



**Pontifical and Royal
University of Santo Tomas**
España Boulevard, Sampaloc, Manila
College of Information and Computing Sciences
Department of Information Technology



Tiger Cookies MNL: Unified Attendance and Salary Computation for Efficient Bake Shop Management

Software Design Document

Members:

Bagain, Aaron Joshua
De Guzman, Ralph Kenneth
Francisco, Aliyah
Joves, Josh Denziel S.
Lopez, Jherome Christopher
Mocorro, Kenn Marton
Samaniego, Mikko
Sunga, Kevin

3ITD

Adviser:

Asst. Prof. Princess Arleen S. Zamora

Table of Contents

1. Introduction	3
1.1 System Overview.....	3
1.2 System Architecture.....	3
2. Detailed Use Case Diagrams.....	3-6
2.1 Login (Use Case).....	3
2.2 Attendance (Use Case).....	4
2.3 Payroll (Use Case).....	5
2.4 Manage Account (Use Case).....	6
3. Swimlane Diagrams.....	7 - 13
3.1 Login (Swimlane).....	7
3.2 Employee - Manage Account (Swimlane).....	8
3.3 Admin - Manage Account (Swimlane).....	9
3.4 Employee - Attendance (Swimlane).....	11
3.5 Admin - Attendance (Swimlane).....	12
3.6 Admin/Employee - Payroll (Swimlane).....	13
4. System Sequence Diagrams.....	15 - 25
4.1 Login (SSD).....	15
4.2 Employee -Attendance (SSD).....	16
4.3 Admin - Attendance (SSD).....	19
4.4 Employee - Payroll (SSD)	21
4.5 Admin - Payroll (SSD).....	22
4.6 Employee - Manage Account (SSD).....	24
4.7 Admin - Manage Account (SSD).....	25
5. Subsystem Sequence Diagrams.....	26 - 34
5.1 Login (Subsystem).....	26
5.2 Employee - Attendance (Subsystem).....	27
5.3 Admin - Attendance (Subsystem).....	29
5.4 Employee - Payroll (Subsystem).....	30
5.5 Admin - Payroll (Subsystem).....	31
5.6 Employee - Manage Account (Subsystem).....	33
5.7 Admin - Manage Account (Subsystem).....	34

6. Data Design.....	35
6.1 Data Description.....	35
6.1.1 Entity - Relationship Diagram.....	35
6.1 Data Dictionary.....	36 - 42
7. Component Design.....	43
7.1 Class Diagram.....	43
8. Human Interface Design (Mockup).....	46 - 68
8.1 Overview of User Interface.....	46 - 48
8.2 Screen Mockups.....	48 - 68
9. Human Interface Design (Screenshot).....	68 - 100
9.1 Overview of User Interface.....	68 - 71
9.2 Screenshot of System.....	72 - 100
10. Process of Deployment.....	100

Software Design Document (SDD)

1. System Overview

Give a general description of the context (client, background, objectives, etc.), functionality (functional requirements), and design (external interface requirements) of your project. Provide any background information if necessary.

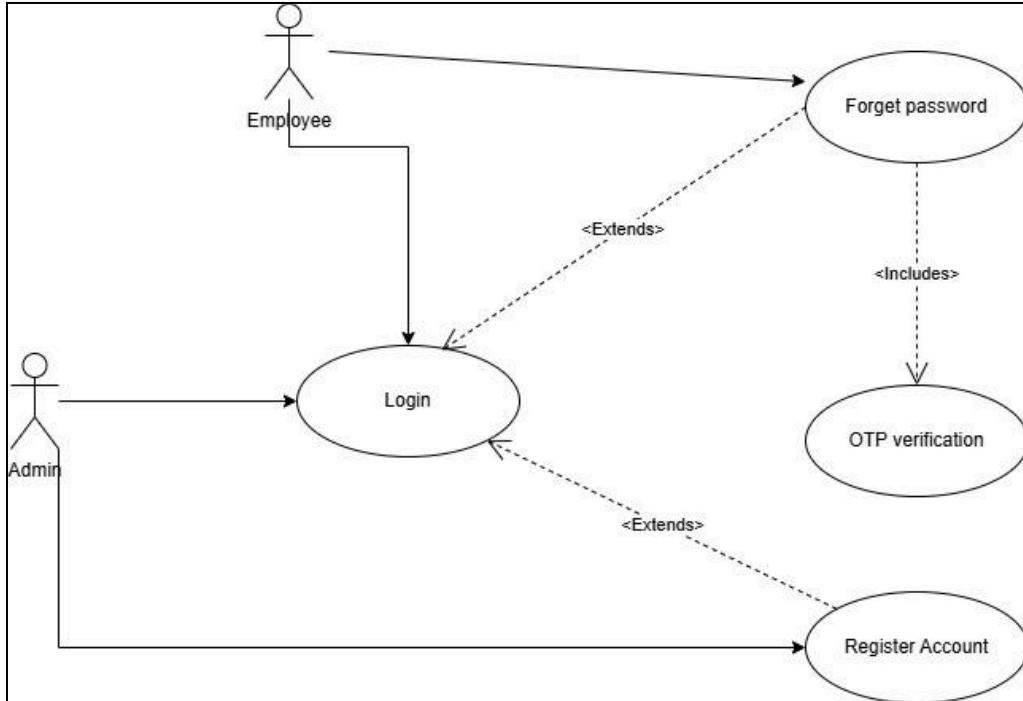
2. System Architecture

a. Architectural design

Describe how responsibilities of the system were partitioned and then assigned to subsystems. Describe how each subsystems collaborate with one another to achieve the desired functionality. This section should be able to give a general understanding of how and why the system was decomposed and how each subsystem work together. Diagrams must include brief narratives to support it.

Figure D2.1. Detailed Use case diagram (with dependencies, inclusions, etc.)

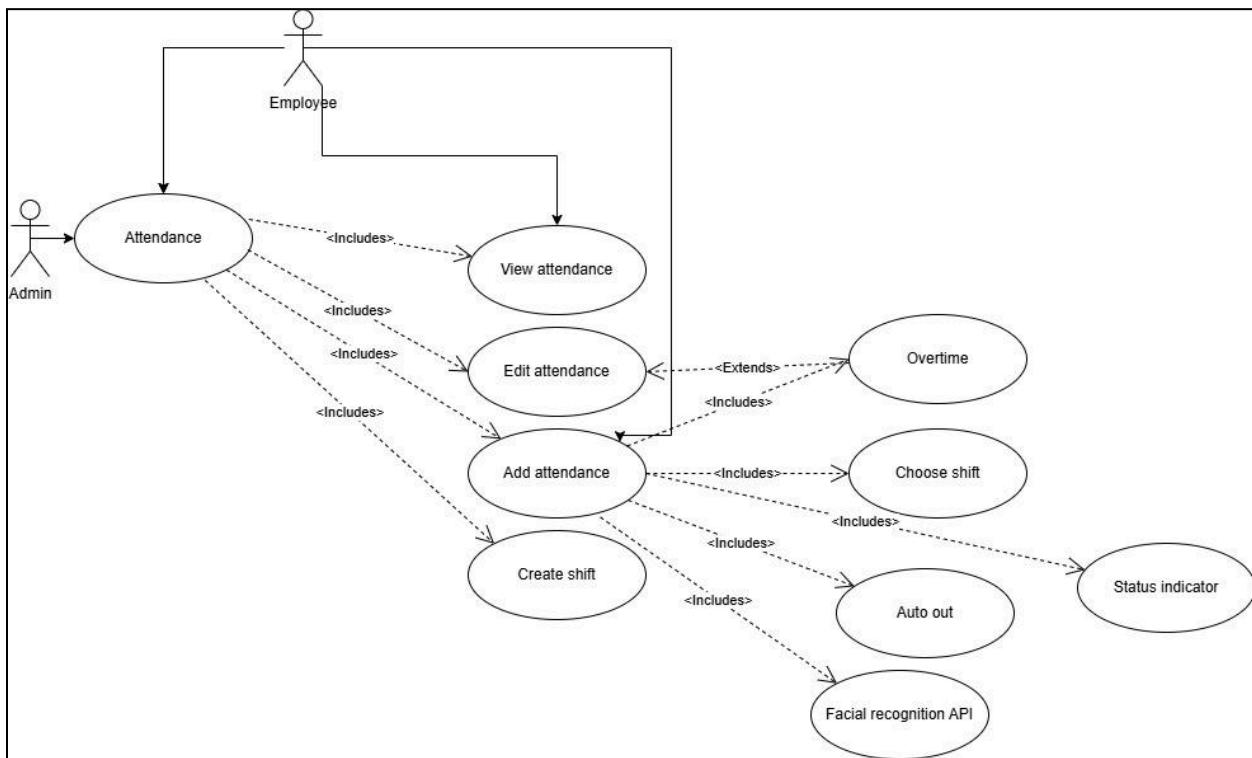
Login (Use Case)



- The Login Use Case Diagram demonstrates how users interact with the system during authentication. Users submit their credentials, verified by the system, providing access if

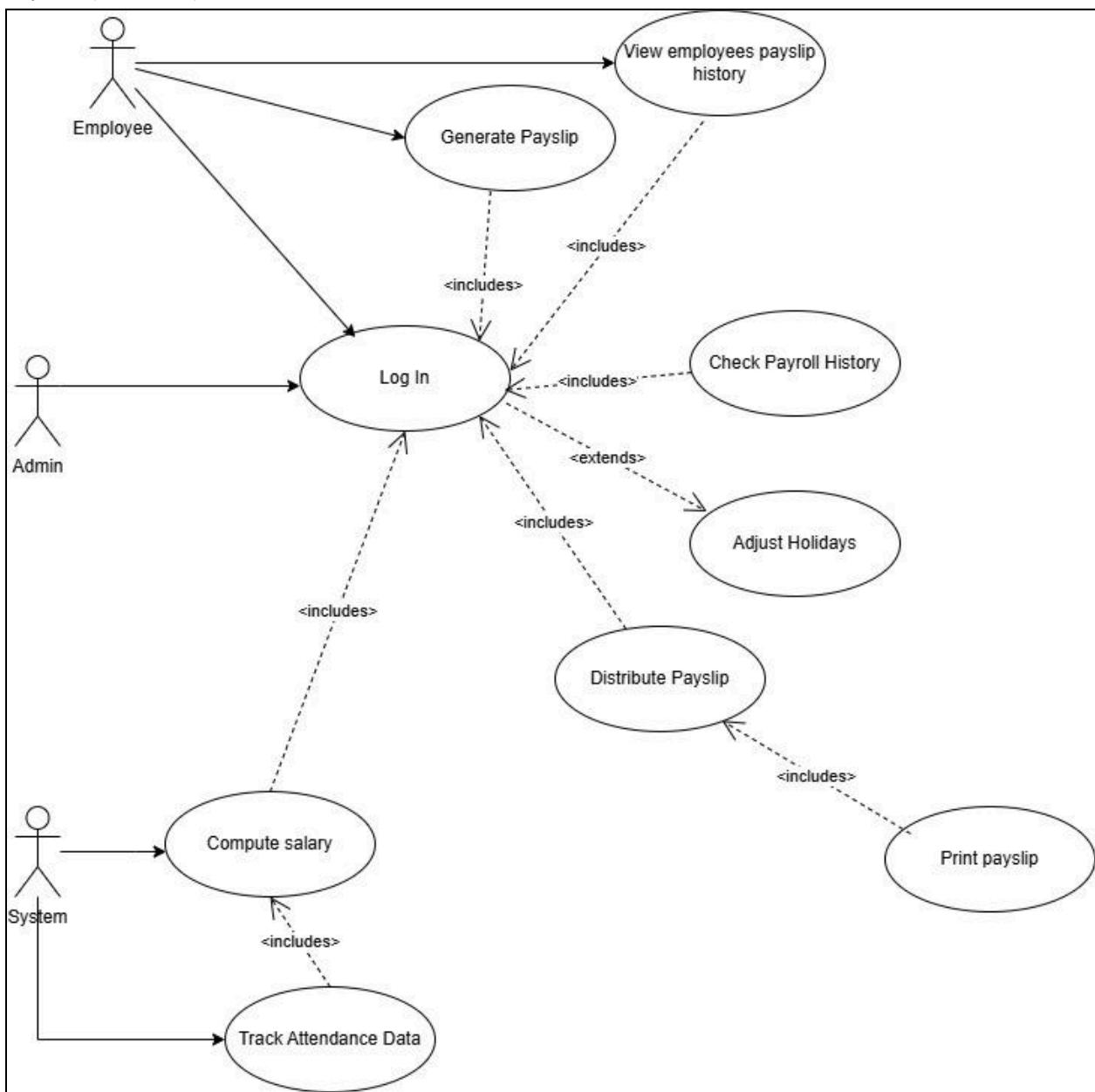
authentication is successful or prompted for re-entry or recovery if it fails. The procedure ensures secure access to system functions.

Attendance (Use Case)



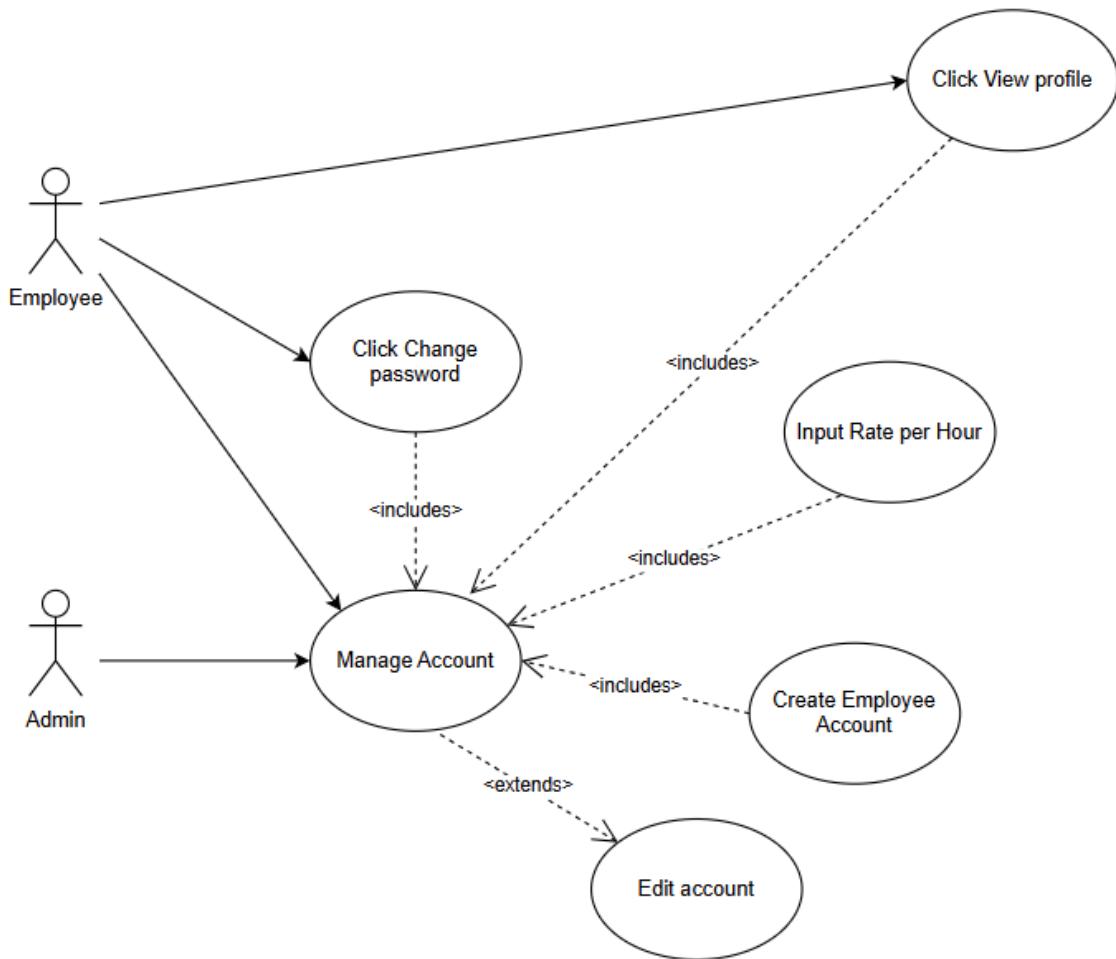
- The Attendance Use Case Diagram shows how administrators manage attendance by adding, creating shifts, editing, and viewing records, whereas employees can only add and view their own attendance, with sub functions such as shift selection, overtime tracking, auto-out, facial recognition, and status indicators to ensure efficient and accurate attendance management.

Payroll (Use Case)



- The Payroll Use Case Diagram depicts how the administrator, employee, and system collaborate to manage payroll activities. Admins can log in to generate payslips, view and verify payroll history, alter holidays, distribute and print payslips, compute wages and track attendance data. At the same time, employees can access their payslip history. The technology facilitates these operations by automating calculations and data management.

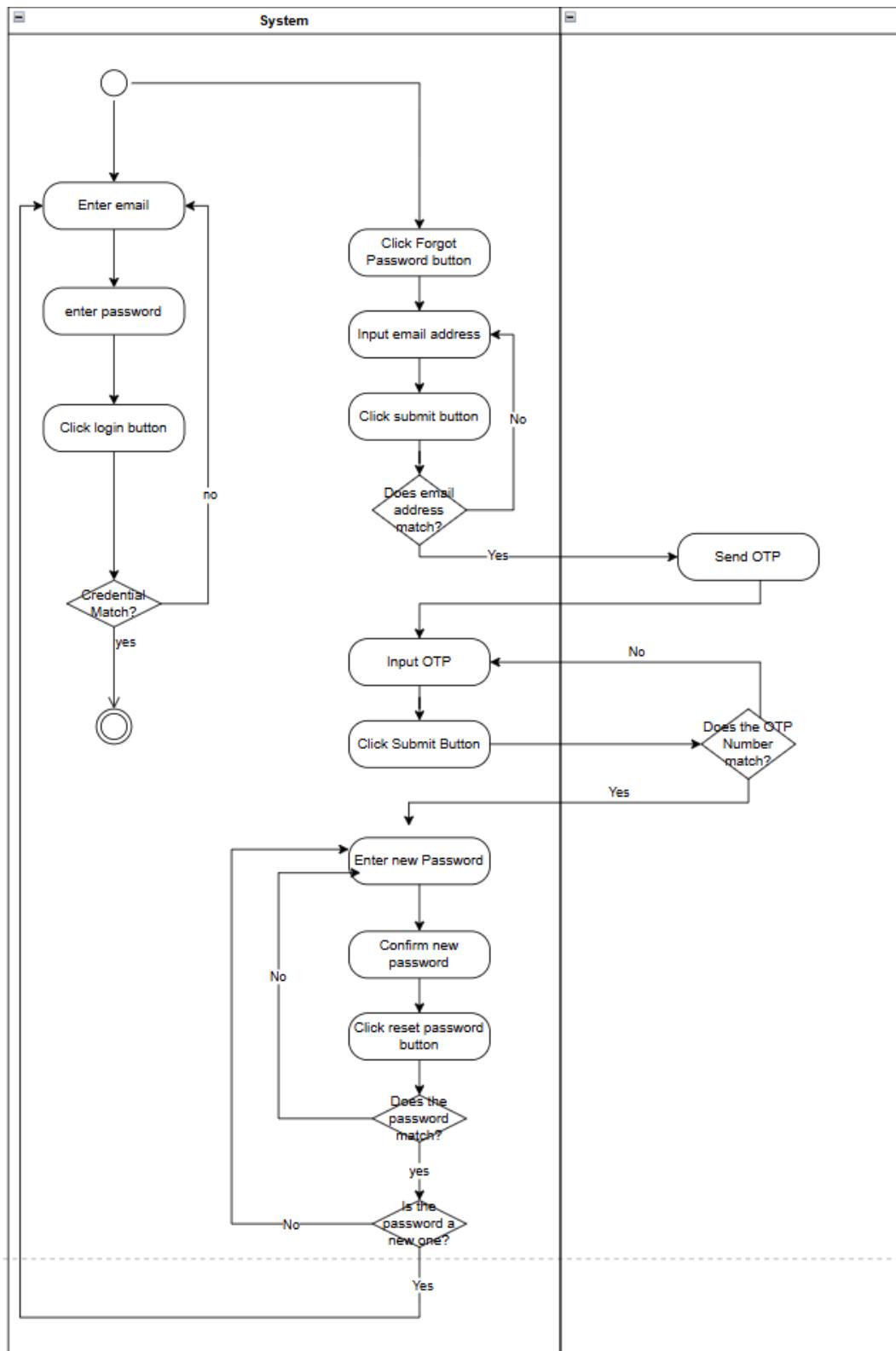
Manage Account - (Use Case)



- The Manage Account Use Case Diagram demonstrates how administrators and employees use the system. Admins can establish employee accounts, set rates, and amend them, while both administrators and employees can browse profiles and change passwords via an email API. This ensures more efficient account administration and secure access.

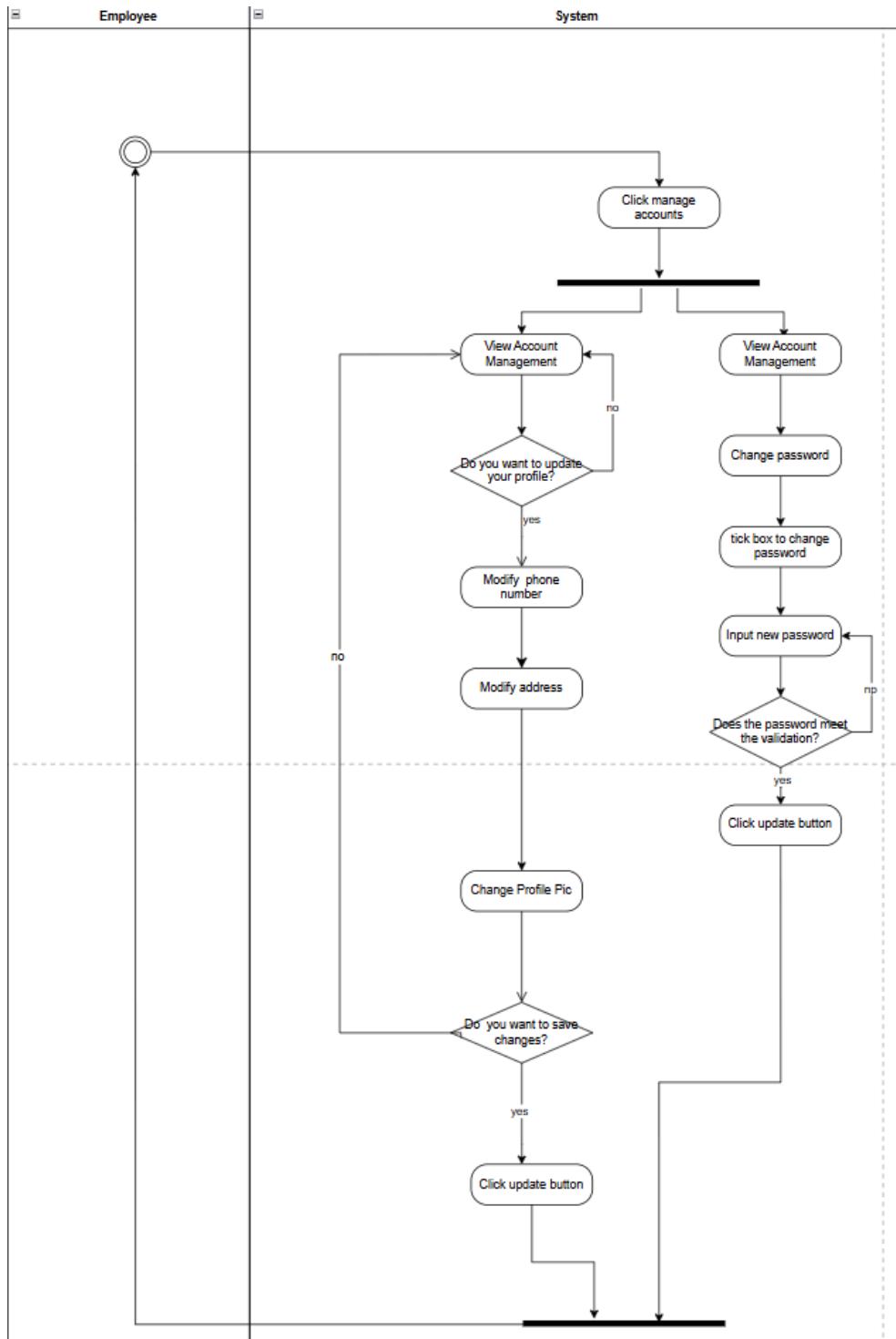
Figure D2.2. Swimlane diagram

Login (Swimlane)



