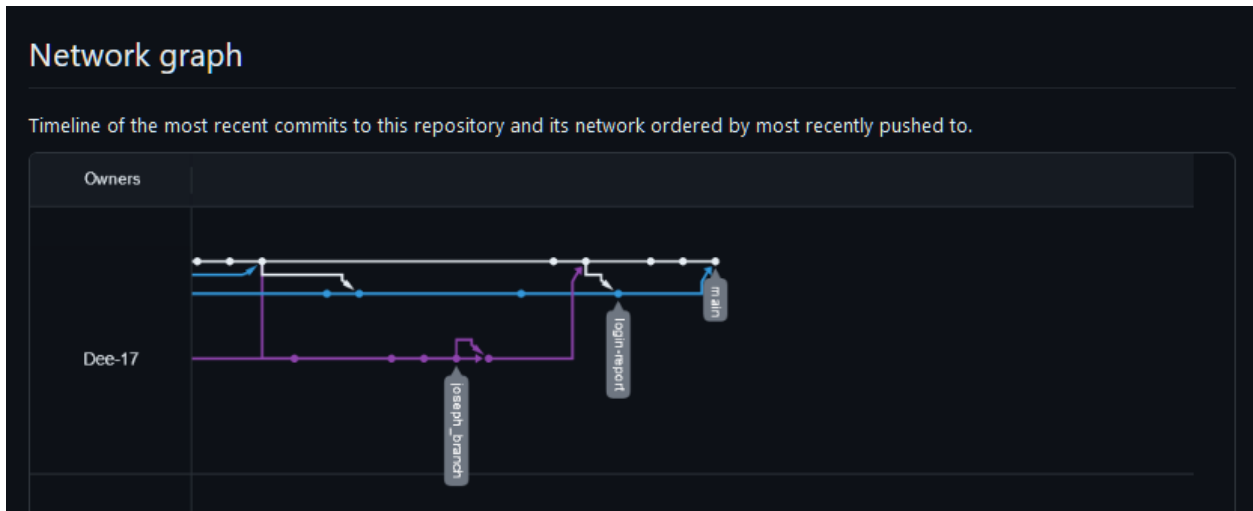


Figure 9.5: Commits to main branch as of December 14, 2023

## Branches

[New branch](#)

Overview Yours Active Stale All

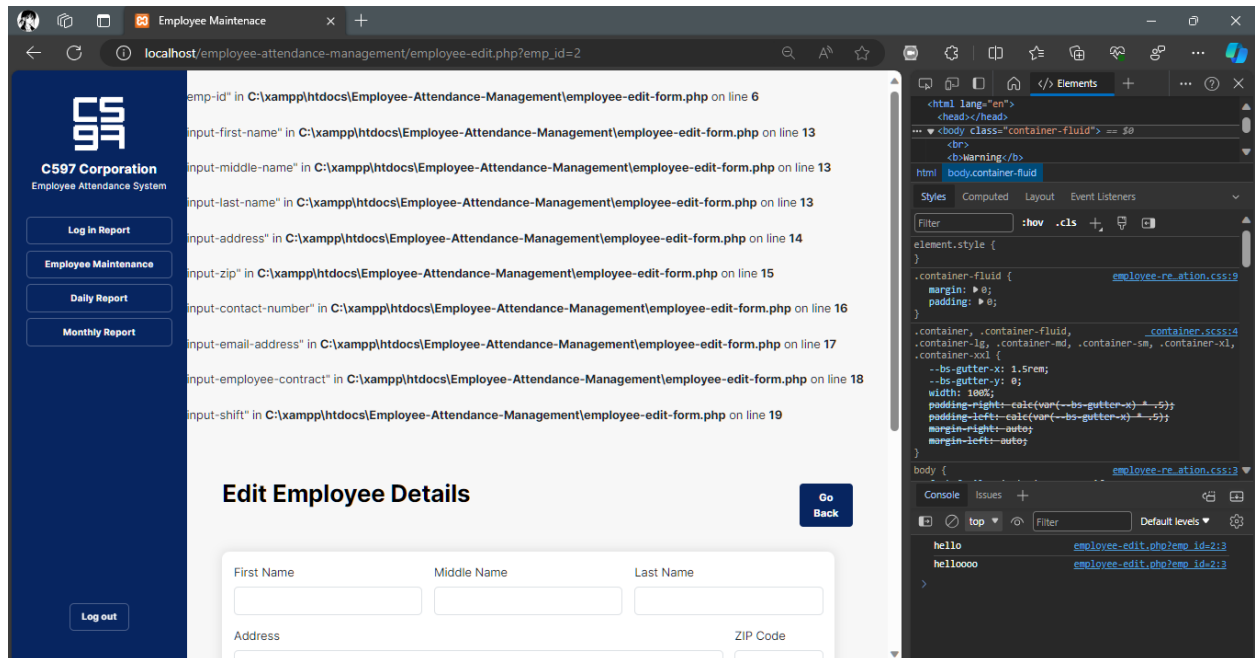
Q Search branches...