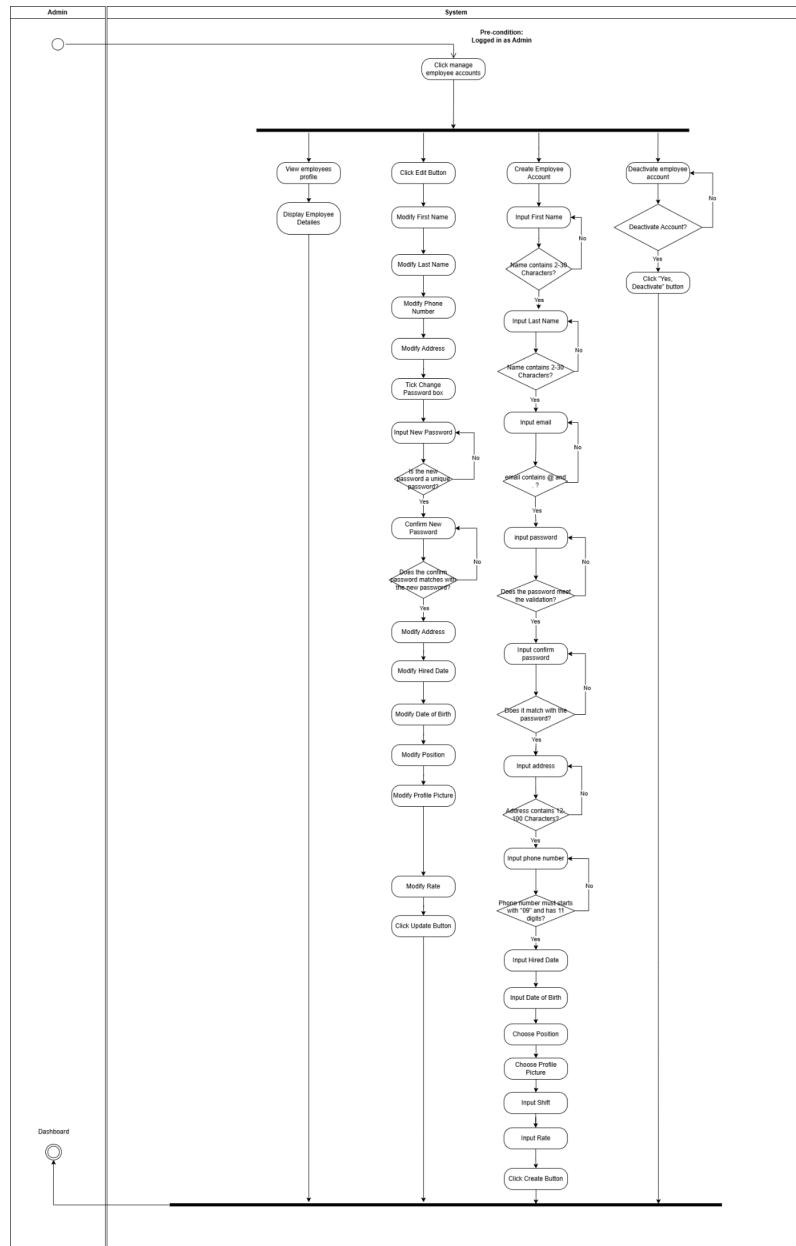
The Login Swimlane Diagram depicts the sequence in which the user enters their email address and password, hits the login button, and the system validates credentials. If the credentials do not match, the user must re-enter them. If everything is correct, you will be granted access. For forgotten passwords, the user enters an OTP, creates and confirms a new password, and then clicks reset

Employee - Manage Account (Swimlane)



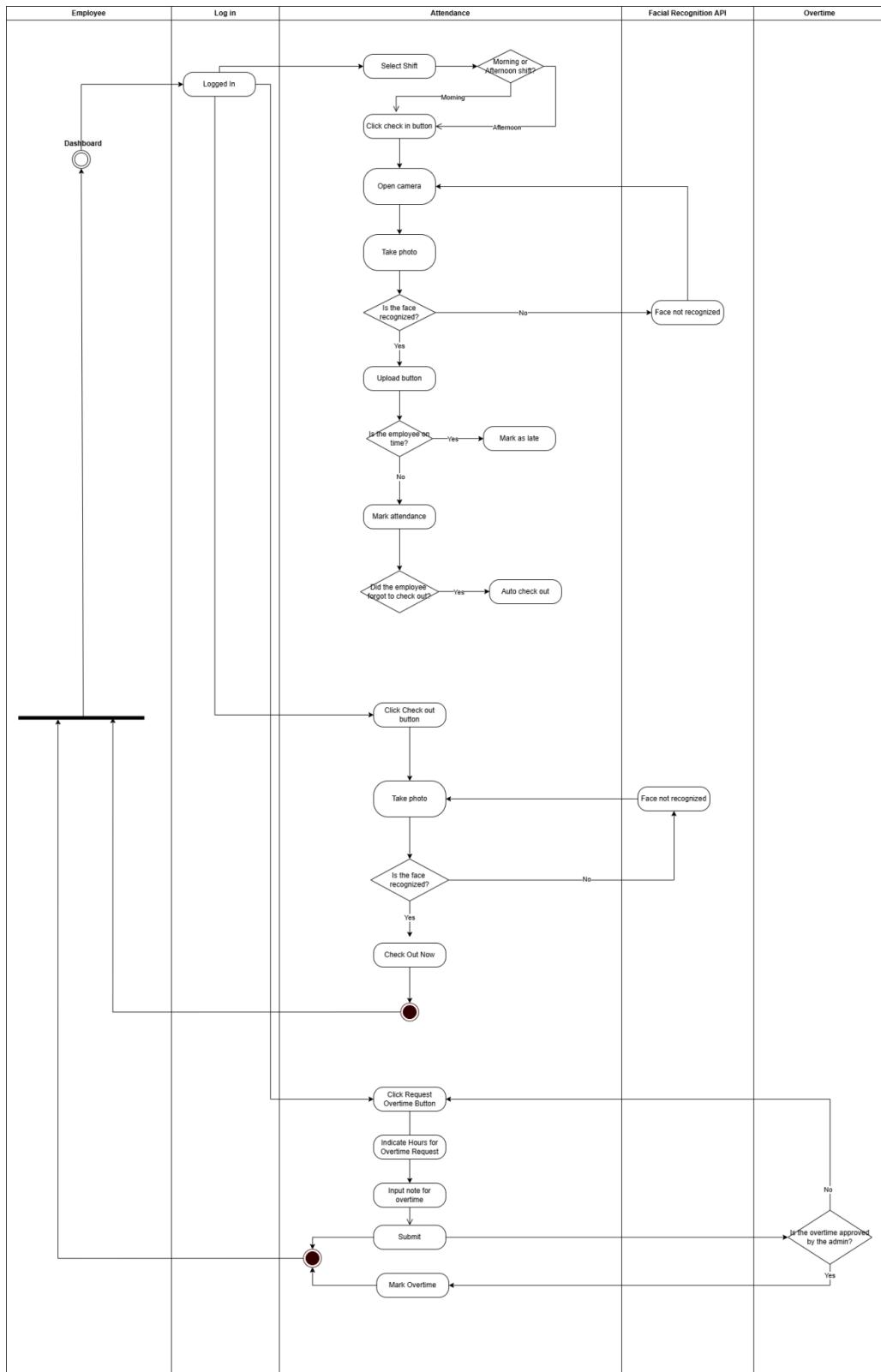
The Employee Manage Account Swimlane Diagram depicts the employee choosing "Manage Account," from which they can either view and edit their profile (phone number, address, gender, and profile photo) or change their password, with the system sending an email and OTP for password reset.

Admin - Manage Account (Swimlane)



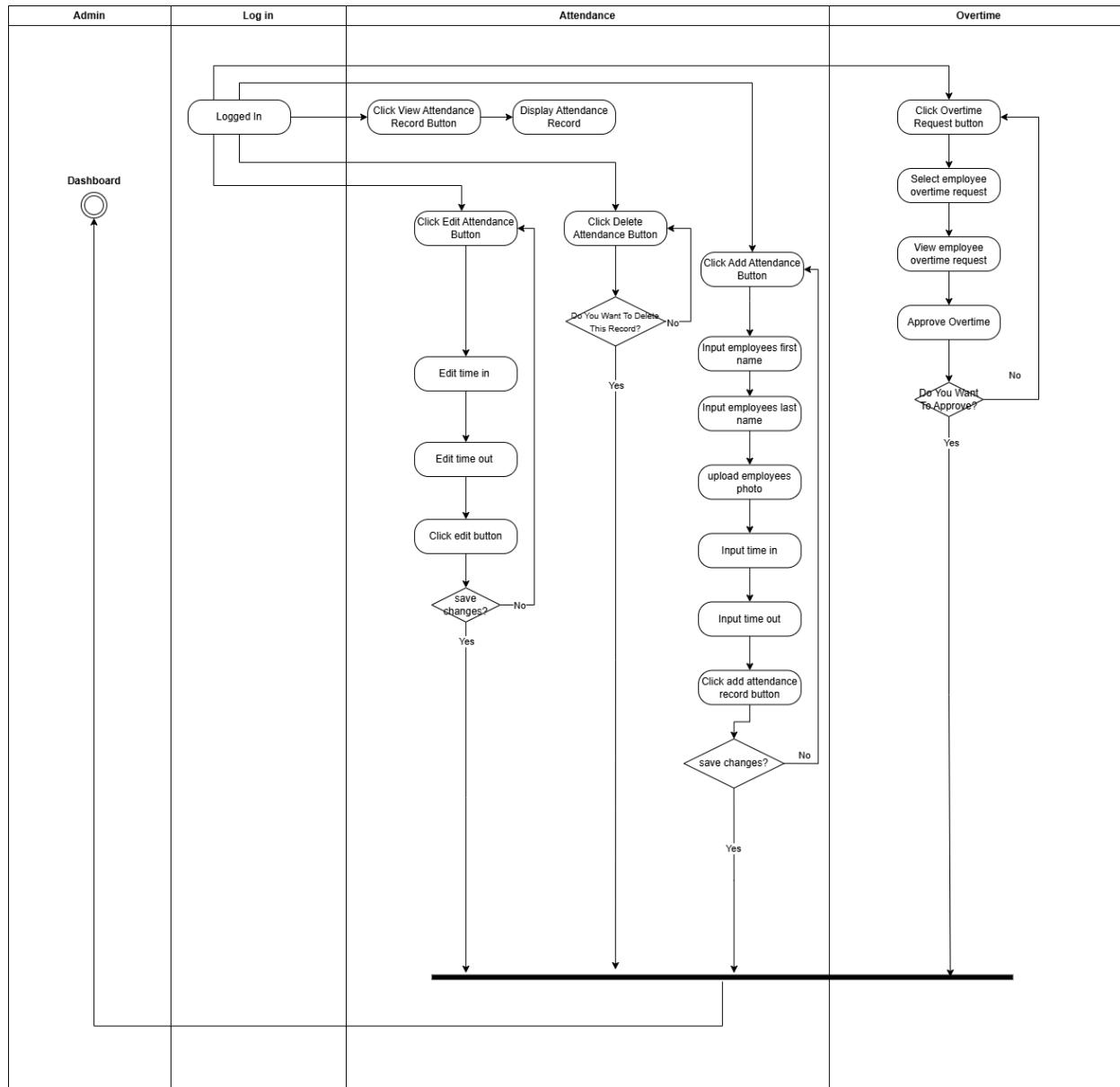
The Admin Manage Account Swimlane Diagram depicts the admin clicking "Manage Account," from which they can view and update employee profiles (first name, last name, phone number, address, and password change), set employee rates, and create or delete accounts without the need for an OTP, unlike the employee process.

Employee - Attendance (Swimlane)



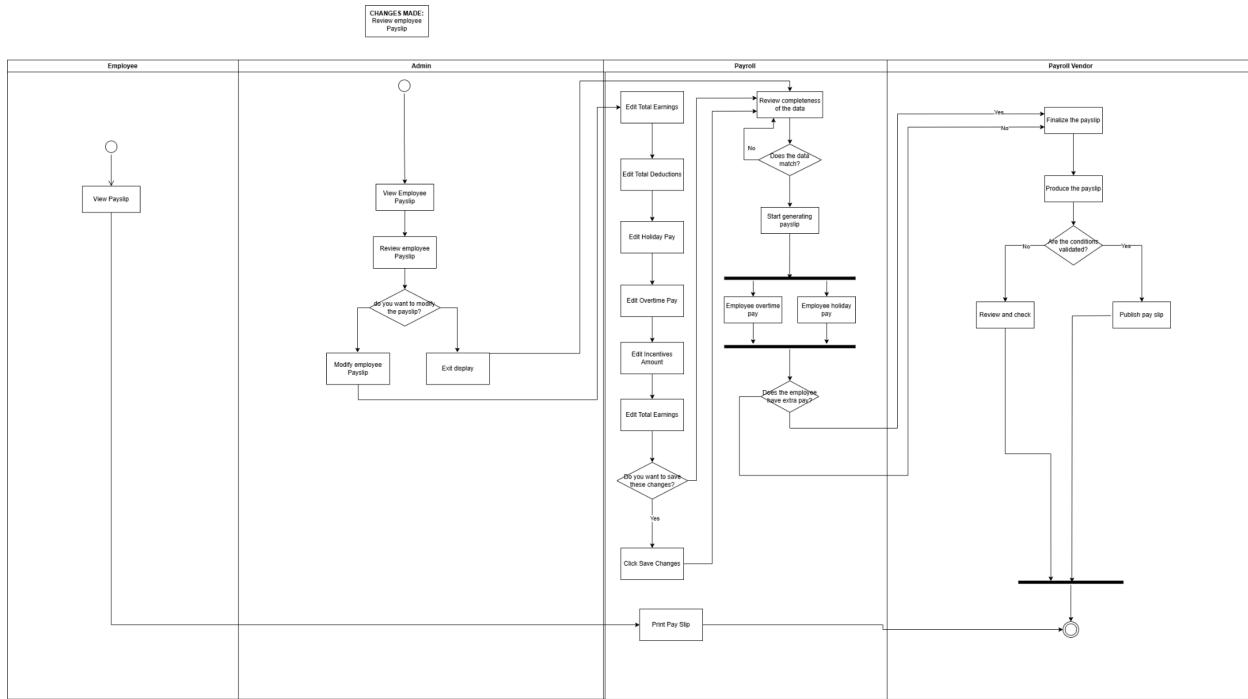
- The Employee Attendance Swimlane Diagram depicts the employee selecting their shift, utilizing face recognition to capture and upload a photo to mark attendance, and having the option to request overtime by submitting a letter for administrative permission before beginning overtime. Upon checkout, the employee utilizes face recognition again, uploads their photo, and confirms their attendance status (late, on time, or overtime).

Admin - Attendance (Swimlane)



The Admin Attendance Swimlane Diagram displays the administrator reviewing, modifying, or deleting attendance records, adding new attendance, and approving employee overtime requests

Admin/Employee - Payroll (Swimlane)

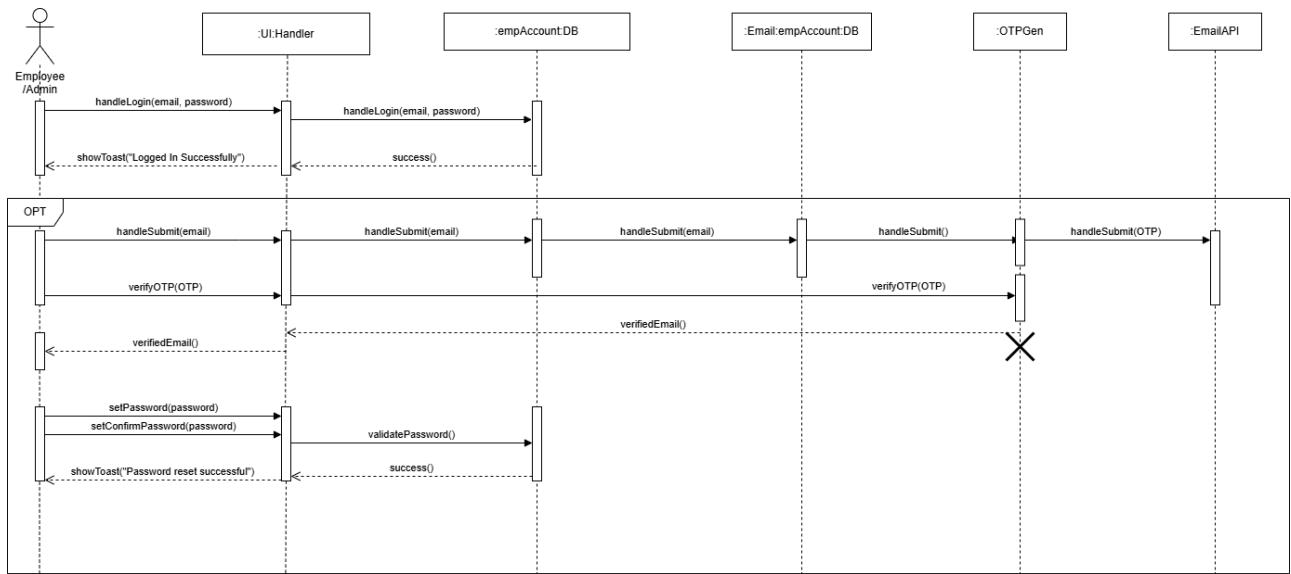


Admin/Employee Payroll Swimlane Diagram: employees can only view and print their payslips, but administrators can review and change employee payslips, generate new payslips, and publish generated final payslips for all employees.

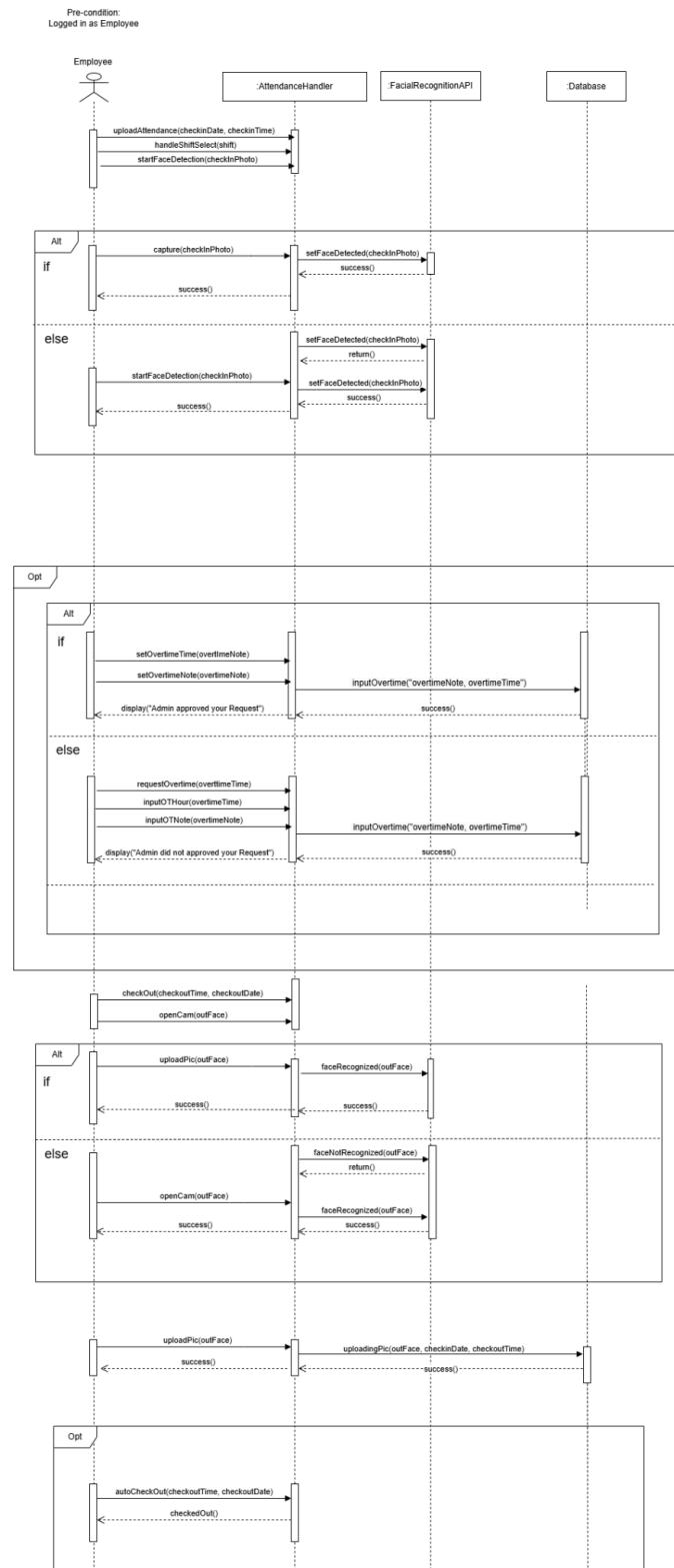
b. Decomposition Description

This section provides the in-depth decomposition as mentioned in the architectural design. Diagrams should identify system sequence, subsystem model, and interface specifications. Depending on the number of subsystems, the Subsystem Sequence Diagrams must be shown separately from the general System Sequence Diagram.

Figure D2.3. System sequence diagram
Login (SSD)

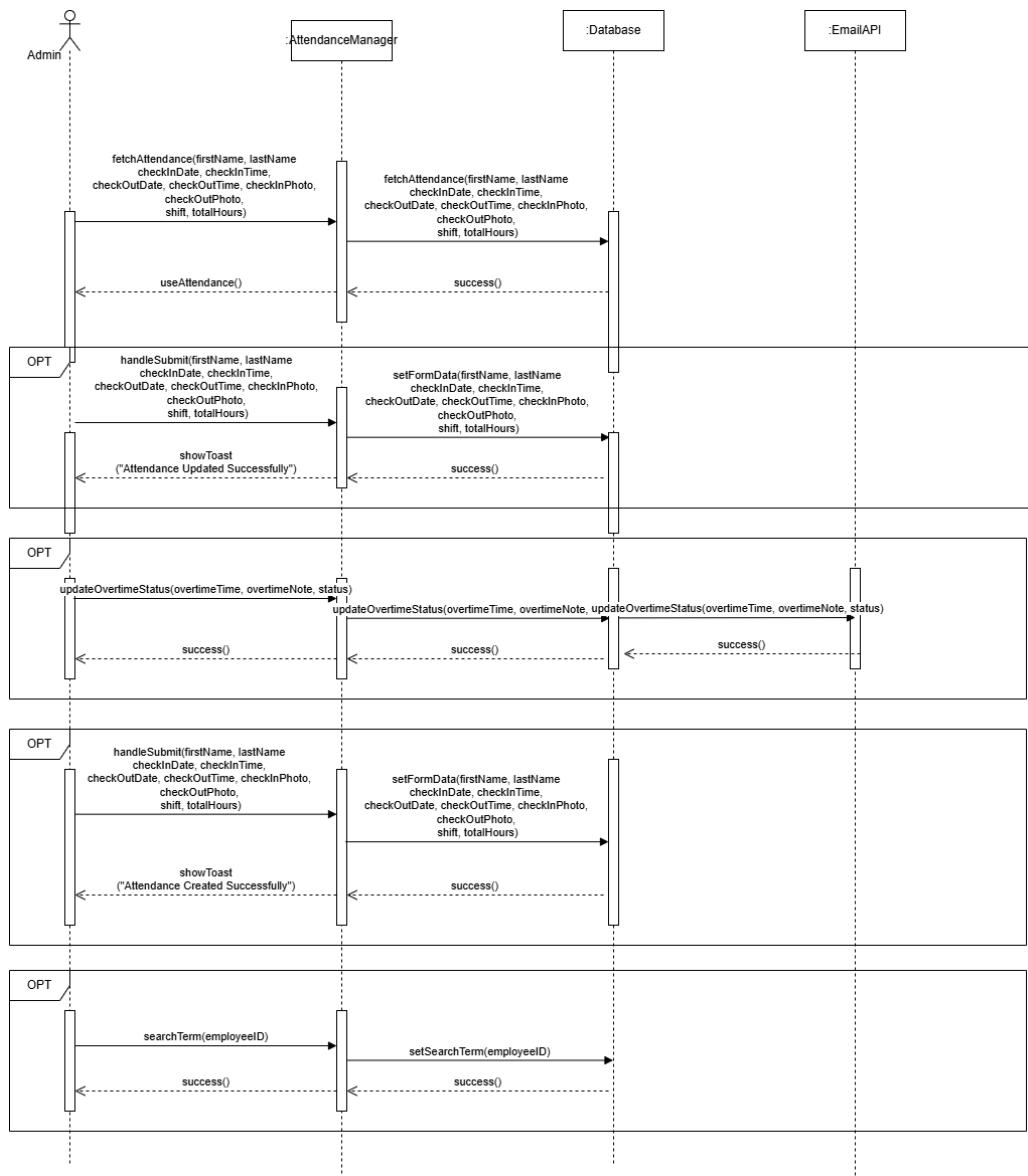


Employee - Attendance (SSD)



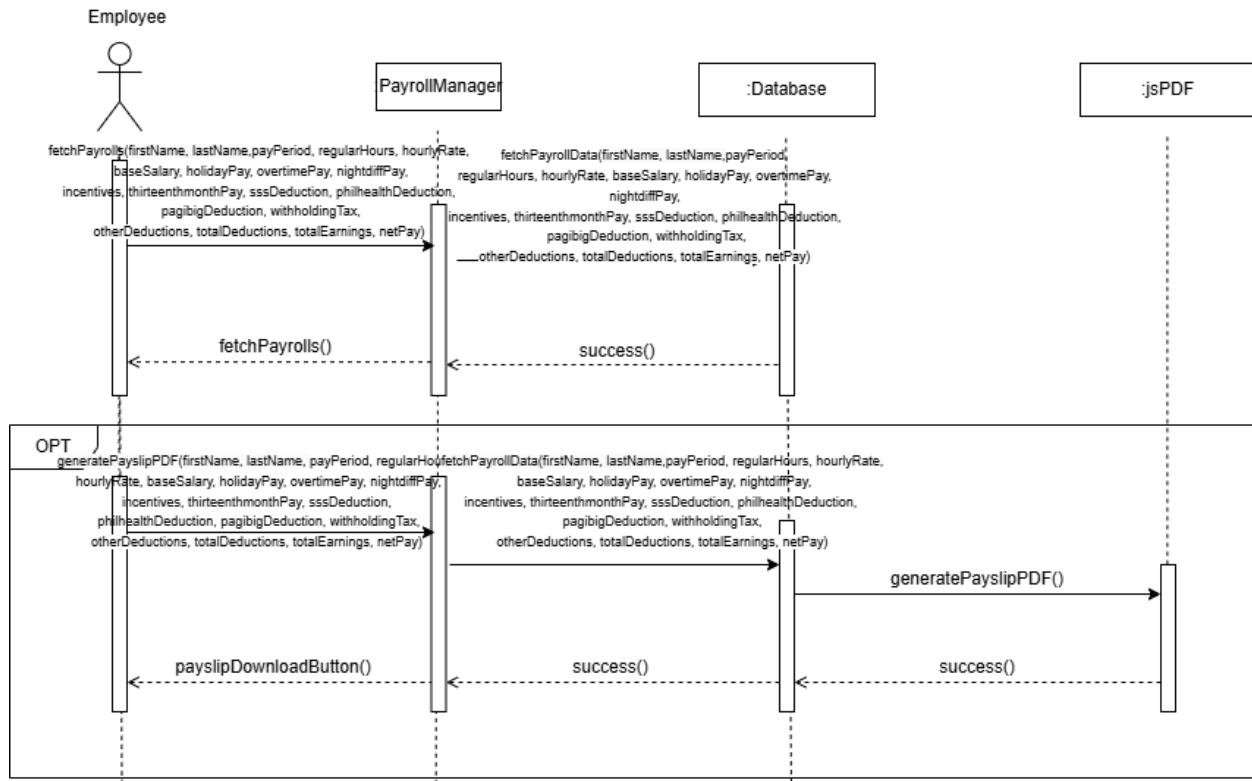
The diagram shows the employee attendance process using facial recognition for check-in, overtime requests, and check-out. During check-in, the employee selects a shift, and the system uses a camera to verify their face. If recognized, the system records the check-in; otherwise, it prompts a retry. For overtime, employees input their hours and notes, and the system processes the request, displaying whether it's approved or rejected. During check-out, the system again uses facial recognition to confirm the employee's identity before recording the check-out. If necessary, the system can perform an automatic check-out. This ensures accurate and secure attendance management.

Admin - Attendance (SSD)



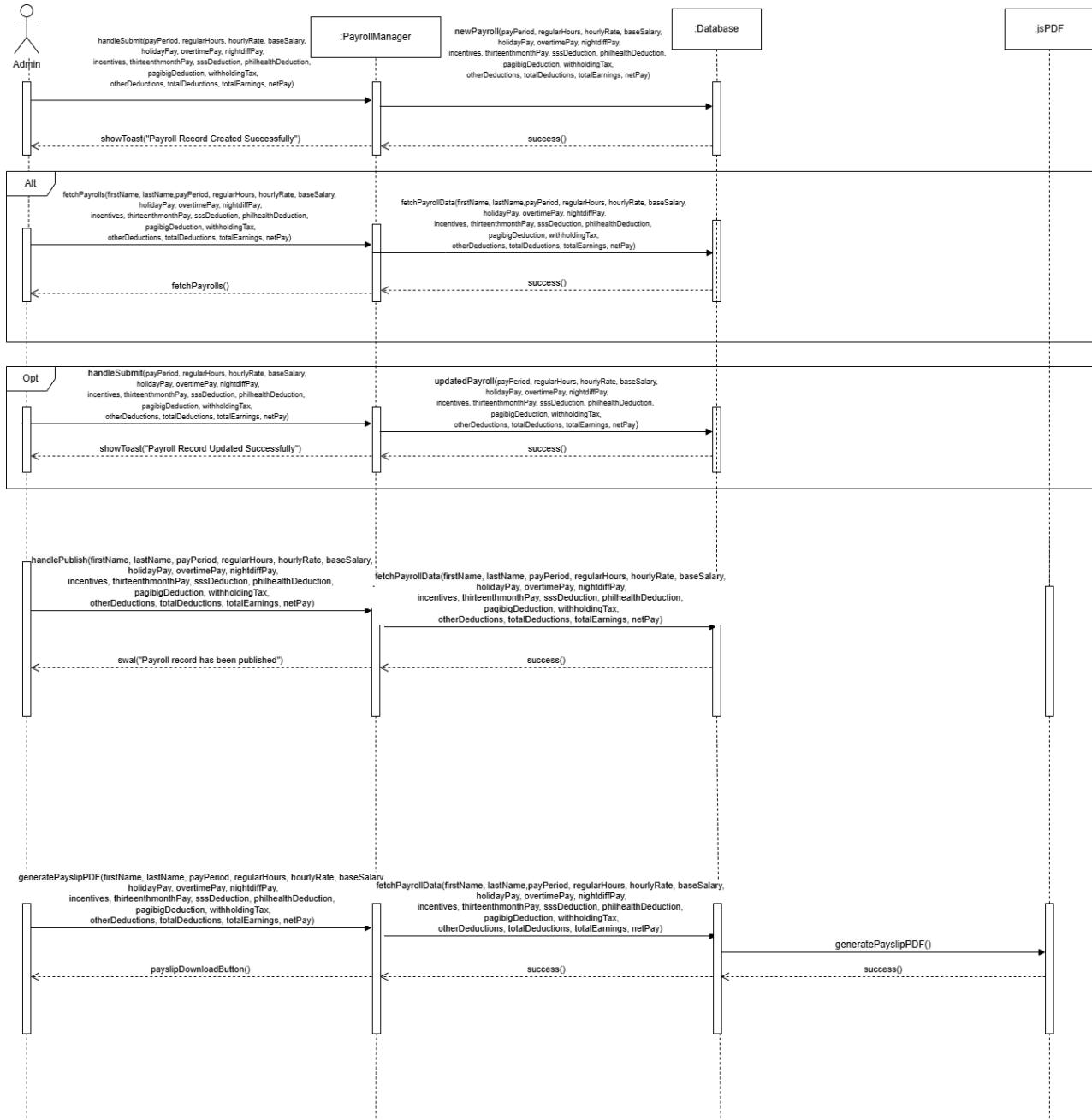
- This diagram illustrates the admin attendance process. The admin can view the attendance records of all employees and monitor their attendance statuses in real time. In addition to viewing attendance, the admin can edit an employee's overtime status based on specific circumstances or requests that may arise. Furthermore, if an employee cannot record their attendance for any reason, the admin can manually input or adjust their attendance record to ensure it accurately reflects the employee's work hours. This process helps maintain accurate records and ensures the smooth functioning of the attendance system.

Employee - Payroll (SSD)



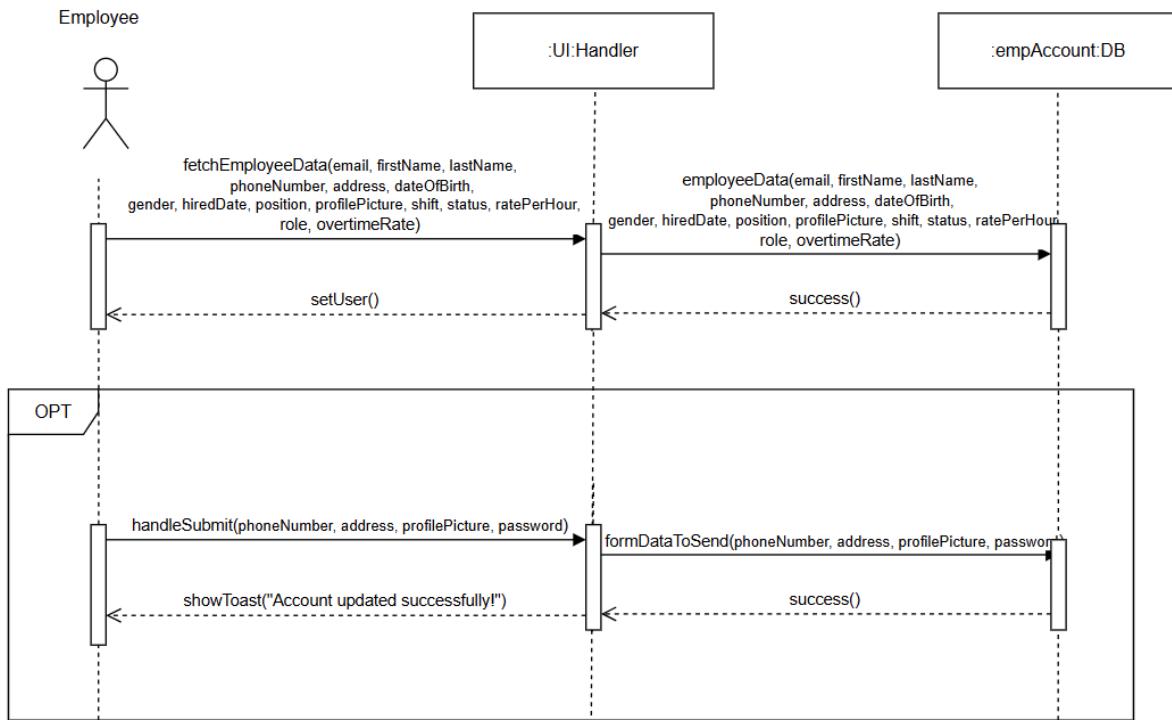
This diagram shows how employees can view their payrolls. They can access published payroll records and easily download them as PDF files to review their payroll details in a more organized format for personal reference or printing.

Admin - Payroll (SSD)



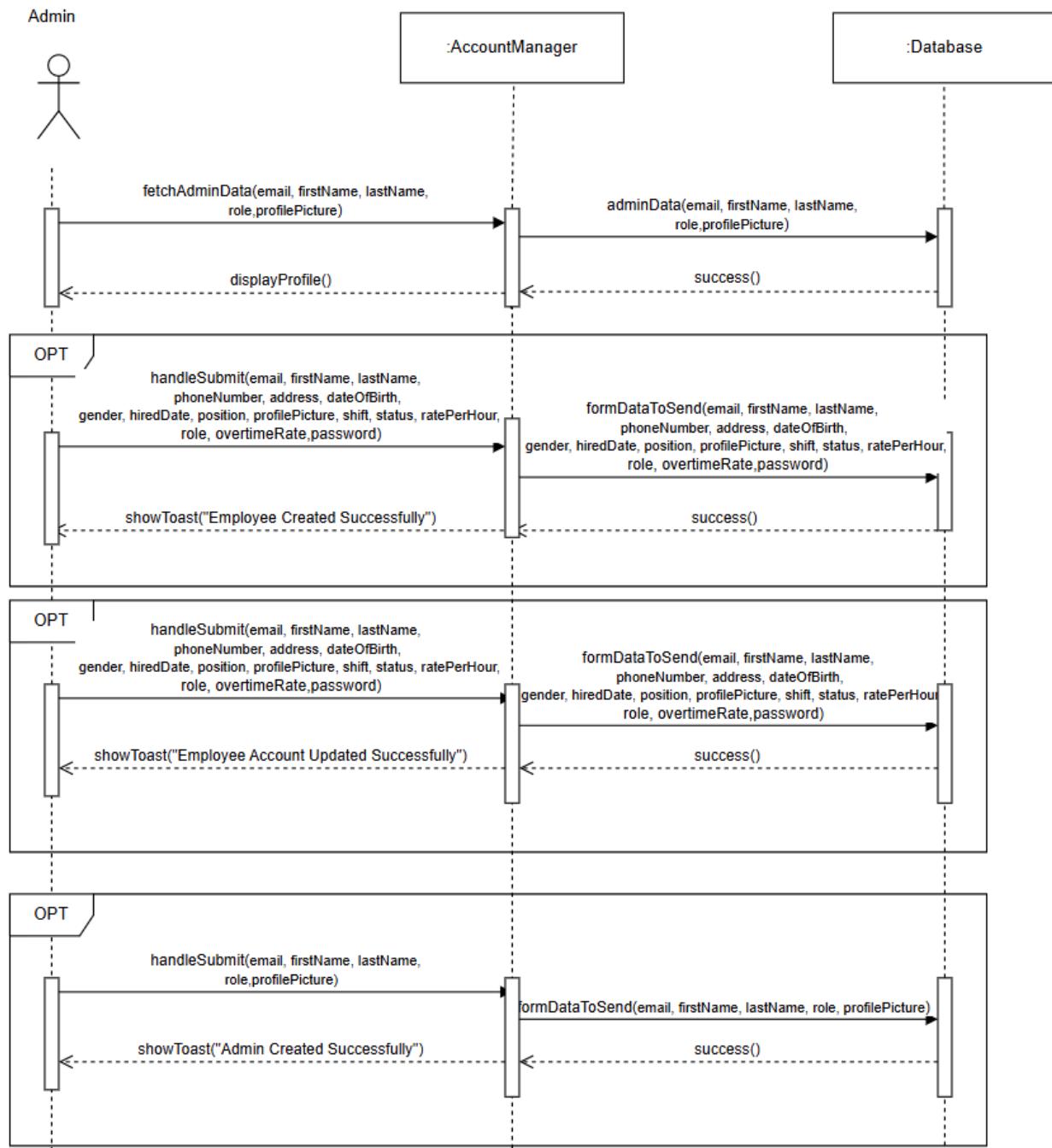
This diagram illustrates how the admin handles payroll. The admin can create payrolls based on each employee's attendance, manually inputting details such as the pay period, regular hours, hourly rate, and other necessary information. The admin has access to both published and unpublished payrolls, allowing them to view and manage the status of each. They can publish unpublished payrolls, making them available for employees to view and download, ensuring timely and accurate payroll distribution.

Employee - Manage Account (SSD)



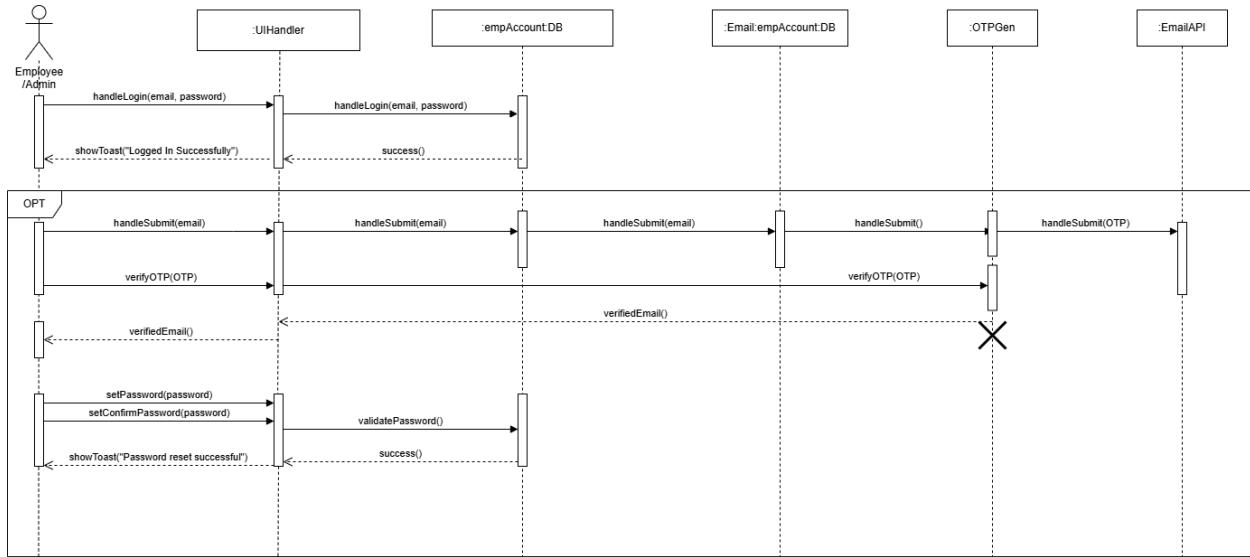
This diagram outlines the process for managing an employee's account. It starts when the employee interacts with the system, prompting the UI handler to fetch and display the employee's data from the database. The employee can then update their information (e.g., phone number, address, profile picture, and password) and submit the changes. The system sends the updated data to the backend, and upon successful update, a confirmation message is shown to the employee, indicating that their account has been updated successfully.

Admin - Manage Account (SSD)



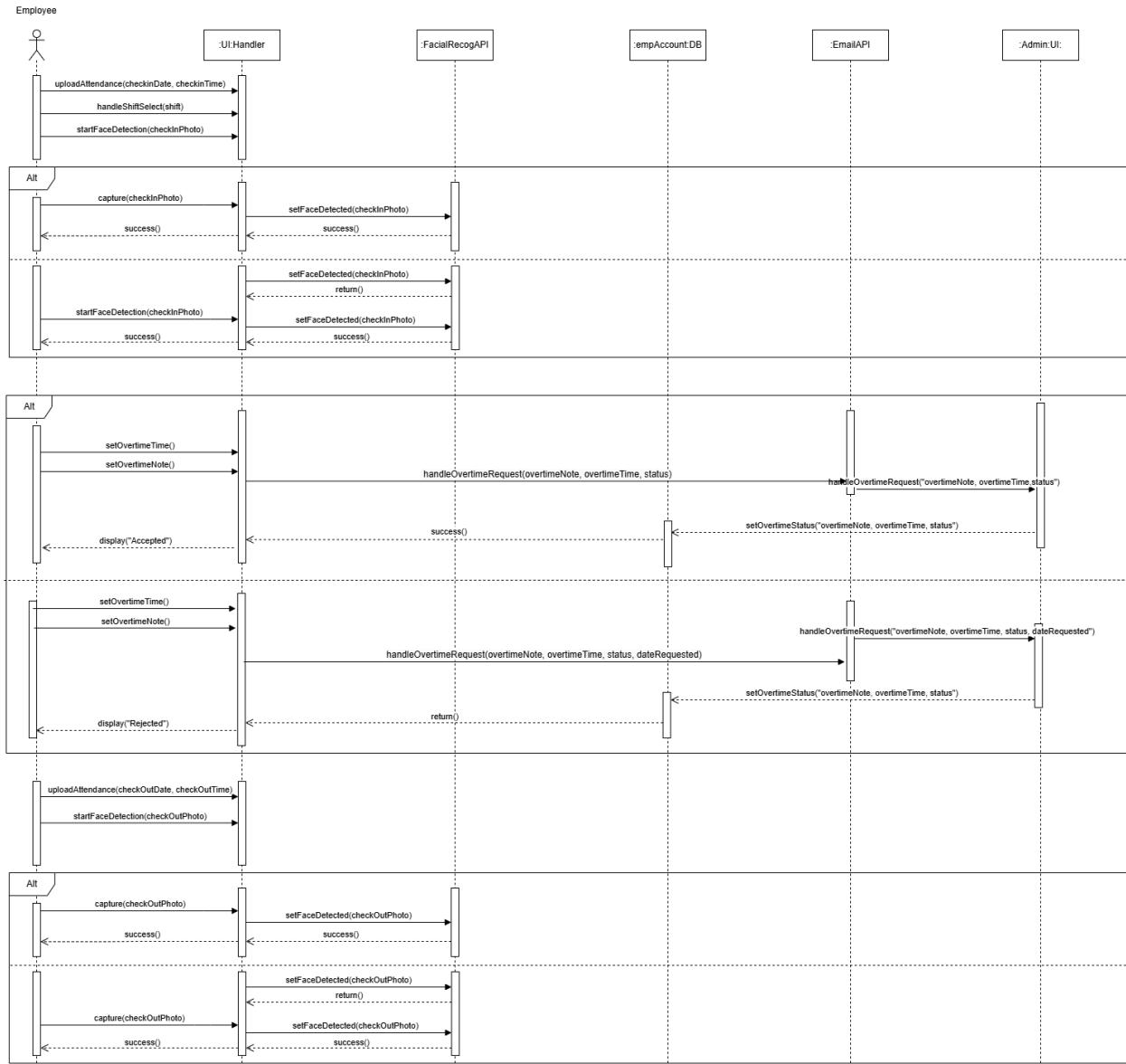
The diagram illustrates the admin account management process. Admins first retrieve their profile data (email, name, role) from the database. They can create new employee accounts by submitting employee information (email, name, phone, address) to the database, with confirmation messages displayed upon success. Admins can also update existing employee information, receiving success messages after updates. Additionally, admins can create their own accounts by submitting their data, with success confirmations shown after creation.

Figure D2.4.1. Subsystem sequence diagram: Login



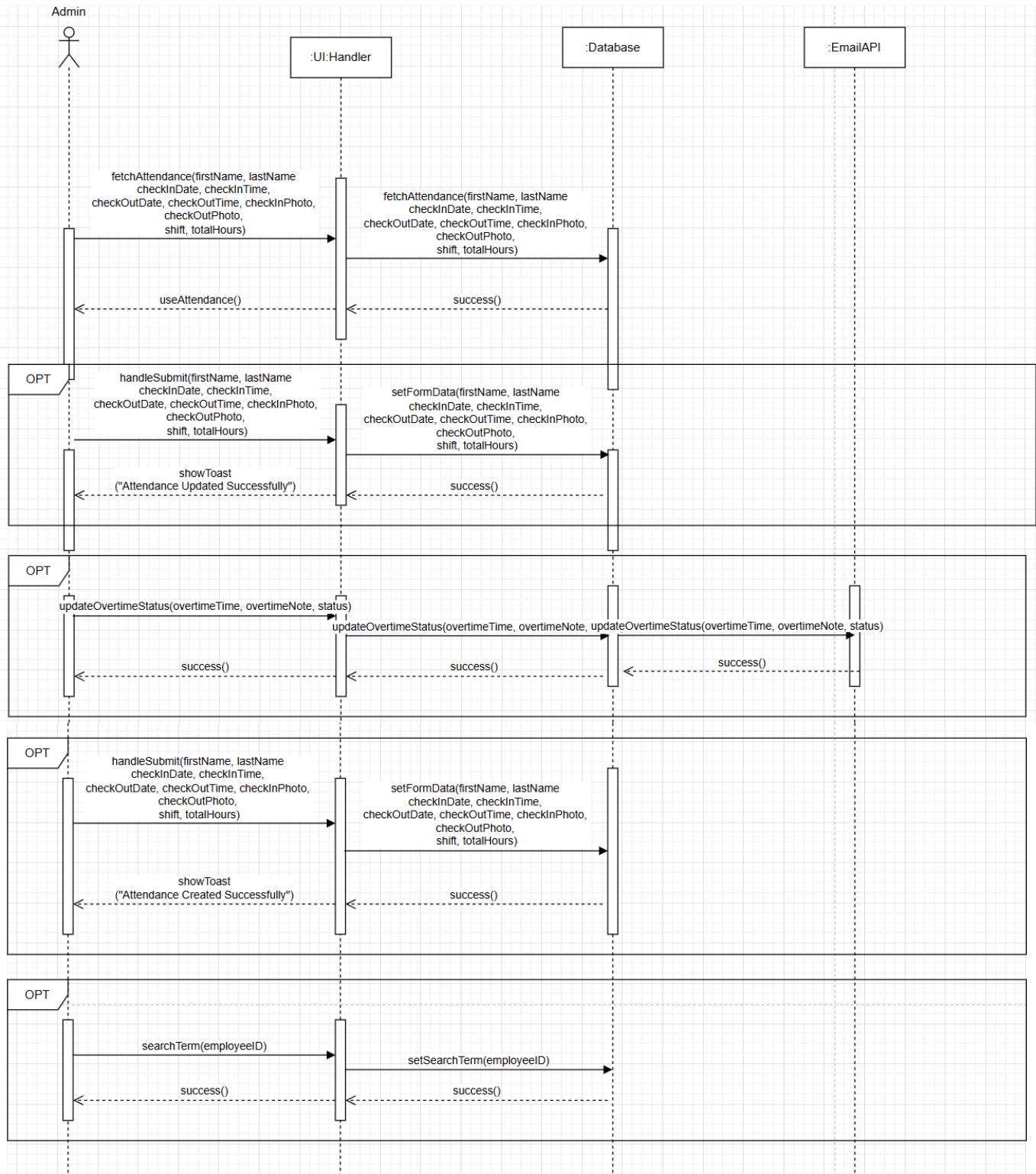
This diagram outlines the login process for employees and admins. The user begins by entering their login credentials, which are sent to the employee account database. If the credentials are valid, a success message is shown, confirming the login. If there is an issue, the system prompts the user to verify their email or reset their password. For email verification, an OTP is generated and sent through the email API. The user submits the OTP, which is verified, and if successful, the system checks if the password meets the required criteria. Once validated, the user gains access to the system.