Branch	Updated	Check status	Behind	Ahead	Pull request
<a href="#">revert-28-shift-con</a>	2 hours ago		5	0	<a href="#">#32</a>
<a href="#">shift-con</a>	2 hours ago		7	0	<a href="#">#28</a>
<a href="#">status-store</a>	6 hours ago		12	0	<a href="#">#31</a>
<a href="#">style-pdf-export</a>	12 hours ago		67	0	<a href="#">#26</a>
<a href="#">show-emp-details</a>	12 hours ago		47	0	
<a href="#">pdf-export</a>	14 hours ago		70	0	
<a href="#">guirald-branch</a>	17 hours ago		81	0	
<a href="#">emp-info-emp-subsystem</a>	18 hours ago		76	0	<a href="#">#21</a>
<a href="#">monthly-report</a>	5 days ago		121	0	
<a href="#">sqlpractice</a>	last week		187	0	
<a href="#">with_php</a>	last week		213	2	

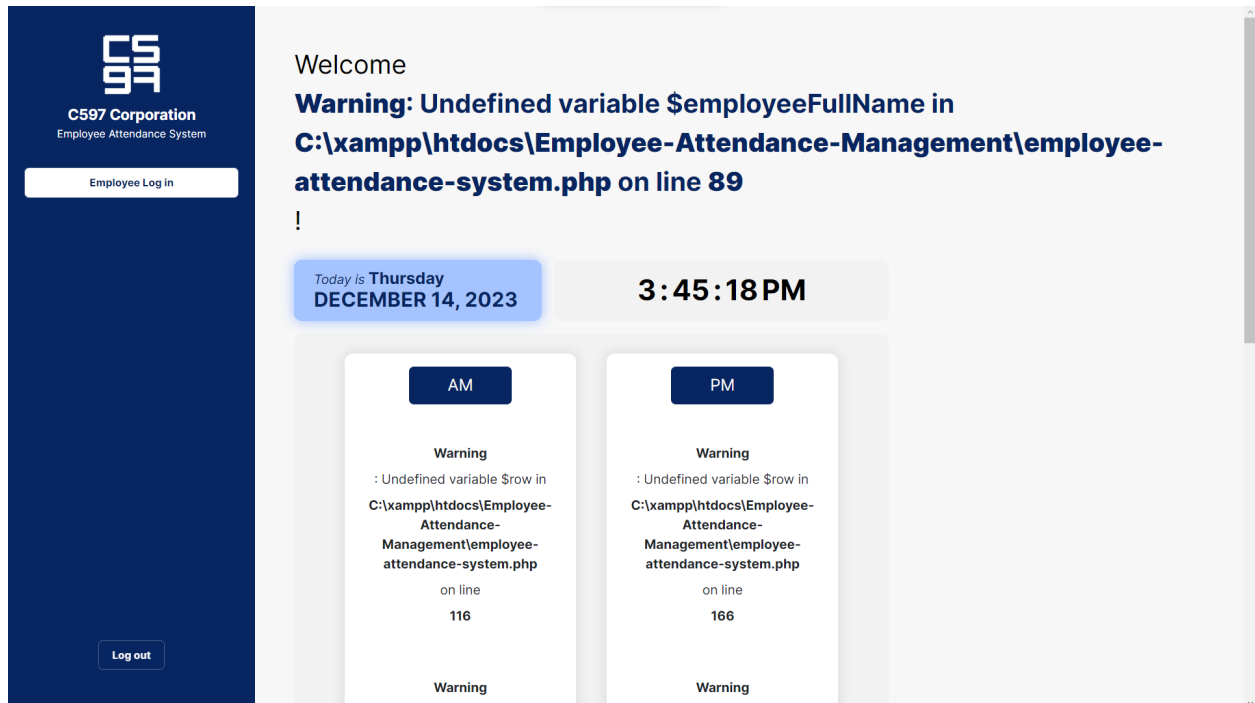
Figure 9.6: Active branches in the repository as of December 19, 2023



# 10 BUG TRACKING REPORT



Solved by just adding the *employee-edit-form.php* in the action form instead.



Error will appear once *employee-attendance-system.php* is opened directly. This is solved by logging in through *employee-login.php*.

Welcome ADMIN123!