Figure D2.4.2. Subsystem sequence diagram: Employee - Attendance



This diagram illustrates the employee attendance process, starting with the employee uploading their clock-in and clock-out times through the UI handler, which communicates with the employee account database to verify and store the attendance data. If the employee needs to request overtime, they submit the request, which is then processed and updated in the system, with the overtime status reflected accordingly. The admin can also view and manage overtime requests and status updates, ensuring accurate tracking of employee work hours. Each step of the process includes confirmation of success, ensuring the employee's attendance and overtime records are properly updated.

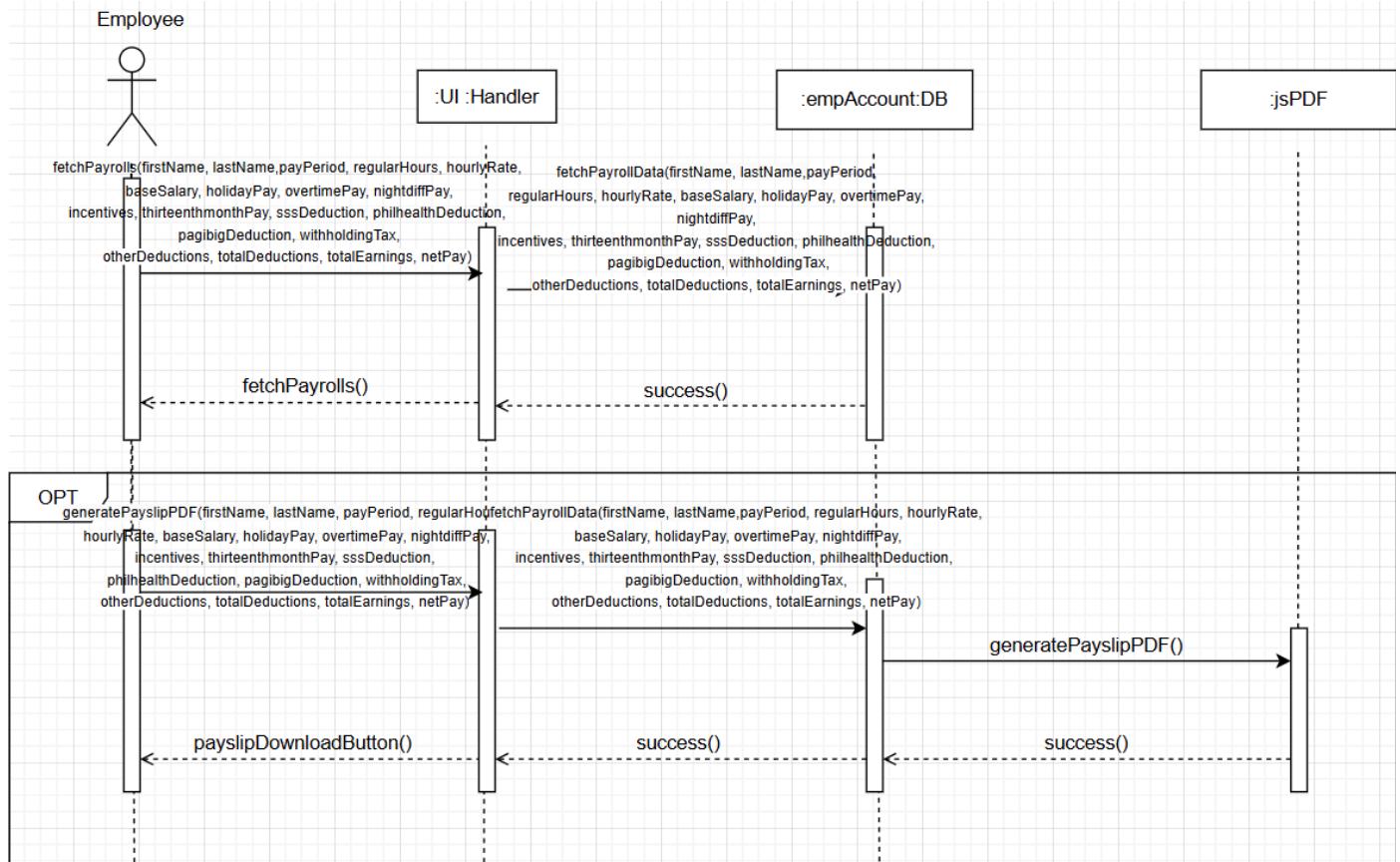
Figure D2.4.3. Subsystem sequence diagram: Admin - Attendance



This diagram shows the admin attendance management process. The admin fetches and updates employee attendance records from the database, processes overtime requests, and confirms successful updates. The

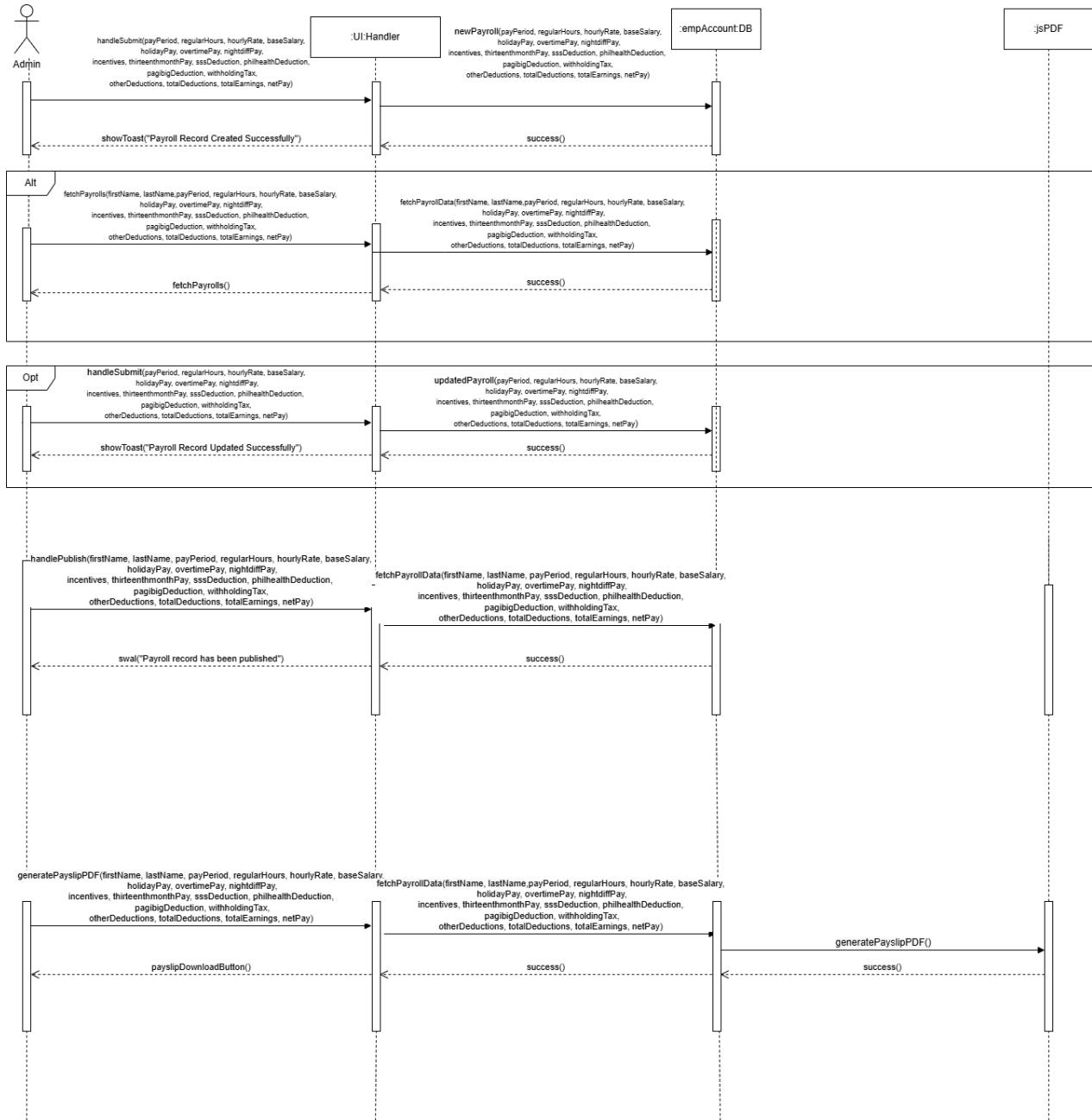
admin can also create new employee accounts, search for specific attendance records, and view updates with success messages at each step.

Figure D2.4.4. Subsystem sequence diagram: Employee - Payroll



This diagram illustrates the employee payroll process. The employee requests their payroll data, which is fetched from the employee account database. The system retrieves the necessary payroll details, such as salary, hours worked, and deductions. Once the payroll data is fetched, the system generates a payroll PDF file using the jsPDF tool, which includes all relevant payroll information. The employee can then download the PDF file to view their detailed payroll information, with each step confirming successful execution.

Figure D2.4.5. Subsystem sequence diagram: Admin - Payroll



This diagram admin payroll subsystem sequence diagram details how the admin manages payroll records. The admin inputs payroll information (such as employee details, hours worked, salary, and deductions) via the UI Handler, which interacts with the database to fetch and update payroll data. The admin can create new payroll records, update existing ones, and publish the finalized data. Once the payroll record is confirmed, a PDF is generated for the employee, and success messages are displayed throughout the process, ensuring that all actions are completed correctly. This process spans across the system components like the UI Handler, Database, and PDF generation tools.

Figure D2.4.5. Subsystem sequence diagram: Employee - Manage Account

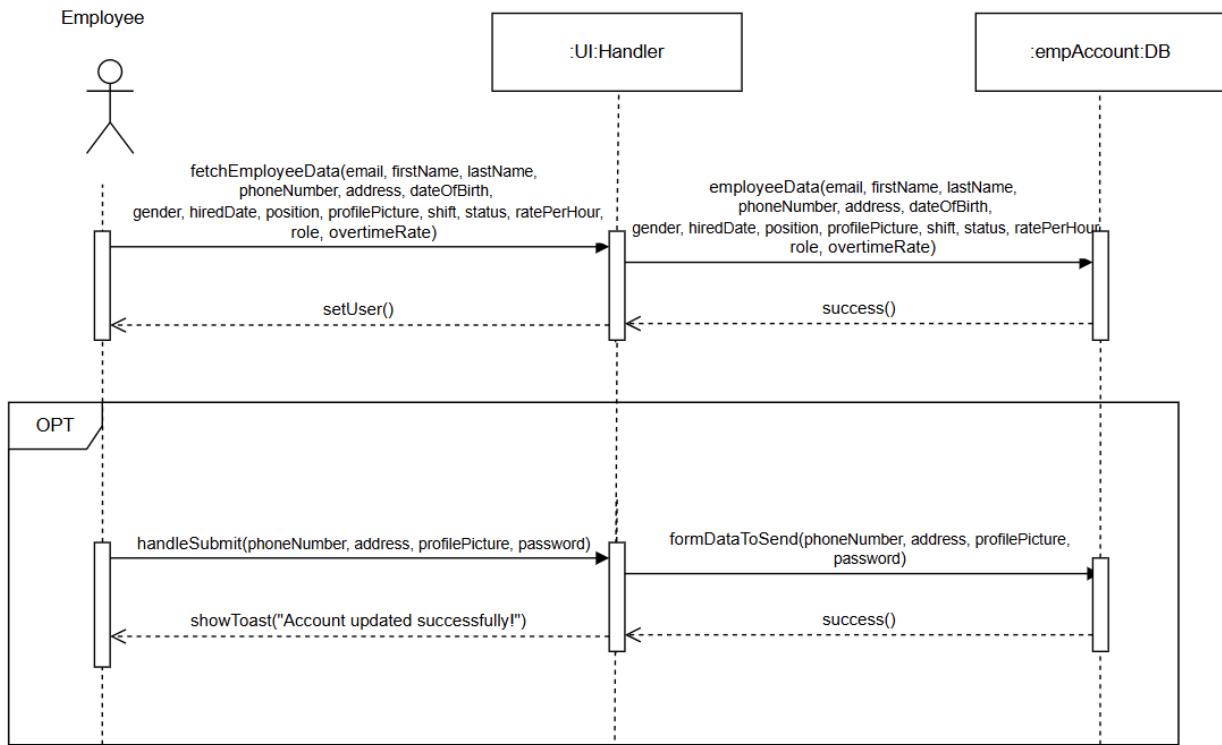
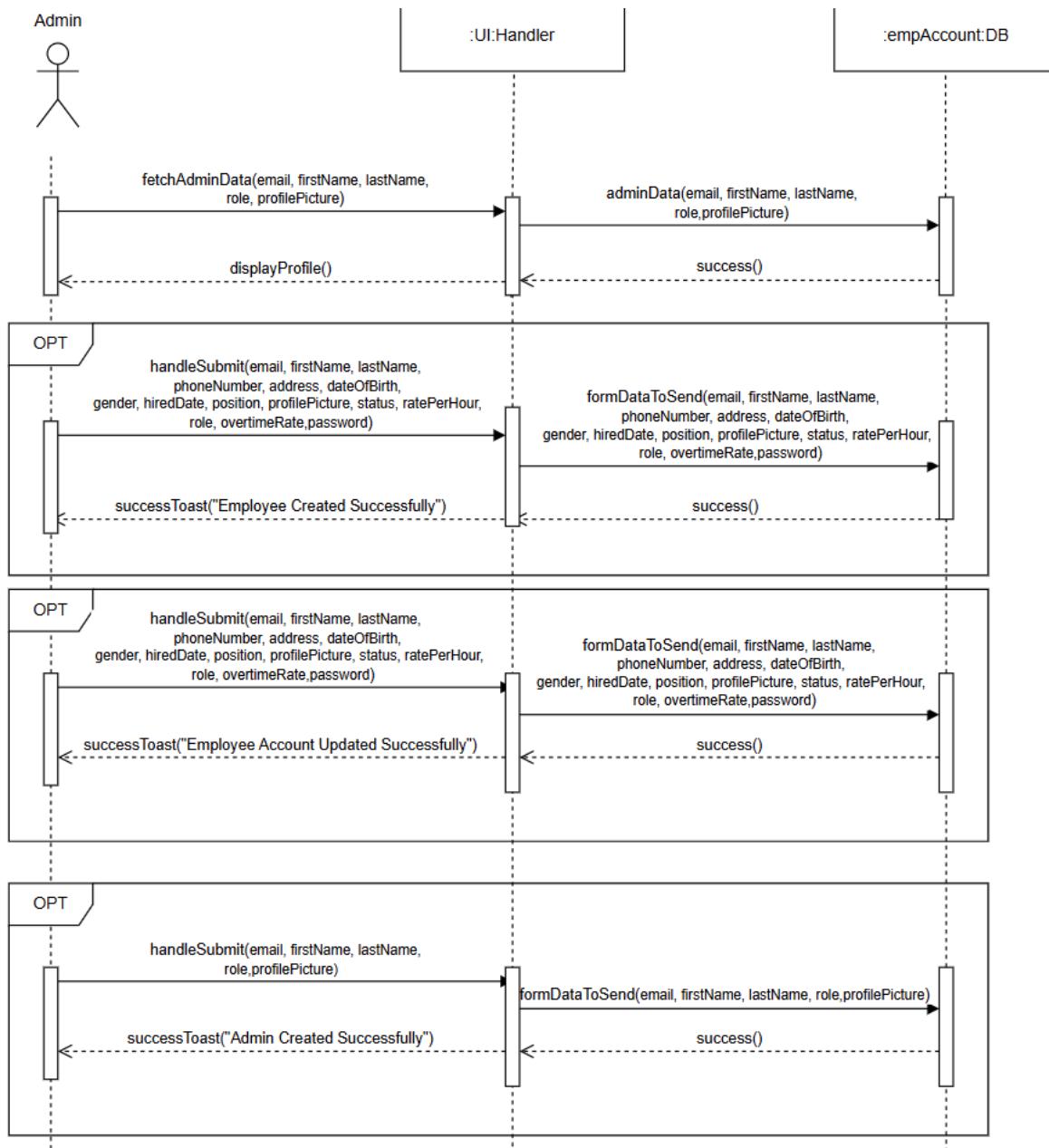


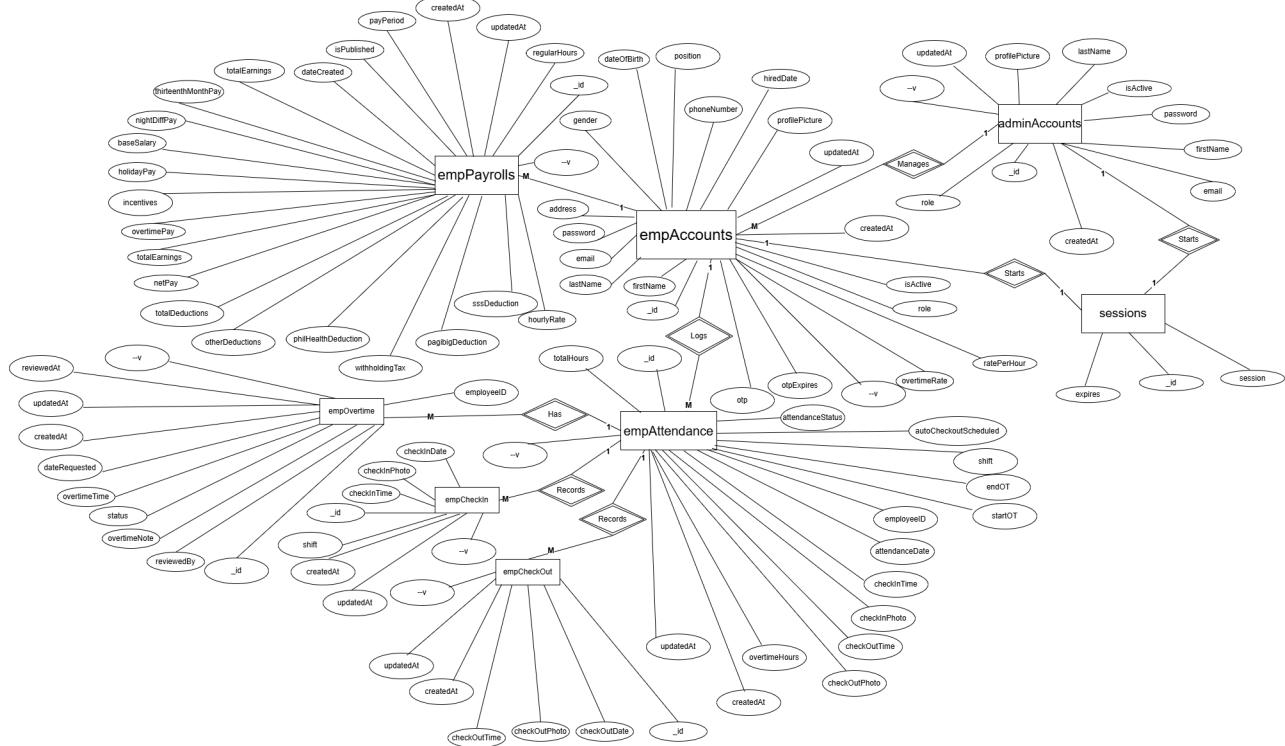
Figure D2.4.6. Subsystem sequence diagram: Admin - Manage Account



The diagram illustrates the sequence of actions when an admin manages user accounts. The admin first retrieves account data (email, name, role, etc.) and views it through the UI Handler. After making necessary changes, the admin can submit the updated information (like email, phone number, role, etc.) to the empAccount DB. If it's a new employee, the system shows a success message indicating "Employee Created Successfully." If it's an update to an existing account, the success message confirms the update. Additionally, if the admin updates their own account, the system shows a success message "Admin Created Successfully." Each process flows smoothly from data fetching, editing, and finally updating the database.

3. Data Design

Figure D3: Database Diagram



This Database Diagram illustrates the structure of a payroll and attendance management system. The central entity is Employee, which connects to key entities like Position, Status, Rate, Payroll, and Attendance. Payroll manages salary details, including incentives, holiday pay, and deductions, while Attendance tracks employee check-in and check-out logs with timestamps and optional face verification. Shift defines work schedules, and Overtime records extra hours worked. The diagram specifies attributes and relationships to design an organized and efficient database schema.

b. Data Dictionary

Alphabetically list the system entities or major data along with their types and descriptions. Include attributes, methods and method parameters.

Table 3: Data dictionary

Admin Data Dictionary

Name	Type	Description	Attributes	Notes
_id	ObjectID	Unique Identifier	(auto-generated)	MongoDB Document ID
profilePicture	String	Admin's Profile Picture path/url		Stored in “/admin-profile-pics/” with format “[admin_id]_profilepic.[ext]
firstName	String	Admin's First Name	required	
lastName	String	Admin's Last Name	required	
email	String	Admin's Email Address	required, unique, email format validation	
password	String	Admin's Password	required	Encrypted with bcrypt (10 rounds)
role	String	Account Role	default: “admin”	
isActive	Boolean	Account Acc	default: 1	1 = active, 0 = inactive
createdAt	Date	Date when the data was created	(auto-generated)	From Mongoose timestamps
updatedAt	Date	Date when the data was last updated	(auto-generated)	From Mongoose timestamps
__v	Number	Version Key for document	(auto-added by Mongoose)	For optimistic concurrency control

Attendance Data Dictionary

Name	Type	Description	Attributes	Notes
_id	ObjectID	Unique Identifier	(auto-generated)	MongoDB Document ID
employeeID	Object	Employee Identifier		References Employee
checkInTime	Time	Time when employee checked in	Format: "HH:MM"	
checkOutTime	Time	Time when employee checked out	Format: "HH:MM"	
attendanceDate	Date	Date of attendance record	Format: "YYYY-MM-DD"	
checkInPhoto	String	Path/URL to check-in photo		
checkOutPhoto	String	Path/URL to check-out photo		
attendanceStatus	String	Status of attendance		"Late", "Present"
shift	String	Employee Shift Schedule		"Morning", "Afternoon"
totalHours	Number	Total Hours worked		
createdAt	Date	Date when the data was created	(auto-generated)	From Mongoose timestamps
updatedAt	Date	Date when the data was last updated	(auto-generated)	From Mongoose timestamps
__v	Number	Version Key for document	(auto-added by Mongoose)	For optimistic concurrency control
autoCheckoutScheduled	Boolean	Whether the auto check out is scheduled or not		

overtimeHours	Number	Total Overtime Hours accumulated for the day		
endOT	String	Time when the overtime ended		
startOT	String	Time when the overtime started		

Check-In Data Dictionary

Name	Type	Description	Attributes	Notes
_id	ObjectID	Unique Identifier	(auto-generated)	MongoDB Document ID
employeeID	Object	Employee Identifier		References Employee
checkInTime	Time	Time when employee checked in	Format: "HH:MM"	
checkInDate	Date	Date when employee checked in	Format: "MM-DD-YYYY"	
checkInPhoto	String	Path/URL to check-in photo		
shift	String	Employee Shift Schedule		"Morning", "Afternoon"
createdAt	Date	Date when the data was created	(auto-generated)	From Mongoose timestamps
updatedAt	Date	Date when the data was last updated	(auto-generated)	From Mongoose timestamps
_v	Number	Version Key for document	(auto-added by Mongoose)	For optimistic concurrency control

Check-Out Data Dictionary

Name	Type	Description	Attributes	Notes
_id	ObjectID	Unique Identifier	(auto-generated)	MongoDB

				Document ID
employeeID	Object	Employee Identifier		References Employee
checkOutTime	Time	Time when employee checked out	Format: "HH:MM"	
checkOutDate	Date	Date when employee checked out	Format: "MM-DD-YYYY"	
checkOutPhoto	String	Path/URL to check-out photo		
createdAt	Date	Date when the data was created	(auto-generated)	From Mongoose timestamps
updatedAt	Date	Date when the data was last updated	(auto-generated)	From Mongoose timestamps
_v	Number	Version Key for document	(auto-added by Mongoose)	For optimistic concurrency control

Overtime Data Dictionary

Name	Type	Description	Attributes	Notes
_id	ObjectId	Unique Identifier	(auto-generated)	MongoDB Document ID
employeeID	Object	Employee Identifier		References Employee
overtimeTime	Time	Employee's requested overtime hour	required	
overtimeNote	String	Employee's overtime note to the admin		
status	String	Employee's Overtime Status	default: "Pending"	"Approved", "Rejected", "Pending"
dateRequested	Date	Date when the employee	Format: "MM-DD-YYYY"	

		requested for overtime		
reviewedAt	Date	Date when the admin reviewed the employee's overtime request		
reviewedBy	String	ID and Name of the admin who reviewed the overtime request	adminID, adminName	
createdAt	Date	Date when the data was created	(auto-generated)	From Mongoose timestamps
updatedAt	Date	Date when the data was last updated	(auto-generated)	From Mongoose timestamps
_v	Number	Version Key for document	(auto-added by Mongoose)	For optimistic concurrency control