Today is Thursday  
DECEMBER 14,  
2023

04:06:27  
AM

Table legend  
Late  
Undertime

Emp ID	Full Name	Shift	td.late	76.23 x 59.06	PM In	PM Out	Overtime	Night Differential
8	Daniela M. Cantillo	Afternoon Shift	10:30:00		11:30:00	13:00:00	14:00:00	0
9	Dee Monde Razon	Night Shift	08:30:00		11:30:00	13:30:00	04:59:00	0
12	Dawn Cruz Bander	Day Shift	08:30:00		11:30:00	13:30:00	04:59:00	0
10	Minzy Grado Mendez	Morning Shift	02:38:52		02:39:03	02:39:08	02:39:10	0
11	Alex Miranda	Night Shift	03:06:02		03:06:16	03:12:09	03:12:12	0

The css class keeps getting overwritten. Solved by adding *!important* in the class.

Monthly Log in Report

Viewing log in reports today  
DECEMBER 2023

4:09:08 PM

Table legend  
Late  
Undertime

Emp ID Full name Contract Shift


1 MARK OTTO Part Time Morning

8 Search

No Records Found

Emp ID	Date	AM IN	AM OUT	PM IN	PM OUT	Overtime
8	2023-12-14	10:30:00	11:30:00	13:30:00	04:59:00	

Error message contradicts the records shown.




**C597 Corporation**  
Employee Attendance System


- Log In Report
- Employee Maintenance
- Daily Report
- Monthly Report

Log out

## Monthly Log in Report

Export to PDF
 

Viewing log in reports today  
**DECEMBER 2023**



**11:31:11 PM**


Table legend

- Late
- Undertime

Emp ID	Full name	Contract	Shift

**Fatal error**

: Uncaught TypeError: mysqli\_num\_rows(): Argument #1 (\$result) must be of type mysqli\_result, bool given in C:\xampp\htdocs\Employee-Attendance-Management\monthly-load.php:15 Stack trace: #0 C:\xampp\htdocs\Employee-Attendance-Management\monthly-load.php(15): mysqli\_num\_rows(false) #1 {main} thrown in C:\xampp\htdocs\Employee-Attendance-Management\monthly-load.php on line 15



**C597 Corporation**  
Employee Attendance System

- Log In Report
- Employee Maintenance
- Daily Report
- Monthly Report

Log out

## Welcome admin1!

Today is **Monday**  
**DECEMBER 18, 2023**

**11:41:45 PM**

Table legend

- Late
- Undertime

**Fatal error**

: Uncaught TypeError: mysqli\_num\_rows(): Argument #1 (\$result) must be of type mysqli\_result, bool given in C:\xampp\htdocs\Employee-Attendance-Management\login-report.php:83 Stack trace: #0 C:\xampp\htdocs\Employee-Attendance-Management\login-report.php(83): mysqli\_num\_rows(false) #1 {main} thrown in C:\xampp\htdocs\Employee-Attendance-Management\login-report.php on line 83

There are instances that a user may encounter a problem in both figures. To resolve this issue, simply click the calendar icon and choose any date (month and year).

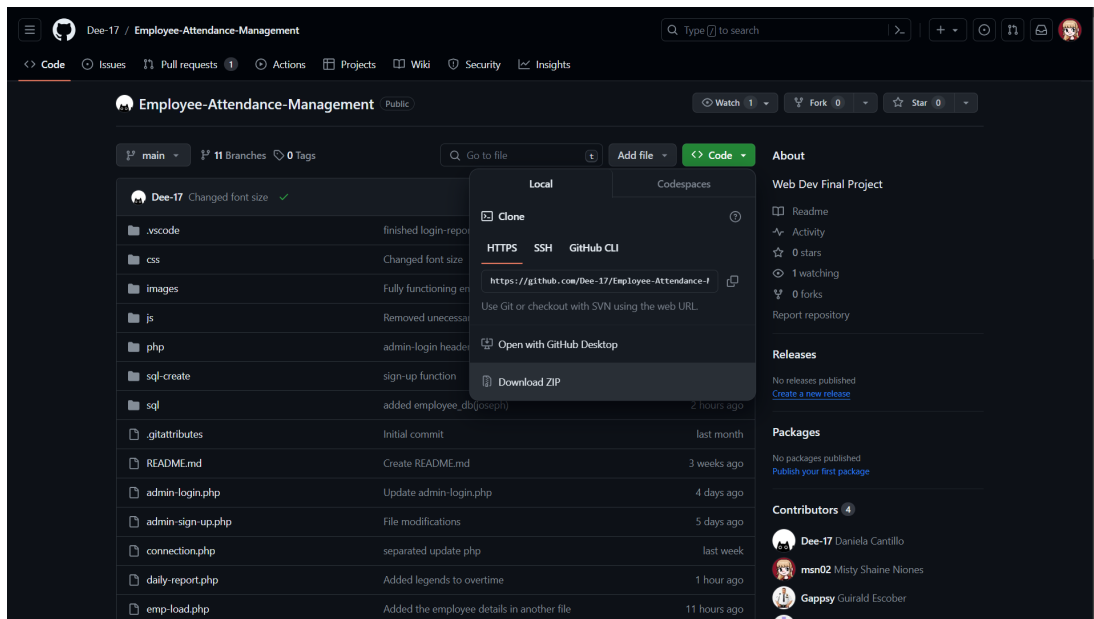
# 11 INSTALLATION GUIDE

Here is a step-by-step guide on how to install the Employee Attendance Management System (EAMS) in your local computer.

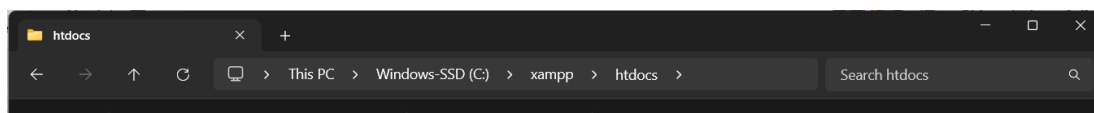
**NOTE:** Ensure that your local computer has an open web server that supports PHP. You can use XAMPP (Download XAMPP [here](#))

(1) Download the zip file from Github using the link below

<https://github.com/Dee-17/Employee-Attendance-Management>

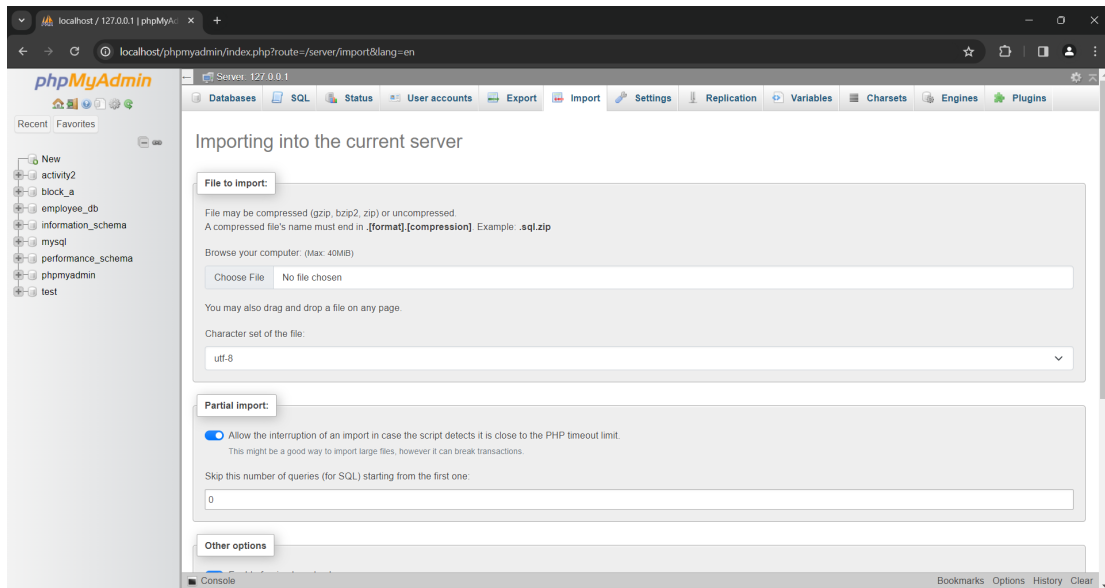


(2) Open file manager in your local computer and look for the 'htdocs' folder inside xampp. OR you can enter this file location (**C:\xampp\htdocs**) in your file manager's address bar.

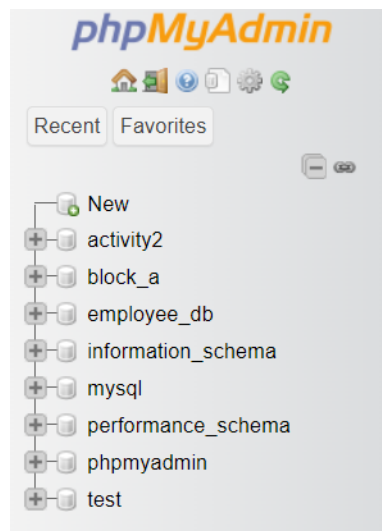


(3) Extract the downloaded zip file inside the **htdocs** folder. Right click the file and click the 'extract file' option. OR copy and paste your downloaded file and extract the zip file..

- (4) Once the files are extracted, open the XAMPP Control Panel and enable *Apache* and *MySQL*. Open your chosen web browser, and type in '***localhost/phpmyadmin/***'
- (5) Select '*Import*' among the tabs listed. Click the ***Choose File*** button and locate the sql file named "*employee\_db*". Scroll down and click the ***import*** button.



- (6) Check the panel on the left if *employee\_db* is in your local computer.



- (7) Now you can access the Employee Attendance Management System by typing the following URL your local browser  
***localhost/Employee-Attendance-Management/***