Overtime Data Dictionary

Name	Type	Description	Attributes	Notes
_id	ObjectID	Unique Identifier	(auto-generated)	MongoDB Document ID
employeeID	Object	Employee Identifier		References Employee
payPeriod	Date	Payroll Pay Period		Covers every 5th and 20th of the month
regularHours	Number	Number of hours attended by the employees throughout the whole pay period		Sum of all regular working hours
hourlyRate	Number	Employee's Pay Rate		Fetched from rate in the employee table
baseSalary	Number	Regular earnings before any additions/deductio		Calculated as (regularHours × hourlyRate)

		ns		
holidayPay	Number	Additional pay for working on holidays		
overtimePay	Number	Additional pay for hours worked beyond regular schedule		
nightDiffPay	Number	Additional pay for hours worked beyond regular schedule		
incentives	Number	Performance bonuses or other incentives		
thirteenthMonthPay	Number	1/12 of annual salary paid in December (Philippines requirement)		
sssDeduction	Number	Social Security System contribution		
philhealthDeduction	Number	Philippine Health Insurance Corporation (PhilHealth) contribution		
pagibigDeduction	Number	Philippine Pag-IBIG Fund (HDMF) contribution		
withholdingTax	Number	Income tax withheld		
otherDeductions	Number	Any other deductions (loans, advances, etc.)		
totalEarnings	Number	Sum of all earnings		

totalDeductions	Number	Sum of all deductions		
netPay	Number	Final take-home pay (totalEarnings - totalDeductions)		
isPublished	Boolean	Whether the payroll has been finalized/published	default: 0	1 = Published, 0 = Not yet published
createdAt	Date	Date when the data was created	(auto-generated)	From Mongoose timestamps
updatedAt	Date	Date when the data was last updated	(auto-generated)	From Mongoose timestamps
_v	Number	Version Key for document	(auto-added by Mongoose)	For optimistic concurrency control

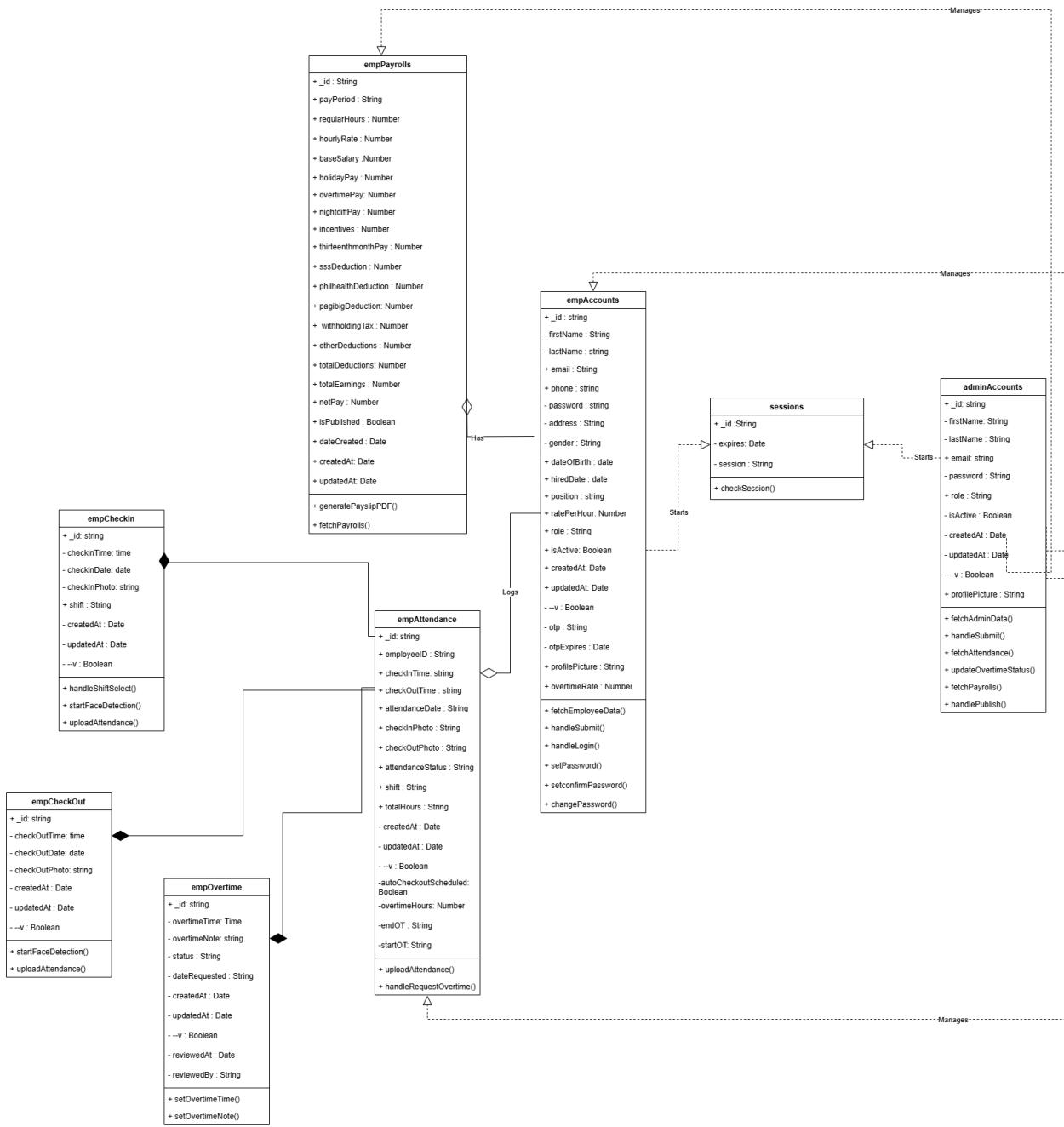
Sessions Data Dictionary

Name	Type	Description	Attributes	Notes
_id	ObjectID	Unique Identifier	(auto-generated)	MongoDB Document ID
expires	ISODate	Session expiration timestamp	Indexed	Automatically managed by connect-mongo based on maxAge
session	Object	Container for all session data		

Summarize each object member function for all the objects. Include local data, if any. Diagrams must include brief narratives to support it.

4. Component Design

Figure D4: Class diagram



The UML class diagram depicts a comprehensive employee management system with several interconnected components. At its core, the system contains employee accounts (**empAccounts**) which store personal information like names, contact details, and demographic data, linked to payroll records (**empPayrolls**) that manage compensation details including hourly rates, various pay types, and deductions. The system tracks employee attendance through **empCheckin** and **empCheckOut** classes that record timestamps and include verification features like photo uploads and face detection. An **empAttendance** class provides comprehensive attendance management by connecting employee IDs to attendance logs. The **sessions** class manages user sessions, and the **adminAccounts** class provides administrative functions for managing users and payroll.

their check-in/out records, shifts, and total hours worked. For overtime management, the empOvertime class handles requests, tracks status, and stores review information. Administrator accounts (adminAccounts) maintain system access credentials and permissions for managing the platform. User authentication is handled through a sessions class that tracks login status and expiration times. Throughout the diagram, relationships between classes are indicated by association lines with different cardinalities, revealing a sophisticated system designed to handle the complete employee lifecycle from basic information management to attendance tracking and payroll processing.

5. Human Interface Design (Mockup)

5.1. Overview of User Interface

Login Page

The login page starts with two required user inputs, the email, and the user password, with a forgot password just in case the user forgets their password and a login button that directs the user to the dashboard.

Forgot Password Page

The Forgot Password page helps users recover their accounts by entering their registered email. An OTP is sent to the email, which must be entered in the OTP field (see Figure D:5.2.2.1). After verification, users can reset their password.

Employee- Attendance Check-In Page

From the employee's perspective, the user is required to click the "Check-in" button to start their time, select their shift time via a combo box, and click "Open Camera." This redirects to a new page (refer to Figure D5.2.3.2), where the user takes and uploads a photo in verification to complete the check-in process with a success message pop-up.

Employee- Attendance- Check-out Page

Similar to the Check-in page, the user chooses between the "Check-out" and "Request Overtime" buttons. In this scenario, the user clicks "Check-out" to end their time, then selects "Open Camera." This redirects to a new page (refer to Figure D5.2.4.2), where the user takes and uploads a photo to complete the check-out process.

Request Overtime Page

The "Request Overtime" option allows employees to request overtime from the Check-out Page. Clicking it redirects the user to a page (refer to Figure D5.2.5) where they input their overtime hours and an accompanying note. Once submitted via the "Request Overtime" button, the request is sent to the admin for review and approval.

Admin- Attendance- View Attendance Page

In this section (refer to Figure D5.2.6), this displays employee attendance records, including check-in, check-out, and status. Admins can search, view details, edit, or delete records. It also

features options to add new records and approve overtime requests, showing attendance management.

Admin- Attendance- Delete Attendance

The Delete option under the View Attendance Page (refer to Figure D5.2.6) allows the admin to remove employee attendance records when necessary.

Admin- Attendance- Edit Attendance

The Edit option under the View Attendance Page directs the admin to the Edit Attendance Page (refer to Figure D5.2.7), where they can modify employee attendance records, including time, overtime, date, and other details when adjustments are needed.

Add Attendance Page

The Add Attendance Page allows admins to manually enter employee attendance. It includes fields for the employee's name, check-in and check-out times, date, and overtime details. Admins can create or cancel the attendance record.

Admin- Attendance- Overtime Page

The Overtime Requests Page (refer to Figure D.5.2.8) allows admins to view and approve employee overtime requests, including check-in/check-out times and overtime notes. It also features a search bar for filtering requests.

Employee- Manage Account - View/Update Profile Page

The interface displays a page (refer to Figure D5.2.9.), allowing users to view and update their profile information. It includes sections for personal details (name, email, phone number, address, date of birth, gender, hire date, and position) and buttons for editing the profile picture, changing the password, and updating or canceling changes.

Employee- Manage Account - Change Password Page

Similar to Login's Forgot Password (refer to Figure D5.2.2 and D5.2.10), it gives the employee the action to modify their password by entering first their registered email, its OTP (refer to Figure D5.2.10.1), then their new password.

Admin- Manage Account - View Profile Page

This page (refer to Figure D5.2.11), from the Admin's perspective, displays the employees' user information (email, full name, phone number, address, etc.) this also contains buttons such as "Create Profile," "Update," and "Activate/Deactivate" to manage the employee's account

Admin- Manage Account - Delete

Under Admin- View Profile Page (refer to Figure D5.2.11), this allows the admin to delete an employee's account when necessary.

Admin- Manage Account - Create

From the same figure, this allows the admin to create a new employee profile, particularly for new hires. This process requires the admin to input all necessary user details to successfully create the account.

Admin- Manage Account - Update

This feature allows the admin to modify and update specific employee details, such as personal information, contact details, position, or other relevant data, whenever necessary. This ensures that the employee profiles remain accurate and up-to-date.

Employee- Payroll Page

The employee payroll page (refer to Figure D5.2.18) shows payroll records by date range, with options to view details, print, and search for specific records. It provides an easy way for employees to access and manage their payroll information.

Admin- Payroll Page

The admin payroll page lists employee payroll records with options to edit, delete, view details, and print. Admins can also search for specific records, making it a convenient tool for managing payroll information.

5.2. Screen Mockups

Figure D5.2.1: Login (Mockup)

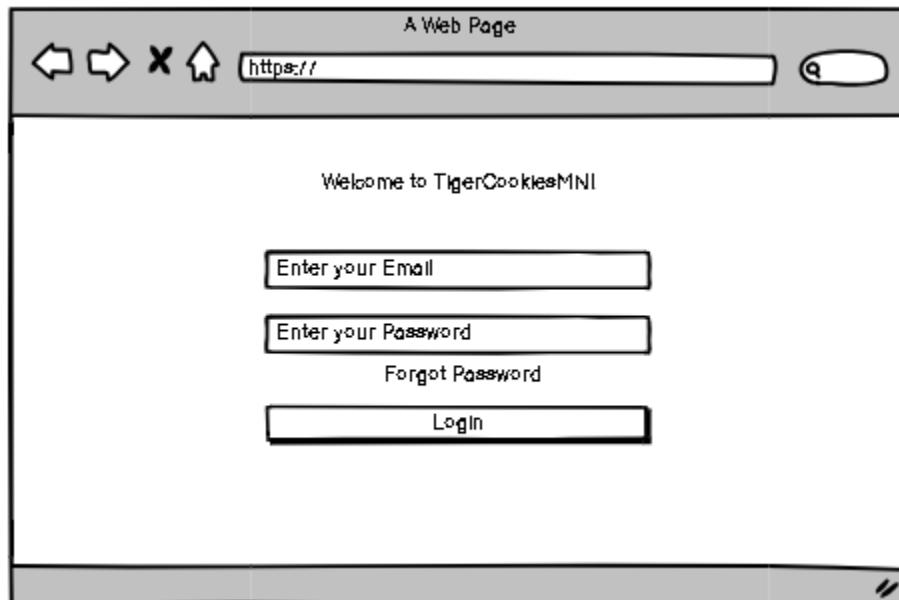


Figure D5.2.2: Forgot Password (Mockup)

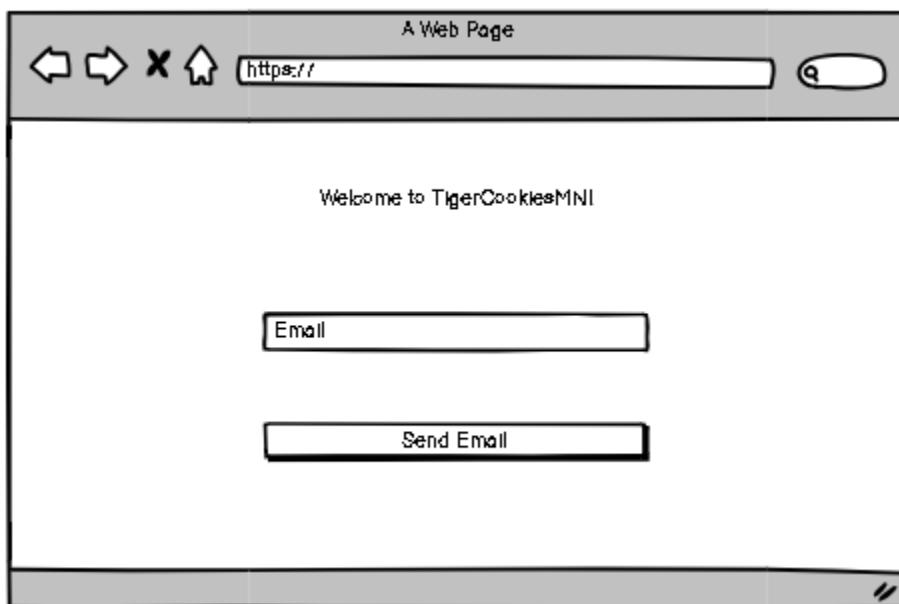


Figure D5.2.2.1

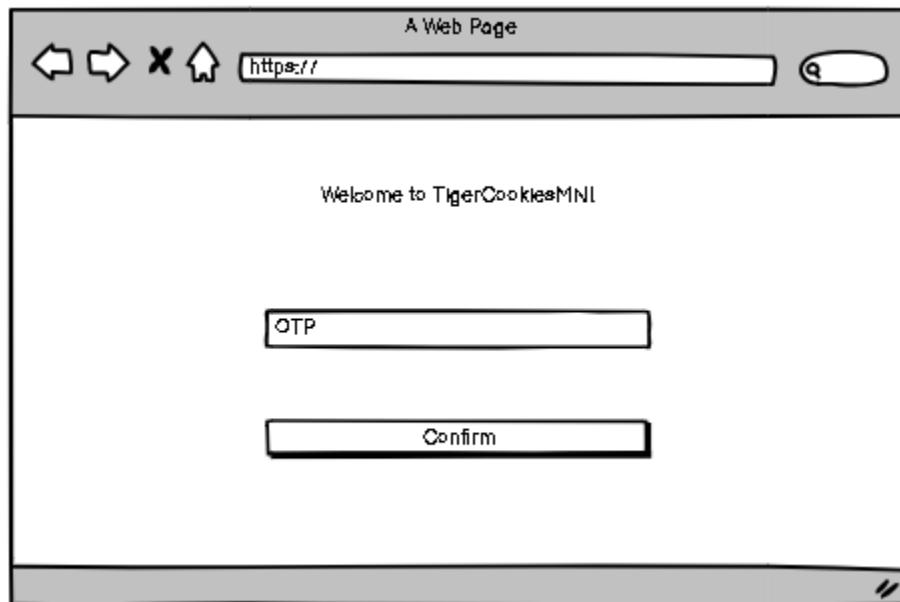


Figure D5.2.2.2

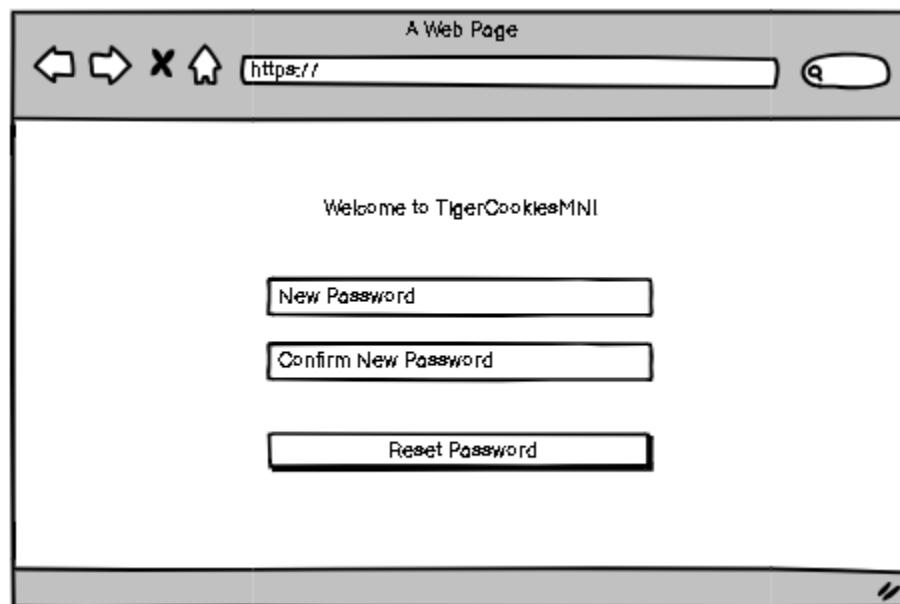


Figure D5.2.3: Employee- Attendance - Check-In (Mockup)

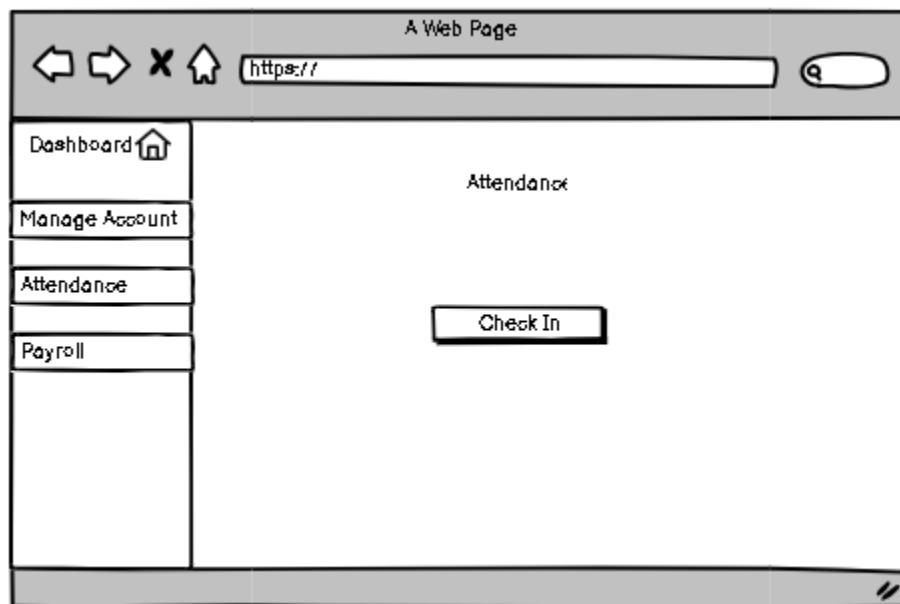


Figure D5.2.3.1

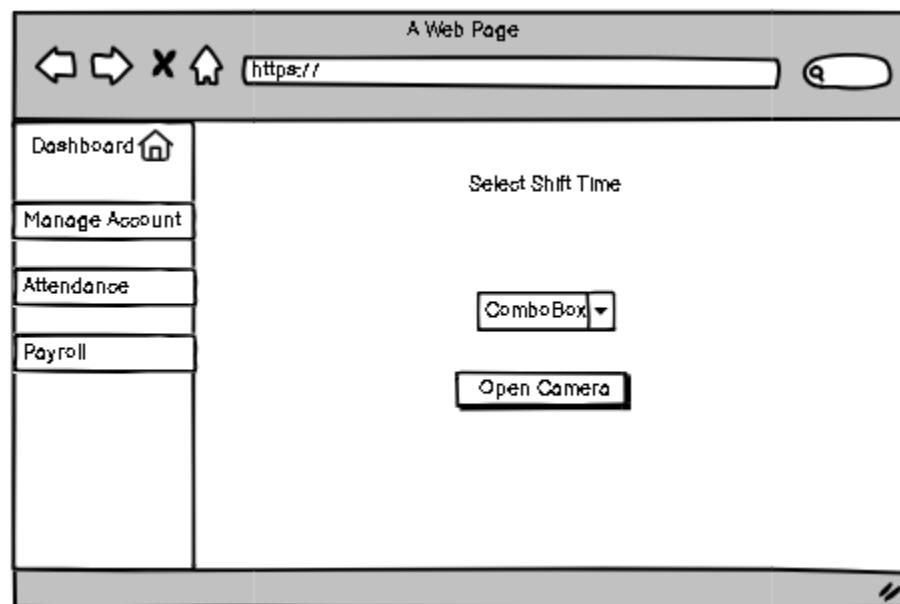


Figure D5.2.3.2

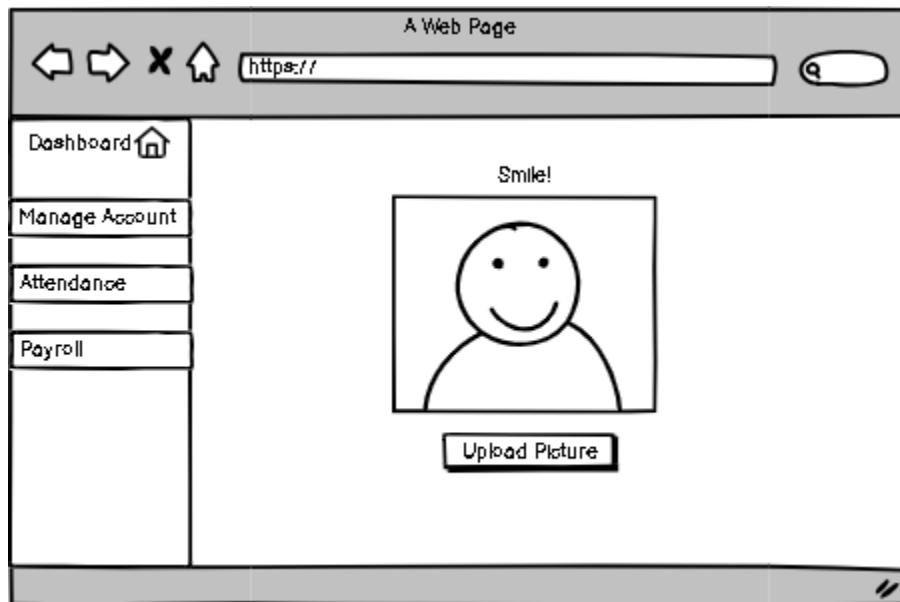


Figure D5.2.3.3

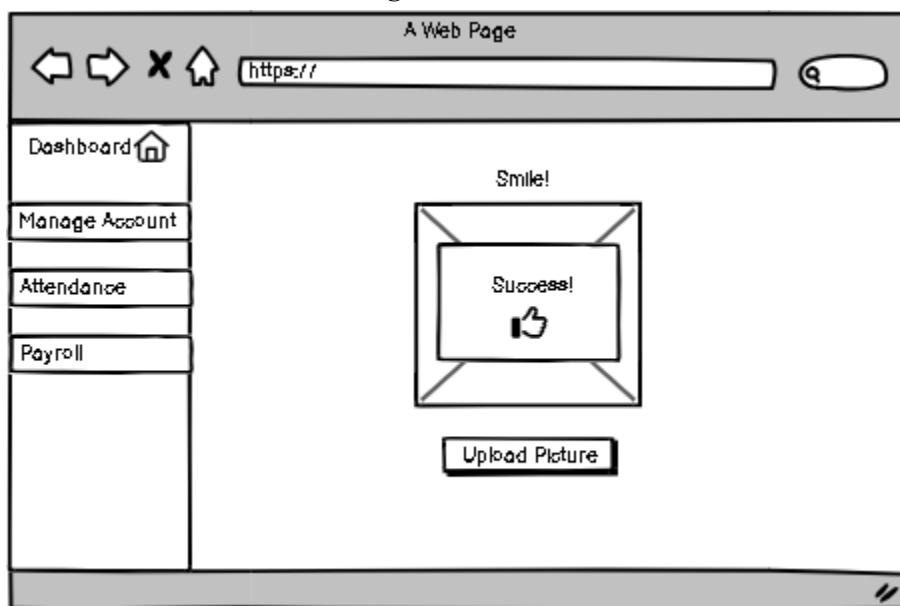


Figure D5.2.4: Employee - Attendance - Check-out (Mockup)

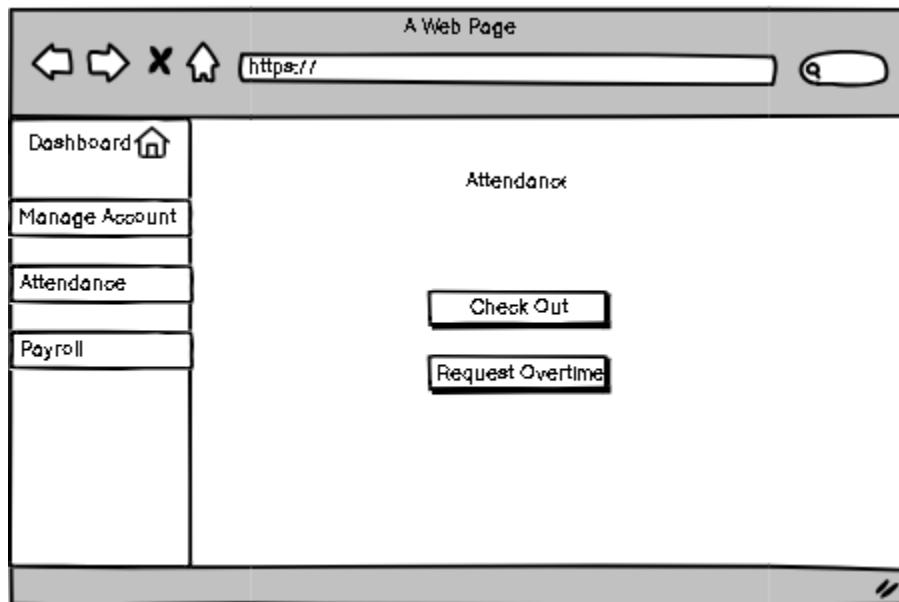


Figure D5.2.4.1

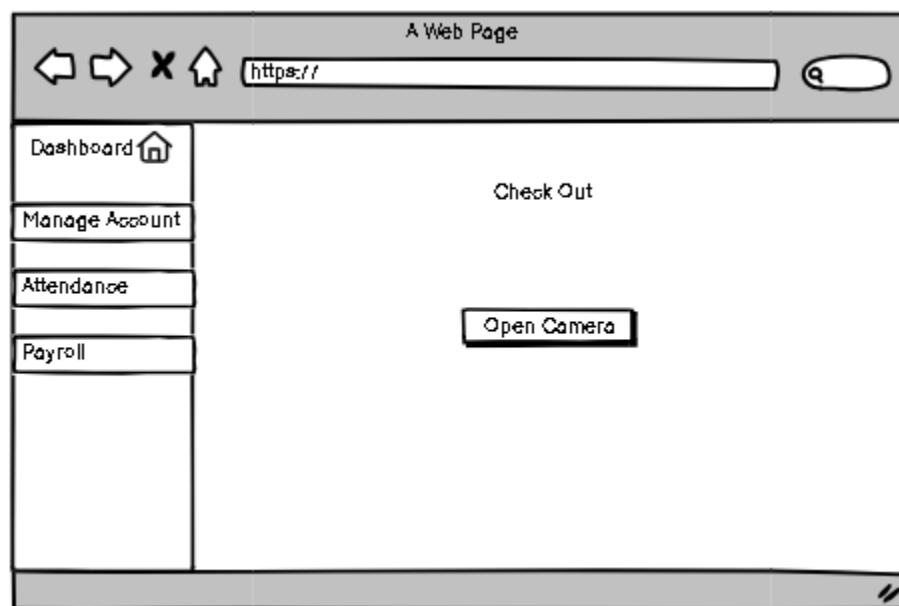


Figure D5.2.4.2

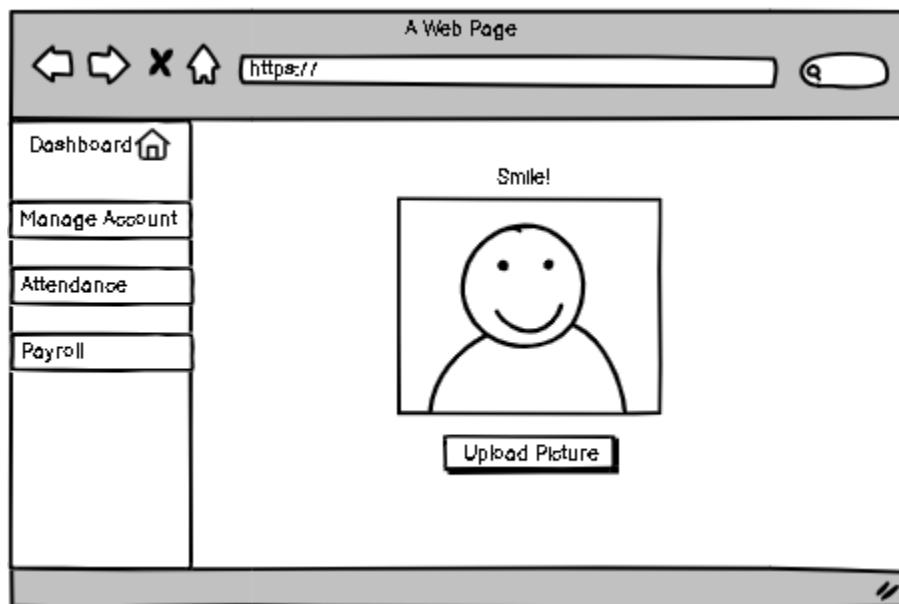


Figure D5.2.4.3

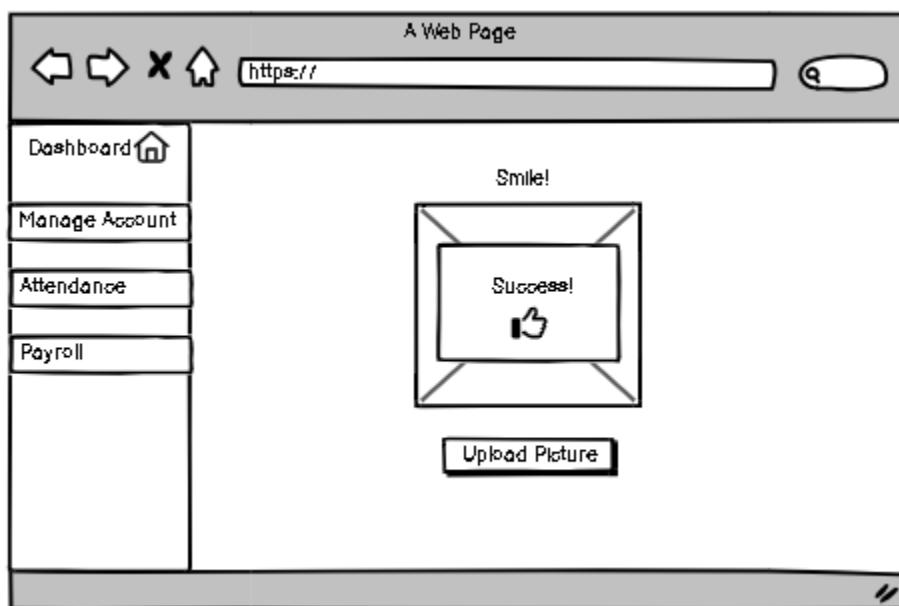


Figure D5.2.5: Employee- Attendance- Request Overtime(Mockup)

A Web Page

https://

Request Overtime

Input Overtime Hour Request Overtime

Input Overtime Note

The page shows a sidebar with 'Dashboard', 'Manage Account', 'Attendance', and 'Payroll' options. The main area is titled 'Request Overtime' with fields for inputting overtime hours and notes, and a 'Request Overtime' button.

Figure D5.2.6: Admin- Attendance- View Attendance(Mockup)

A Web Page

https://

Attendance

Add Shift Time Approve Overtime Add search

<input type="checkbox"/>	Fullname	Check In	Check Out	Status	Details	Edit	Delete
<input type="checkbox"/>	Fullname	Check In	Check Out	Status	Details	Edit	Delete
<input type="checkbox"/>	Fullname	Check In	Check Out	Status	Details	Edit	Delete
<input type="checkbox"/>	Fullname	Check In	Check Out	Status	Details	Edit	Delete

The page shows a sidebar with 'Dashboard', 'Manage Account', 'Attendance', and 'Payroll' options. The main area is titled 'Attendance' with buttons for adding shift time, approving overtime, and adding entries, along with a search bar. Below is a table listing attendance records with columns for status, edit, and delete buttons.

Figure D5.2.7: Admin- Attendance (Detailed)

A Web Page

https://

Dashboard

Manage Account

Attendance

Payroll

Edit Attendance

Check In Face

Shift Start Time
5:45 PM

Check In Time
5:45 PM

Shift End Time
5:45 PM

Check In Date
/ /

Check Out Face

Check Out Time
5:45 PM

Check Out Date
/ /

Overtime
5:45 PM

5:45 PM

Overtime Note

Figure D5.2.8: Admin- Attendance- Delete Attendance(Mockup)

A Web Page

https://

Dashboard

Manage Account

Attendance

Payroll

Attendance

Add Shift Time

Approve Overtime

Add

search

Fullscreen

Fullname CheckIn CheckOut Status Details Edit Delete

Fullscreen CheckIn CheckOut Status Details Edit Delete

Fullscreen CheckIn CheckOut Status Details Edit Delete

Fullscreen CheckIn CheckOut Status Details Edit Delete

Do You Want To Delete This Record?

Yes No

Figure D.5.2.8.1

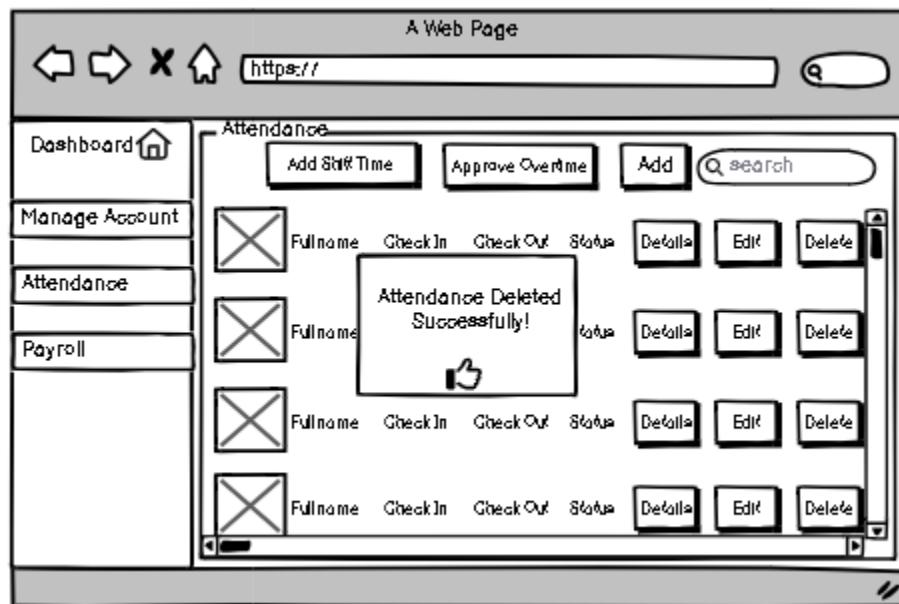


Figure D5.2.9: Admin- Attendance- Edit Attendance(Mockup)

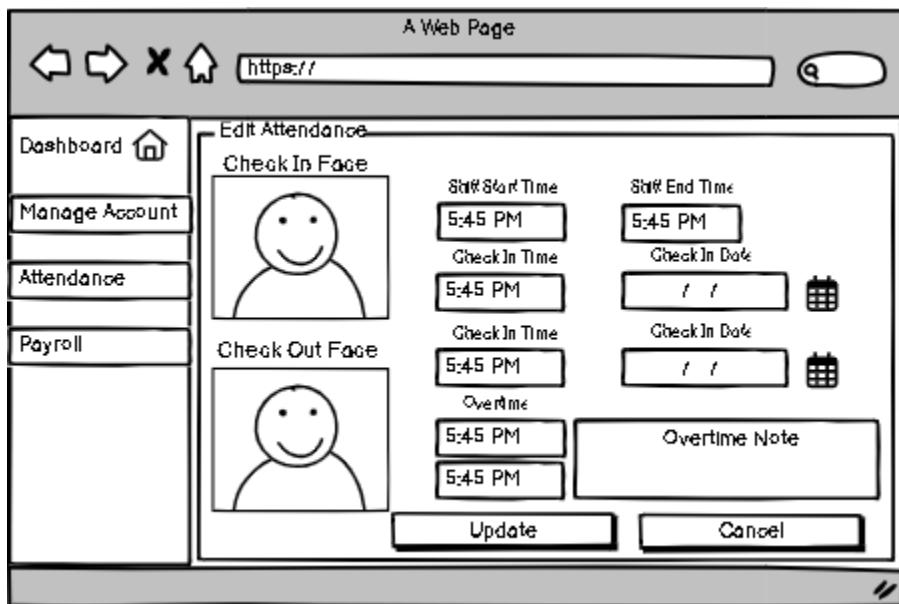


Figure D.5.2.9.1

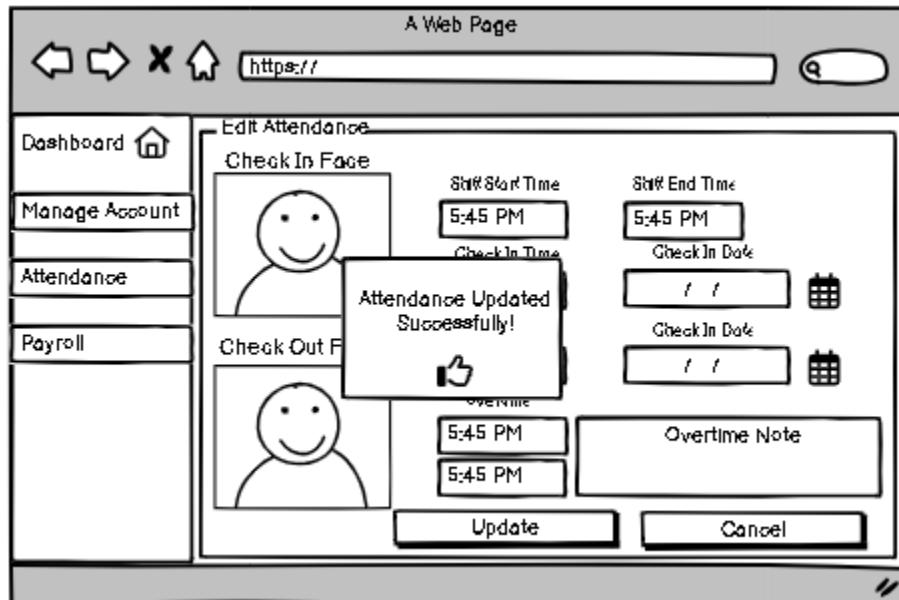


Figure D5.2.10: Admin- Attendance- Add Attendance(Mockup)

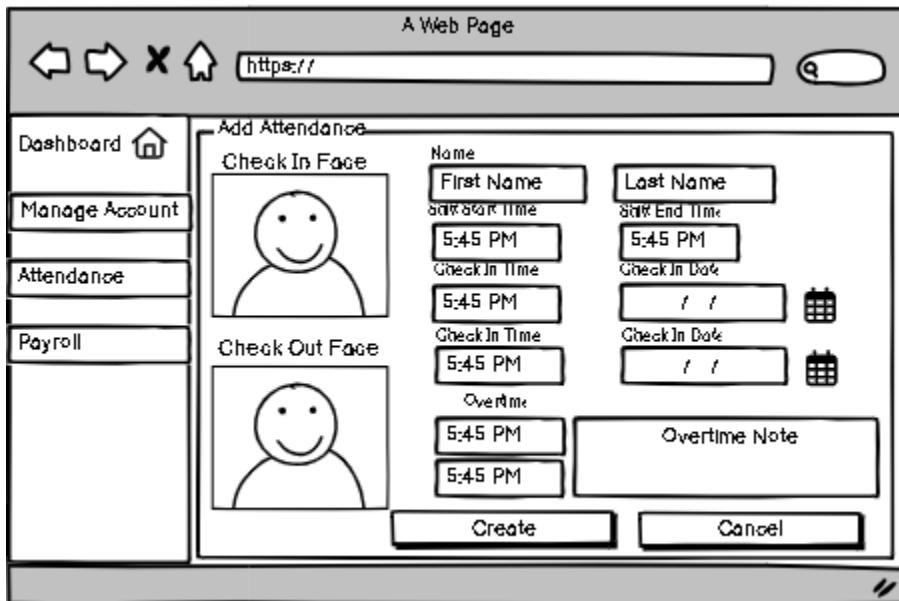


Figure D.5.2.10.1

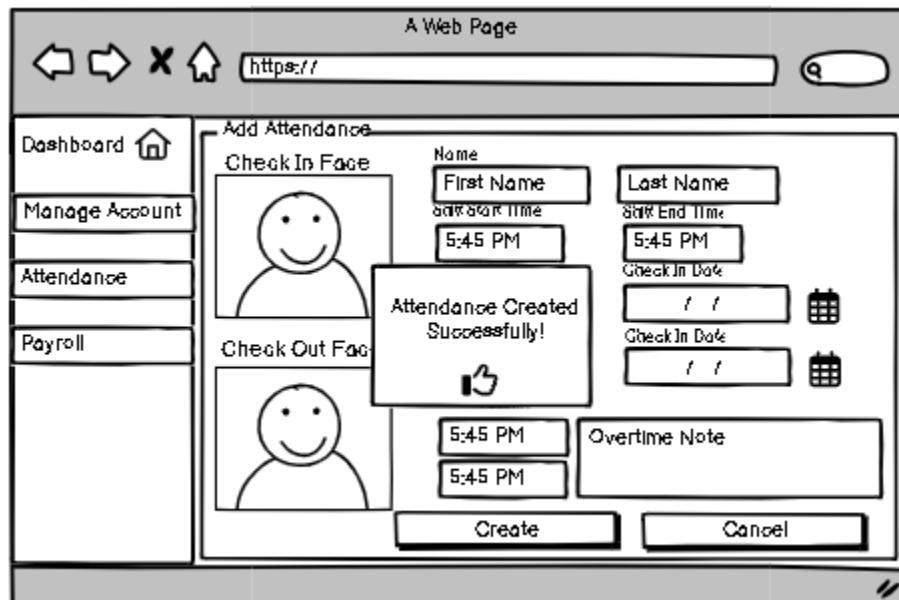


Figure D5.2.11: Admin- Attendance- Overtime(Mockup)

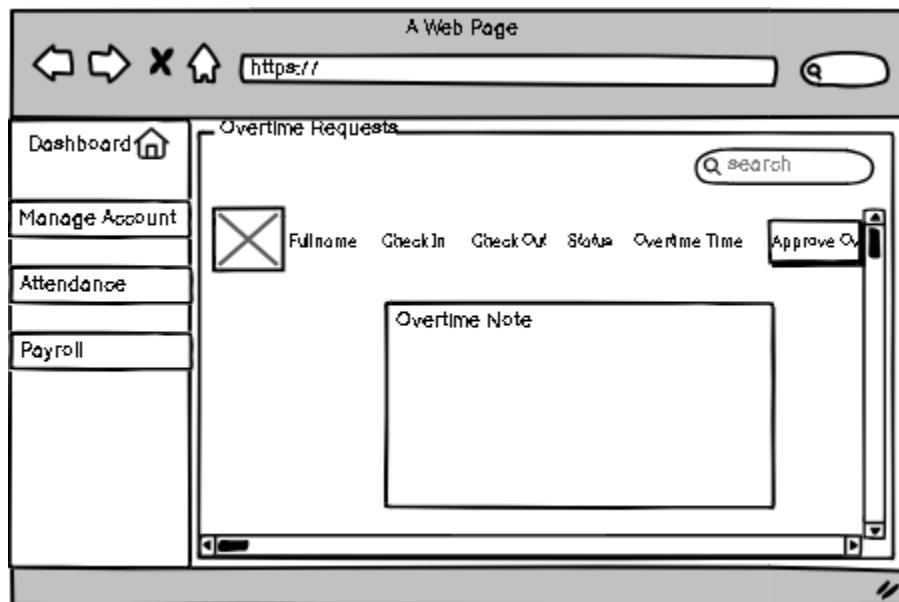


Figure D5.2.11.1

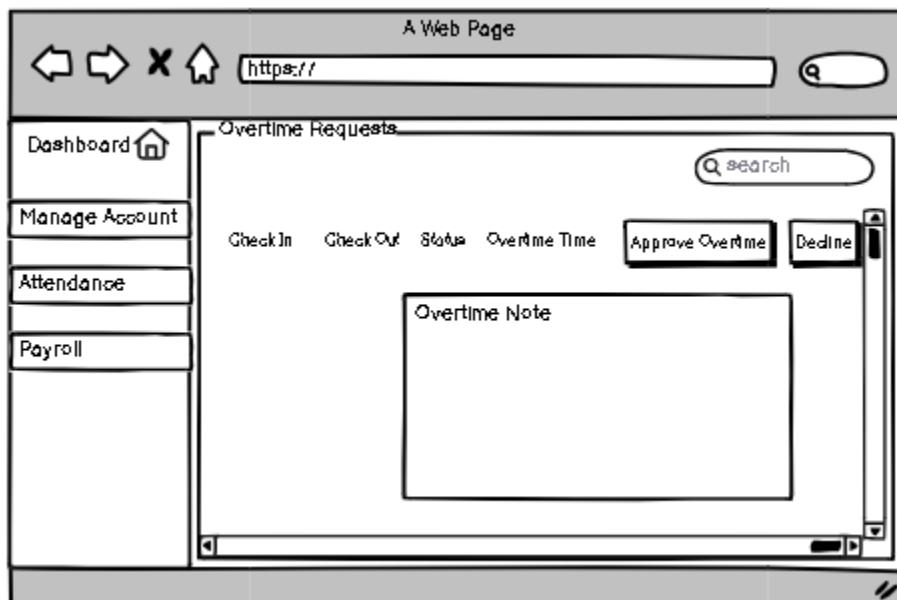


Figure D5.2.12: Employee- Manage Account- View Profile(Mockup)

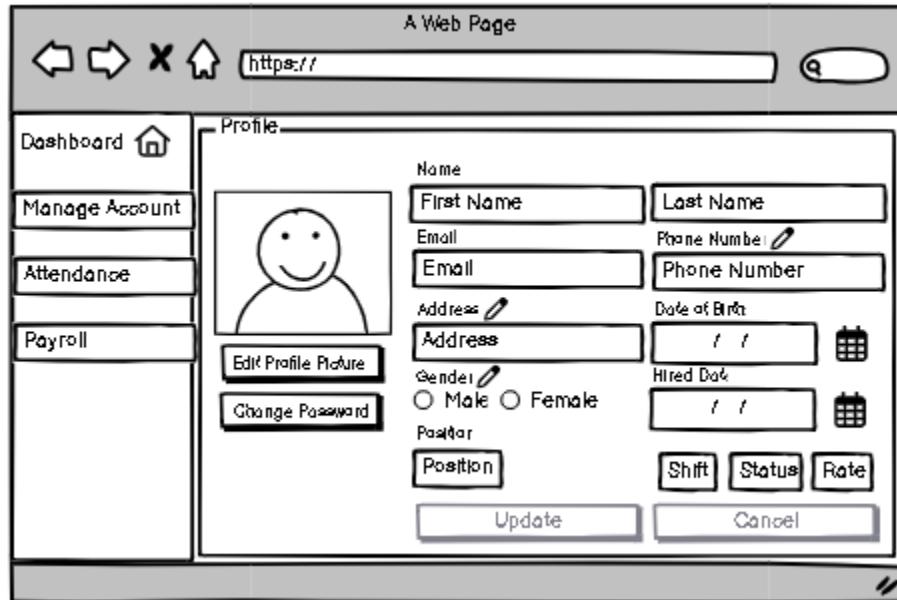


Figure D5.2.12.1: Update Account(Mockup)

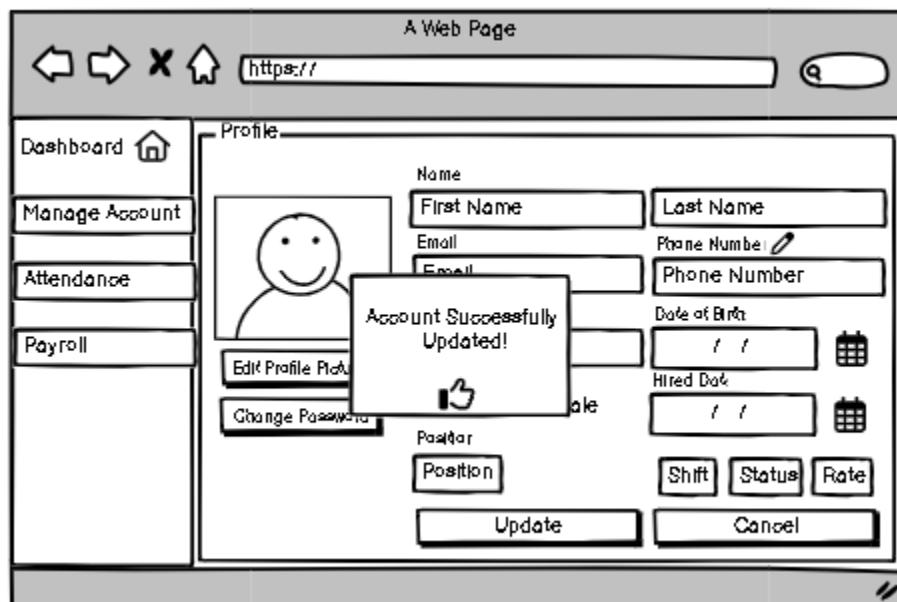


Figure D5.2.13: Change Password(Mockup)

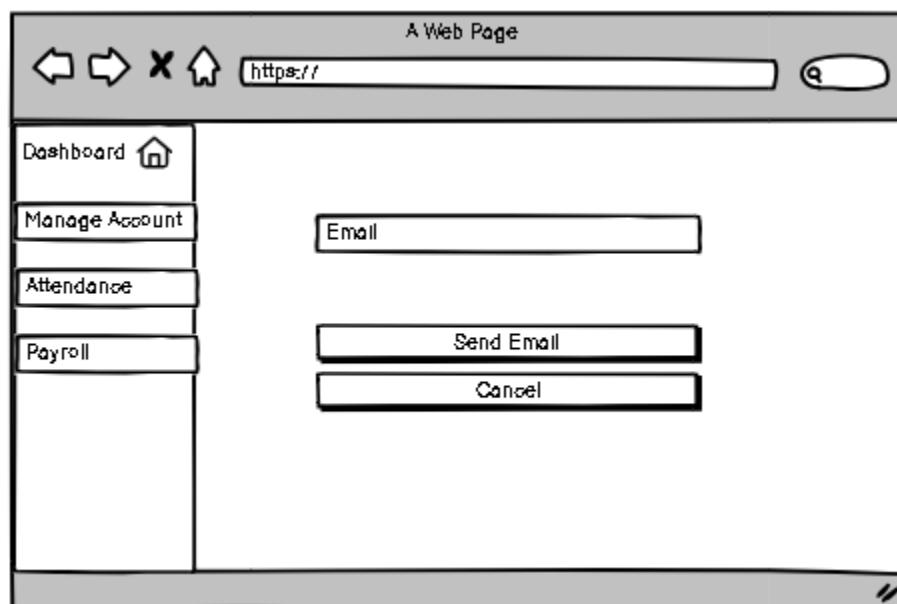


Figure D.5.2.13.1

A Web Page

https://

Dashboard

Manage Account

Attendance

Payroll

OTP

Confirm

This screenshot shows a web browser window titled "A Web Page". The address bar displays "https://". On the left, there is a vertical sidebar with four menu items: "Dashboard" (with a home icon), "Manage Account", "Attendance", and "Payroll". The main content area contains a text input field labeled "OTP" and a button labeled "Confirm".

Figure D5.2.13.2

A Web Page

https://

Dashboard

Manage Account

Attendance

Payroll

New Password

Confirm New Password

Reset Password

This screenshot shows a web browser window titled "A Web Page". The address bar displays "https://". On the left, there is a vertical sidebar with four menu items: "Dashboard" (with a home icon), "Manage Account", "Attendance", and "Payroll". The main content area contains three text input fields: "New Password", "Confirm New Password", and a button labeled "Reset Password".

Figure D5.2.13.3

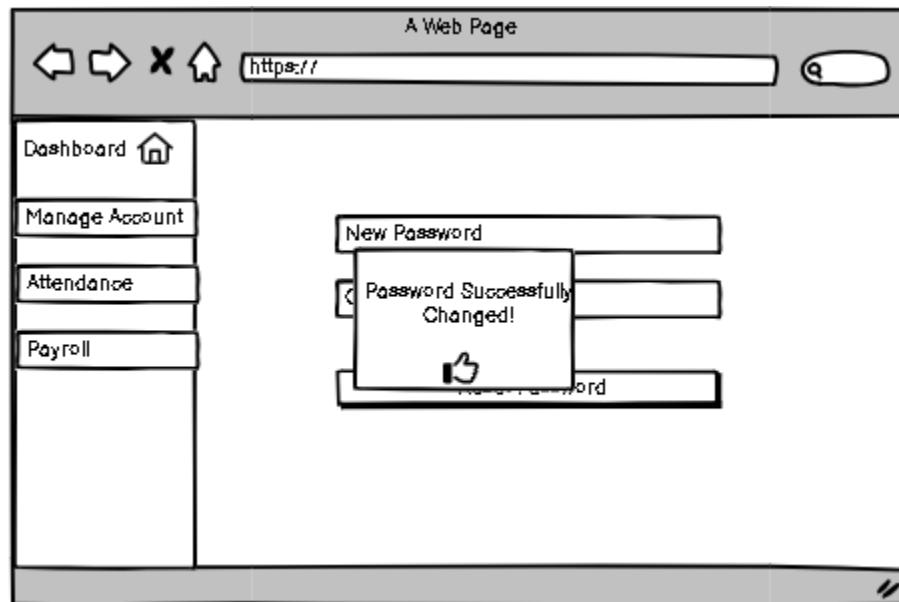


Figure D5.2.14: Admin- Manage Account- View Profile(Mockup)

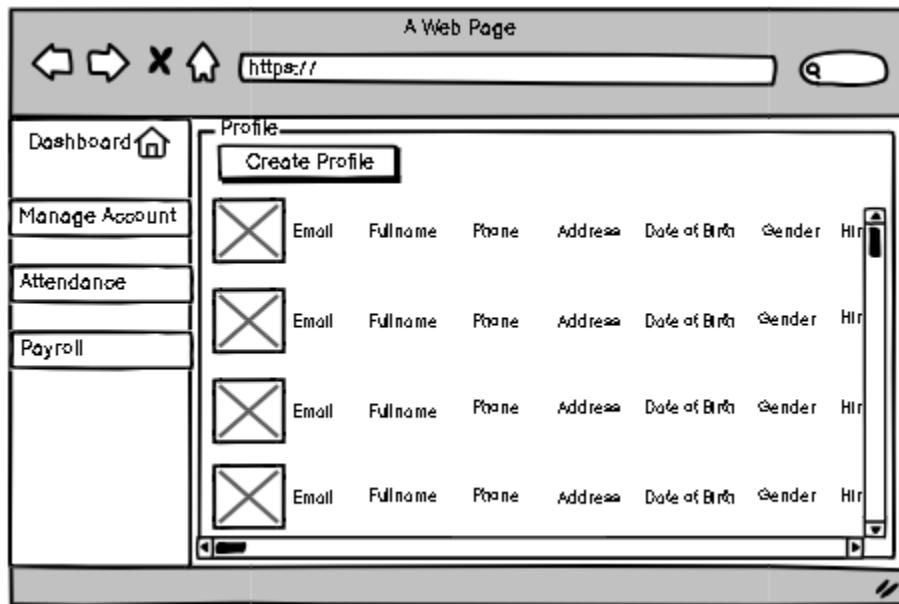


Figure D5.2.14.1

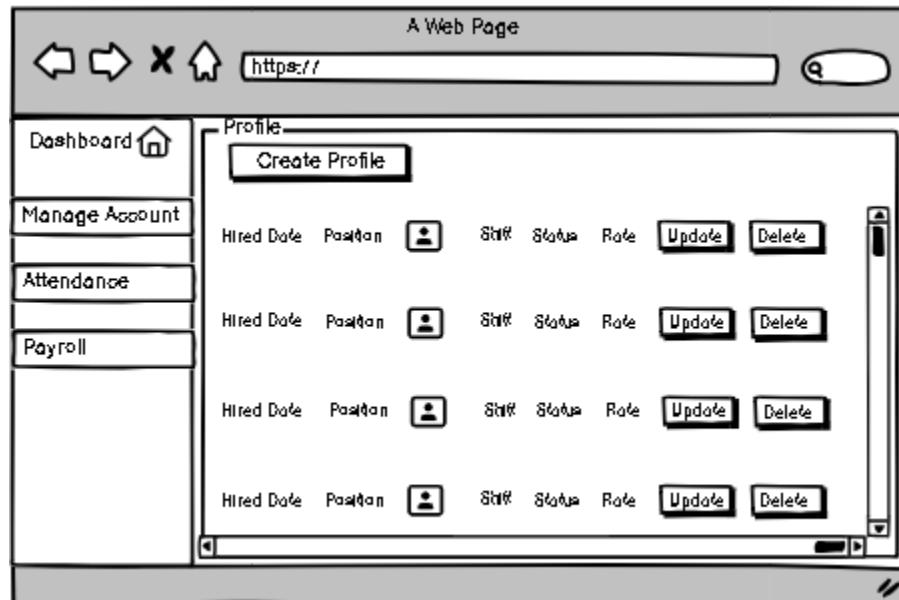


Figure D5.2.15: Admin- Manage Account- Delete Profile(Mockup)

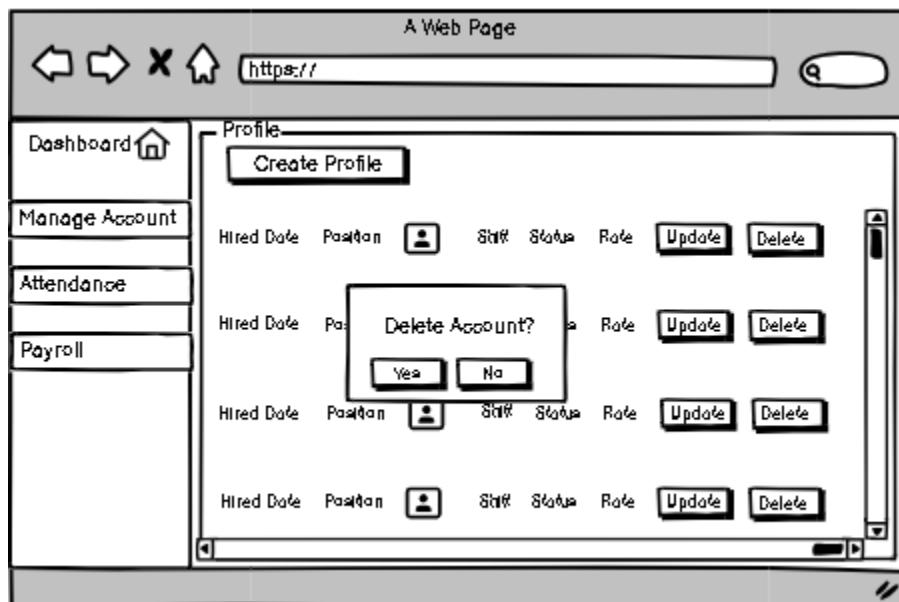


Figure D5.2.15.1

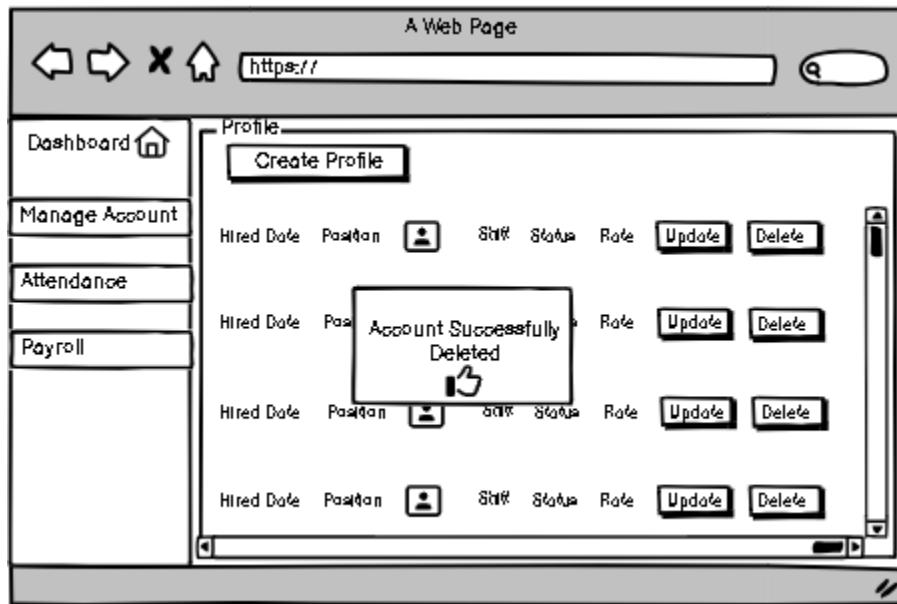


Figure D5.2.16: Admin- Manage Account- Create Profile(Mockup)

A screenshot of a web browser window titled "A Web Page". The URL bar shows "https://". The main content area is titled "Create Profile" and contains a "Name:" section with "First Name" and "Last Name" input fields. Below that is a "Email" and "Phone Number" section, followed by "Gender" options for "Male" and "Female". There is also a "Address:", "Date of Birth:", and "Hired Date:" section with date pickers. Further down are "Position:" (dropdown menu) and "Password:" sections with "Shift" and "Rate" buttons, and "Confirm Password:" fields. At the bottom are "Create" and "Cancel" buttons.

Figure D5.2.16.1

A Web Page

The page title is "A Web Page". The URL bar shows "https://". The left sidebar has buttons for "Dashboard", "Manage Account", "Attendance", and "Payroll". The main content area is titled "Create Profile". It contains fields for Name (First Name and Last Name), Email, Phone Number, Gender (Male or Female), Address, Date of Birth, Hired Date, Position, Password, Confirm Password, Shift, Rate, and Create/Cancel buttons. A central message box says "Account Successfully Created" with a thumbs-up icon.

Figure D5.2.17: Admin- Manage Account- Update Profile(Mockup)

A Web Page

The page title is "A Web Page". The URL bar shows "https://". The left sidebar has buttons for "Dashboard", "Manage Account", "Attendance", and "Payroll". The main content area is titled "Update Profile". It contains fields for Name (First Name and Last Name), Email, Phone Number, Gender (Male or Female), Address, Date of Birth, Hired Date, Position, Password, Confirm Password, Shift, Rate, and Update/Cancel buttons. A central message box says "Profile Updated" with a thumbs-up icon.

Figure D5.2.17.1

A Web Page

https://

Dashboard

Manage Account

Attendance

Payroll

Update Profile

Name:

First Name Last Name

Email Phone Number

Gender: Male Female

Address: Hired Date:

Address **Account Successfully Updated**

Position: Password

Position Password

Confirm Password:

Confirm Password

Update Cancel

Figure D5.2.18: Employee- Payroll(Mockup)

A Web Page

https://

Dashboard

Manage Account

Attendance

Payroll

Payroll

search

	Month (Day - Day)	\$0.00	Date Issued	<input type="button" value="Details"/>	<input type="button" value="Print"/>
	Month (Day - Day)	\$0.00	Date Issued	<input type="button" value="Details"/>	<input type="button" value="Print"/>
	Month (Day - Day)	\$0.00	Date Issued	<input type="button" value="Details"/>	<input type="button" value="Print"/>
	Month (Day - Day)	\$0.00	Date Issued	<input type="button" value="Details"/>	<input type="button" value="Print"/>

Figure D5.2.19: Admin- Payroll(Mockup)

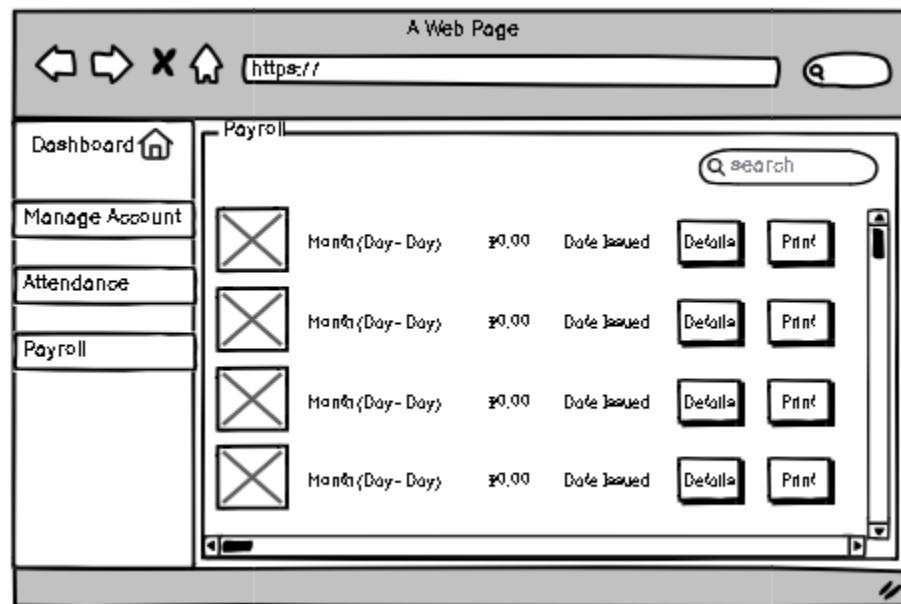
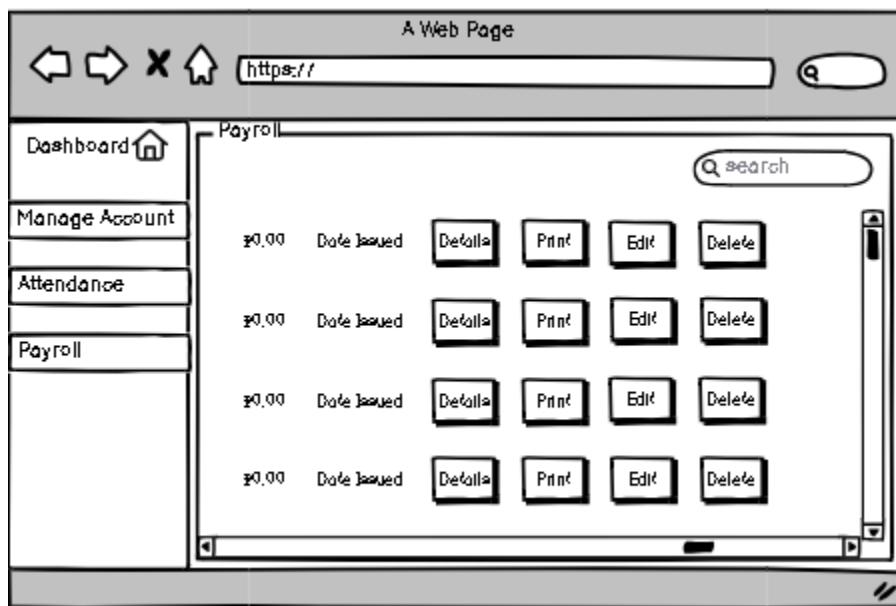


Figure D5.2.19.1



6. Human Interface Design (Screenshot)

6.1. Overview of User Interface

Login Page

The login page starts with two required user inputs, the email, and the user password, with a forgot password just in case the user forgets their password, and a login button that directs the user to the dashboard.

Forgot Password Page

The Forgot Password page helps users recover their accounts by entering their registered email. An OTP is sent to the email, which must be entered in the OTP field (see Figure D6.2.2.1). After verification, users can now enter their new password and use it to log in.

Employee- Attendance Check-In Page

From the employee's perspective, the user must click the "Check-in Now" button to start their time, and upon clicking, the user should select their shift time (see Figure D6.2.3.1) (shift depends on the current time), upon selection, it will then require you to turn your camera on (see Figure D6.2.3.2), a picture of the user can only be captured if the face is recognizable by the API. Upon capture the user will now be able to check in. Check-in would be seen as a success with a success message pop-up (see Figure D6.2.3.4).

Employee- Attendance- Check-out Page

Similar to the Check-in page, the user chooses between the "Check-out" and "Request Overtime" buttons. (see Figure D6.2.4) In this scenario, the user clicks "Check-out Now" to end their time, and then the camera API turns on (see Figure D6.2.4.1), where the user takes and uploads a photo to complete the check-out process. Check-out would be seen as a success with a success message pop-up (see Figure D6.2.4.3).

Request Overtime Page

The "Request Overtime" option allows employees to request overtime from the Check-out Page. Clicking it redirects the user to a page (refer to Figure D6.2.5) where they input their overtime hours and an accompanying note. Once submitted via the "Request Overtime" button, the request is sent to the admin for review and approval.

Employee - Overtime Requests Page

This page allows users to view their requests (see Figure D6.2.6), whether they are awaiting approval or rejection.

Admin- Attendance- View Attendance Page

This section (refer to Figure D6.2.7) displays employee attendance records, including shift, check-in, check-out, and status. Admins can search, view details, and edit, It also features options to add new records, showing attendance management.

Admin - Attendance - Create Attendance Page

The Create Attendance Page (see Figure D6.2.8) allows admins to manually enter employee attendance. It includes fields for the employee's name, shift, check-in, and check-out times/photos, and, date. Admins can create or cancel the attendance record. A success message would be displayed (see Figure D6.2.8.1) if the record is made.

Admin- Attendance- Update Attendance Page

The Edit option under the View Attendance Page (refer to Figure D6.2.7) directs the admin to the UpdateAttendance Page (see Figure D6.2.9), where they can modify employee attendance records, including time, date, and other details when adjustments are needed. A success message will be displayed (see Figure D6.2.9.1) if the update is made.

Admin- Attendance- Manage Overtime Requests Page

The Manage Overtime Requests Page (refer to Figure D.6.2.10) allows admins to view, approve, or reject employee overtime requests, including the date of request, requested overtime hours, and their notes. For every approval or rejection (see Figures D6.2.10.1 and D6.2.10.3) there will be a confirmation.

Employee- Manage Account - View/Update Profile Page

The interface displays a page (refer to Figure D6.2.11.), allowing users to view and update their profile information. It includes sections for personal details (name, email, phone number, password, address, date of birth, gender, hired date, rate per hour, and position) and options for updating the profile picture, password, phone number, address, and updating or canceling changes.

Admin- Manage Employee Account - View Profile Page

This page (refer to Figure D6.2.12), from the Admin's perspective, displays the employees' user information (profile picture, full name, email, phone number, address, etc.) this also contains buttons such as "New Account", "Edit," and "Activate/Deactivate" (refer to Figure D6.2.12.1) to manage the employee's account.

Admin- Manage Employee Account - Deactivate

Under Admin- View Profile Page (refer to Figure D6.2.12.1), this allows the admin to deactivate an active employee account when necessary. (see Figures D6.2.12.2 and Figure D6.2.12.3)

Admin- Manage Employee Account - Activate

Like the Deactivate section, this allows the admin to Activate an inactive employee account when necessary. (see Figures D6.2.12.4 and Figure D6.2.12.5)

Admin- Manage Employee Account - Create Profile Page

From the View Profile Page (refer to figure D6.2.12), clicking "New Account" allows the admin to create a new employee/admin profile, particularly for new hires. (see Figure D6.2.13) This process requires the admin to input all necessary user details to successfully create the account.

Admin- Manage Employee Account - Update Profile Page

This allows the admin to modify and update specific employee details (see Figure D6.2.14), such as personal information, contact details, position, or other relevant data, whenever necessary. This ensures that the employee profiles remain accurate and up-to-date.

Admin- Manage Admin Account - View Profile Page

This page (refer to Figure D6.2.15), from the Admin's perspective, displays the Admins' user information (profile picture, full name, and, email.. This also contains buttons such as "New Account" and "Edit," to manage the admin's account.

Admin- Manage Admin Account - Create Profile Page

From the View Profile Page (refer to figure D6.2.15), clicking "New Account" allows the admin to create a new admin/employee profile. (see Figure D6.2.16) This process requires all the necessary user details to successfully create the account.

Admin- Manage Admin Account - Update Profile Page

The interface displays a page (refer to Figure D6.2.17), allowing admins to update their profile information. It includes sections for details (profile picture, name, and email) and options for updating the profile picture, name, and email, as well as updating or canceling changes.

Employee- Payroll - View Payroll Page

The employee payroll page (refer to Figure D6.2.18) shows payroll records by pay period, with the option of downloading a soft copy of the user's payslip (see Figure D6.2.18.1) to view/print the breakdown of pay details. Users can also filter by specific pay periods. It provides an easy way for employees to access their payroll information.

Admin- Payroll - Manage Payrolls Page

The admin Manage Payrolls page (refer to Figure D6.2.19) lists employee payroll records with options to create new payroll, edit, and publish (see Figure D6.2.19.3). Admins can also search by specific pay periods or by status, making it a convenient tool for managing payroll information.

Admin- Payroll - Create Employee Payroll Page

Clicking "New Payroll" (refer to Figure D6.2.19) allows the admin to create a payroll for an employee. (see Figure D6.2.20 and D6.2.20.1) This process requires all the necessary pay details to successfully create the payroll.

Admin- Payroll - Update Employee Payroll Page

Clicking "Edit" (refer to Figure D6.2.19.2) allows the admin to update the employee's current payroll if necessary. (see Figure D6.2.21 and D6.2.21.1)

6.2. Screenshot of System

Figure D6.2.1: Login (Screenshot)

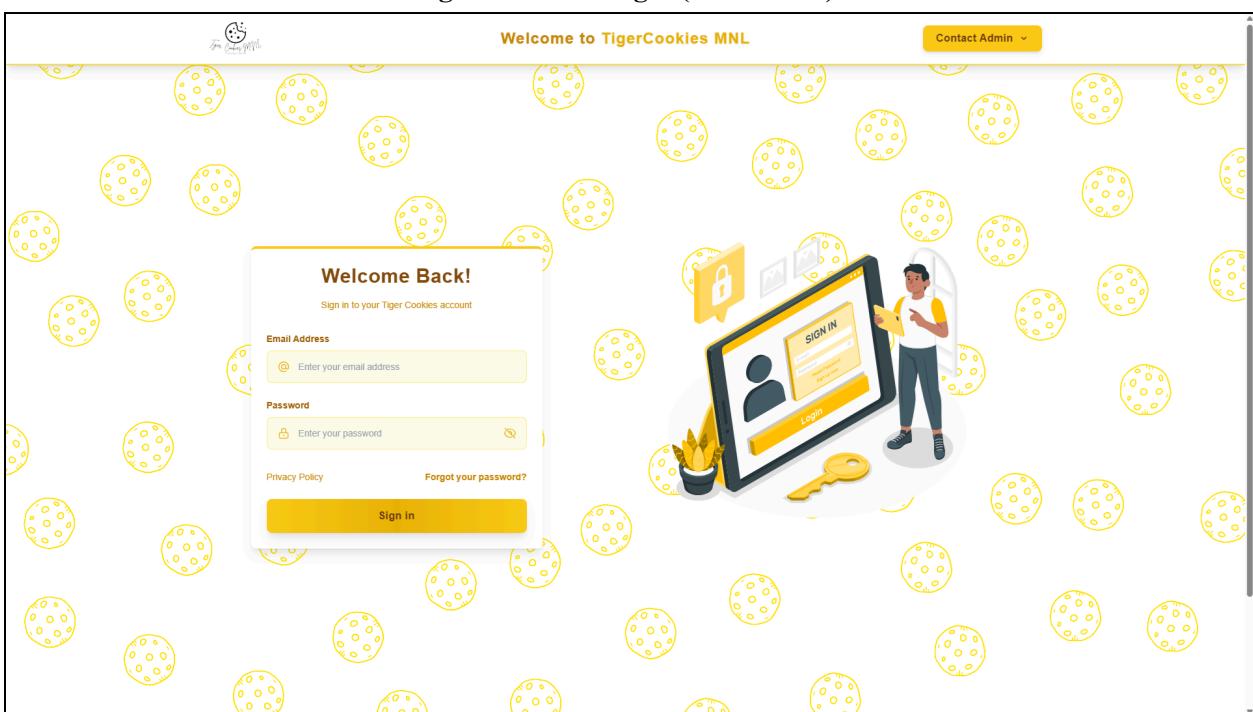


Figure D6.2.2: Forgot Password (Screenshot)

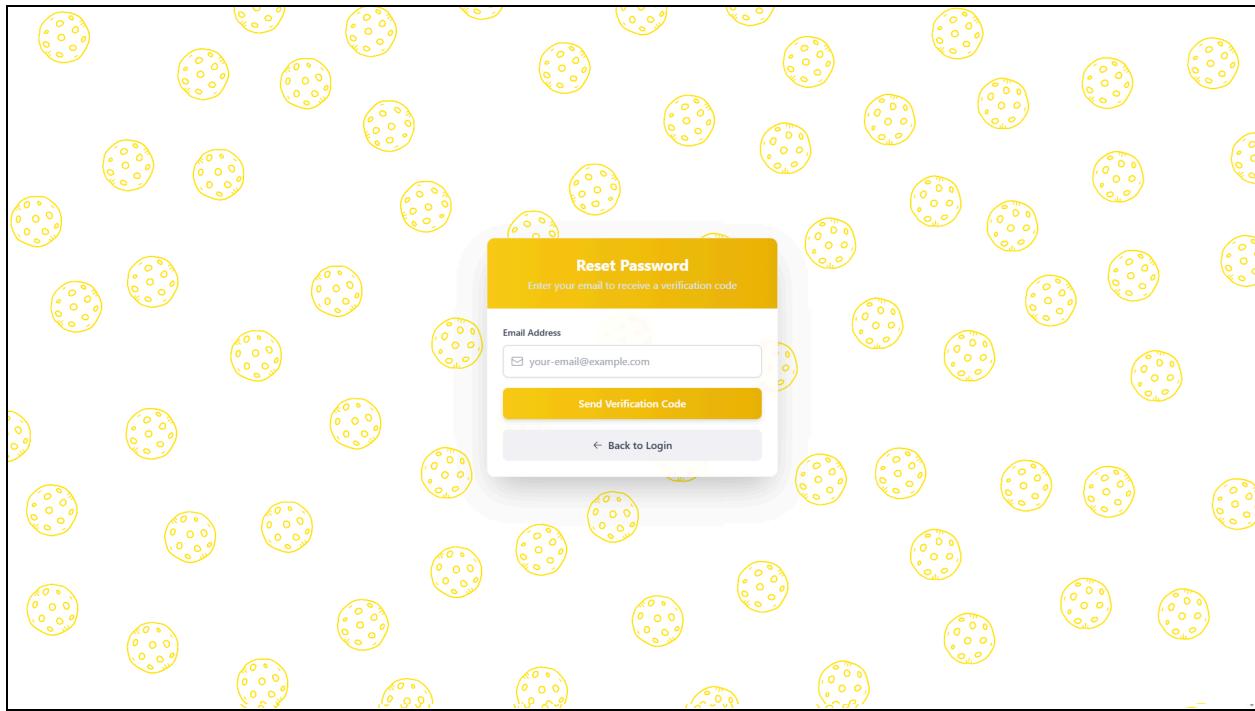


Figure D6.2.2.1

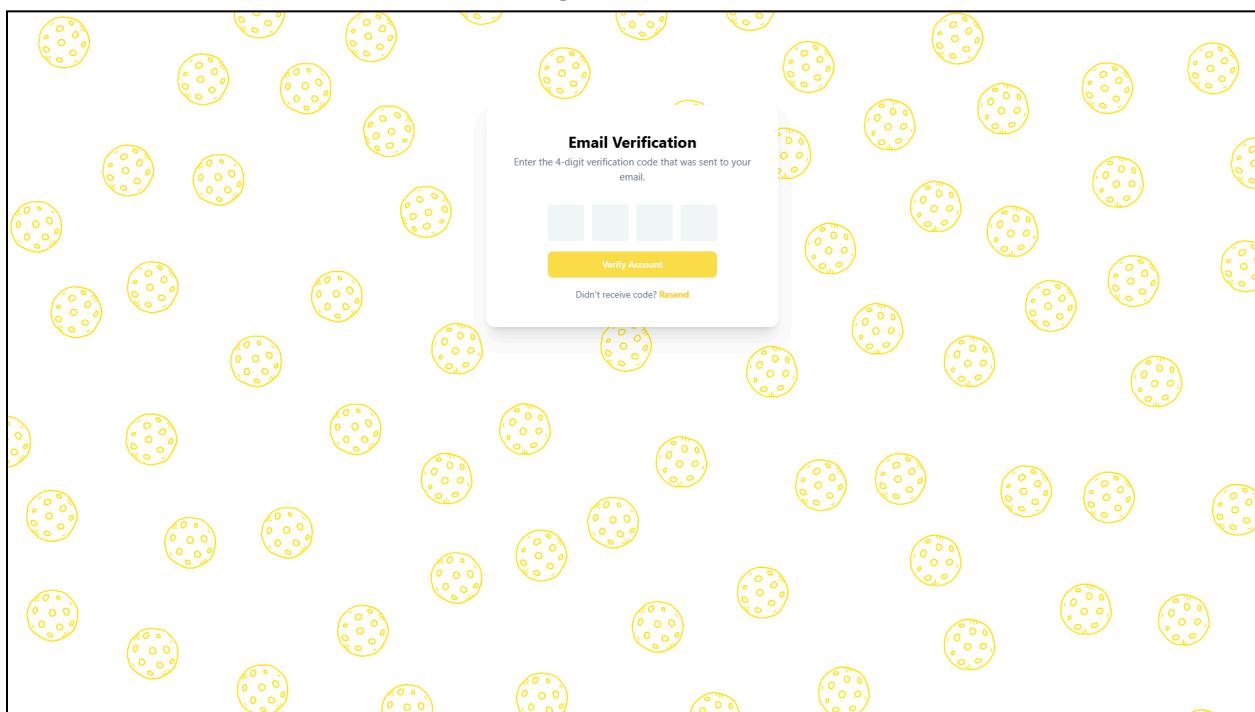


Figure D6.2.2.2

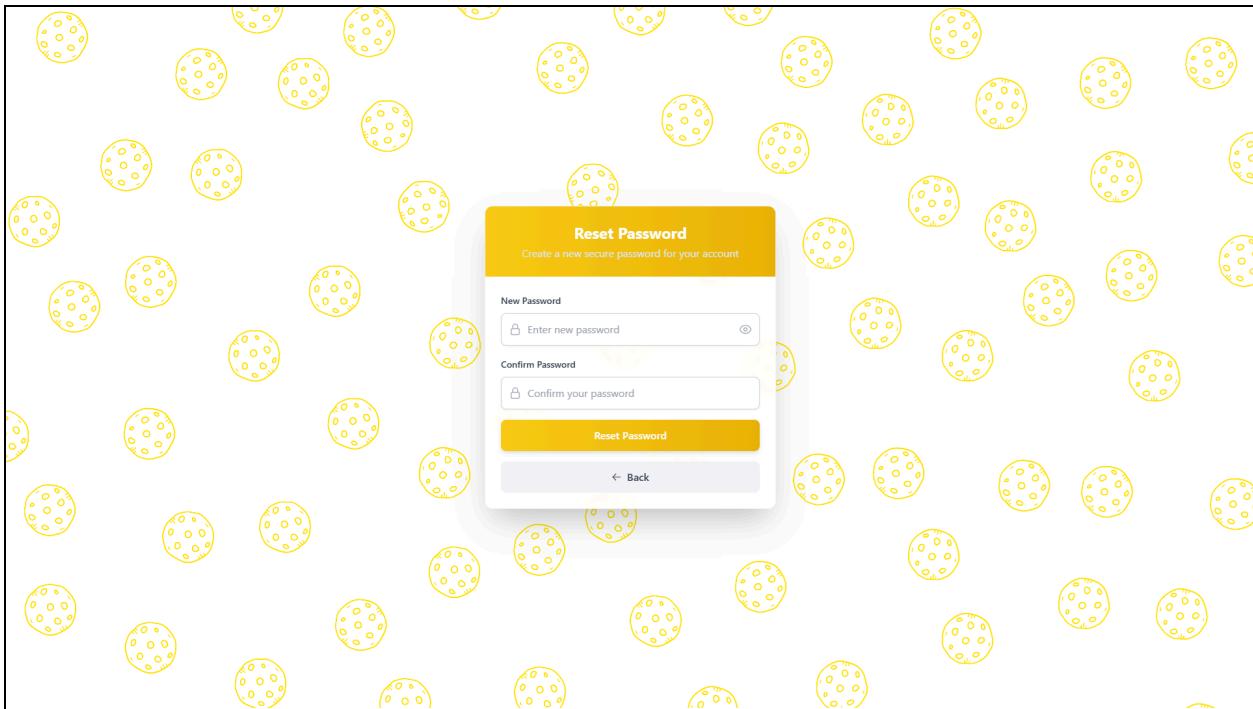


Figure D6.2.3: Employee - Attendance - Check-In (Screenshot)

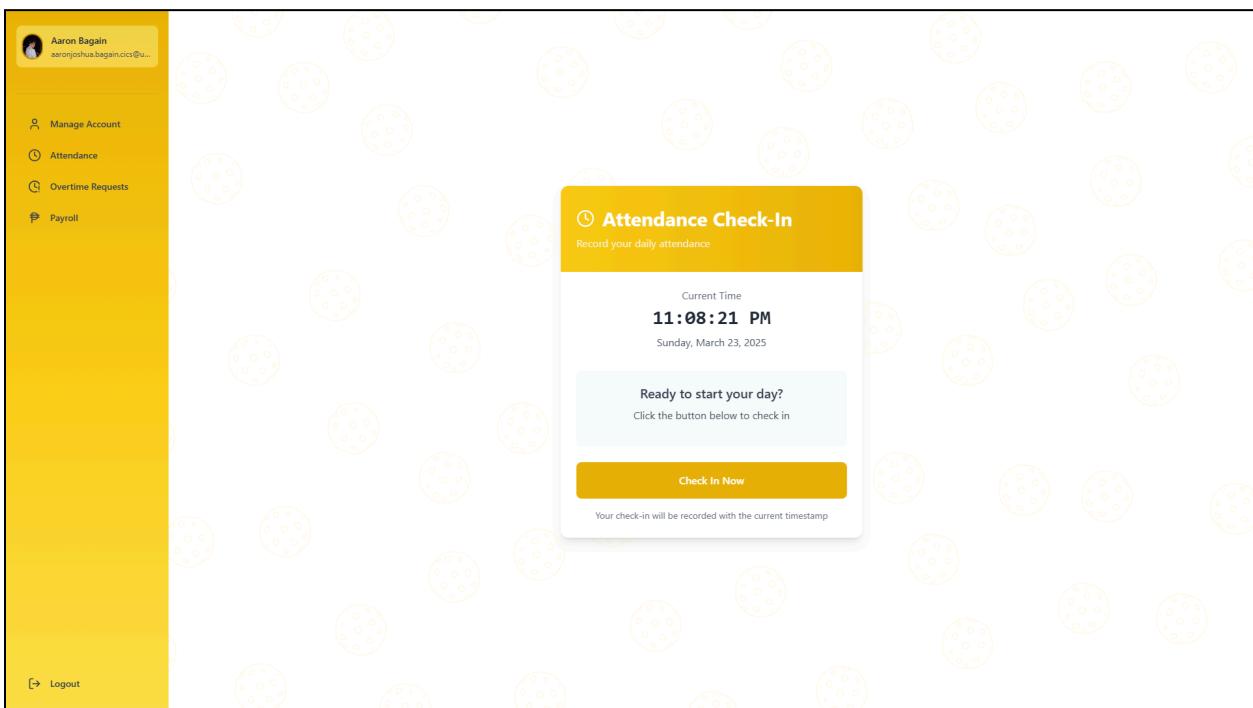


Figure D6.2.3.1

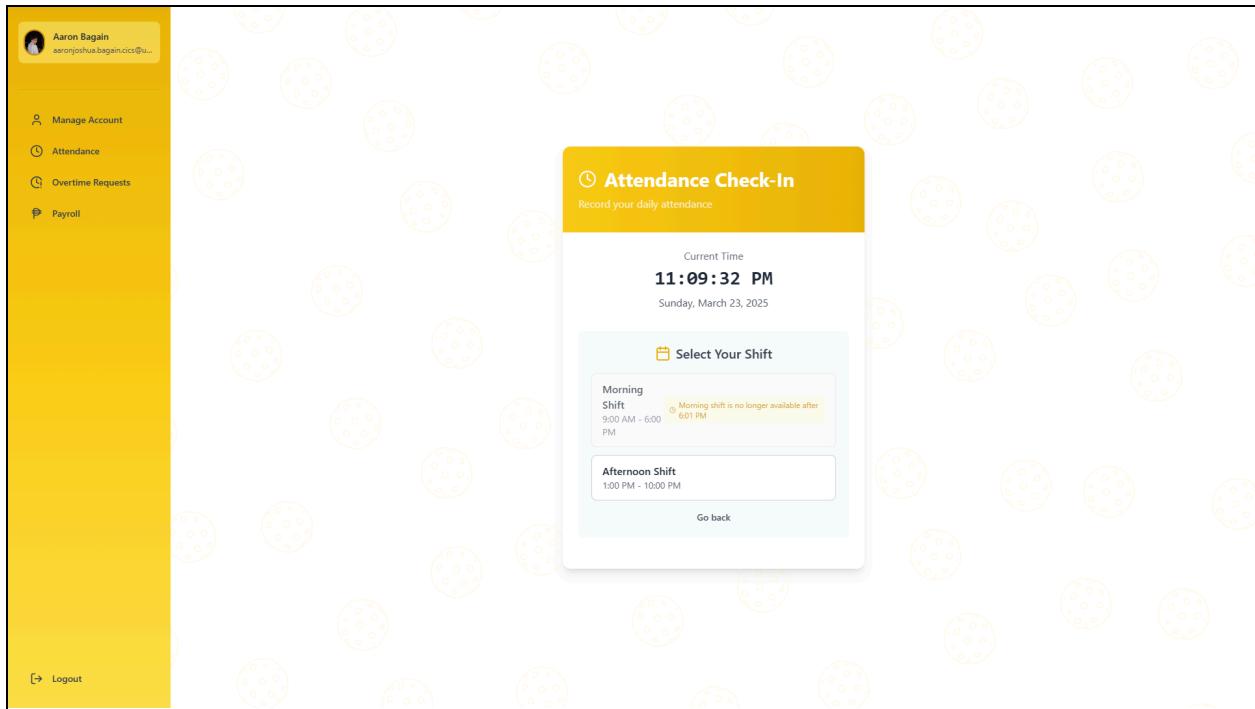


Figure D6.2.3.2

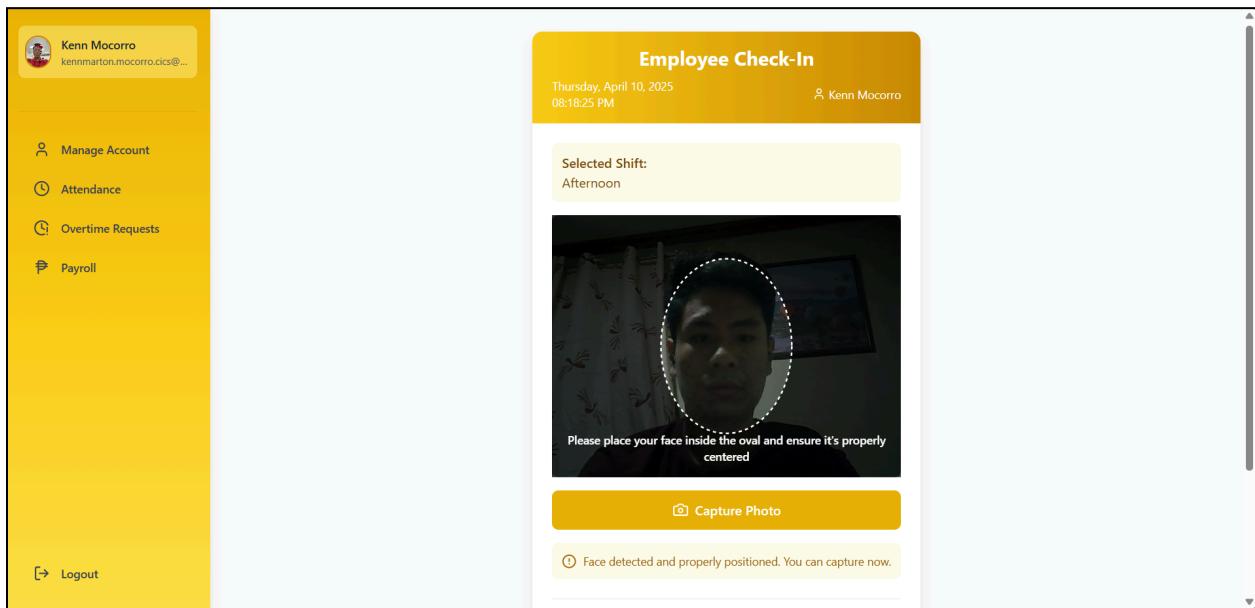


Figure D6.2.3.3

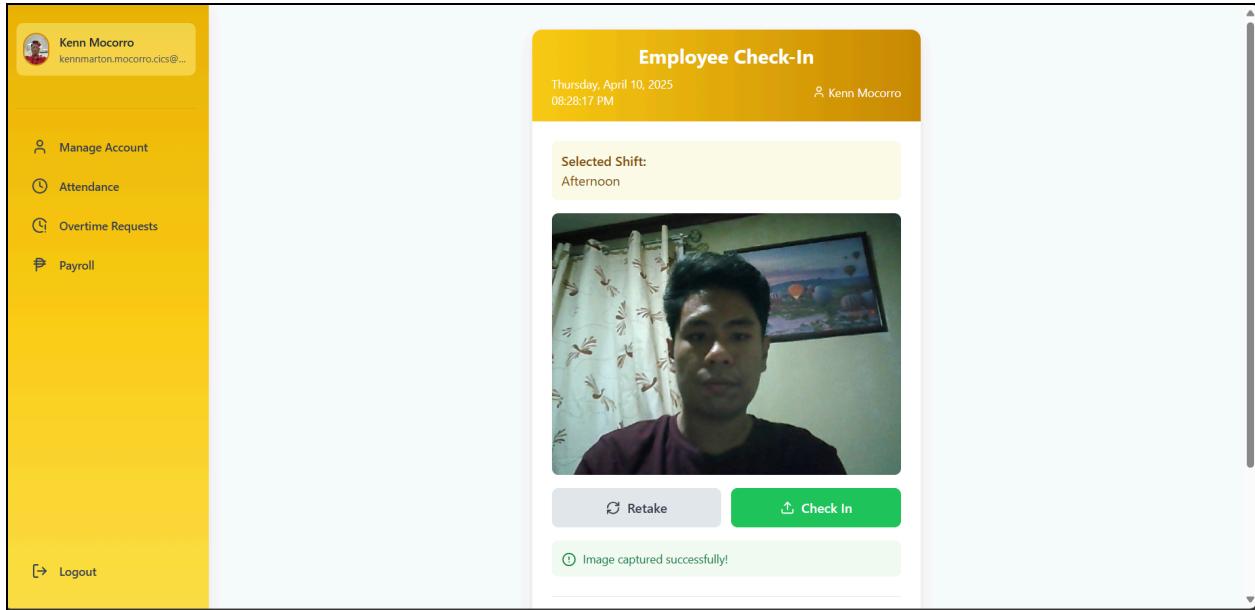


Figure D6.2.3.4

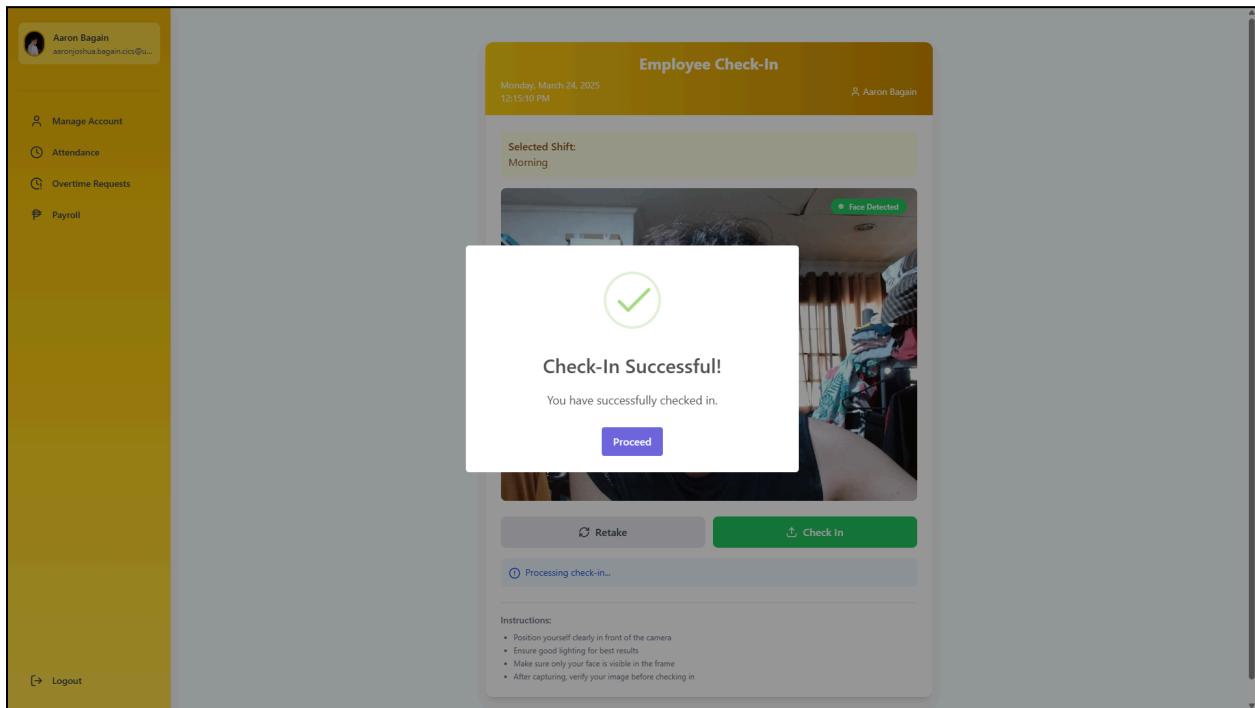


Figure D6.2.3.5

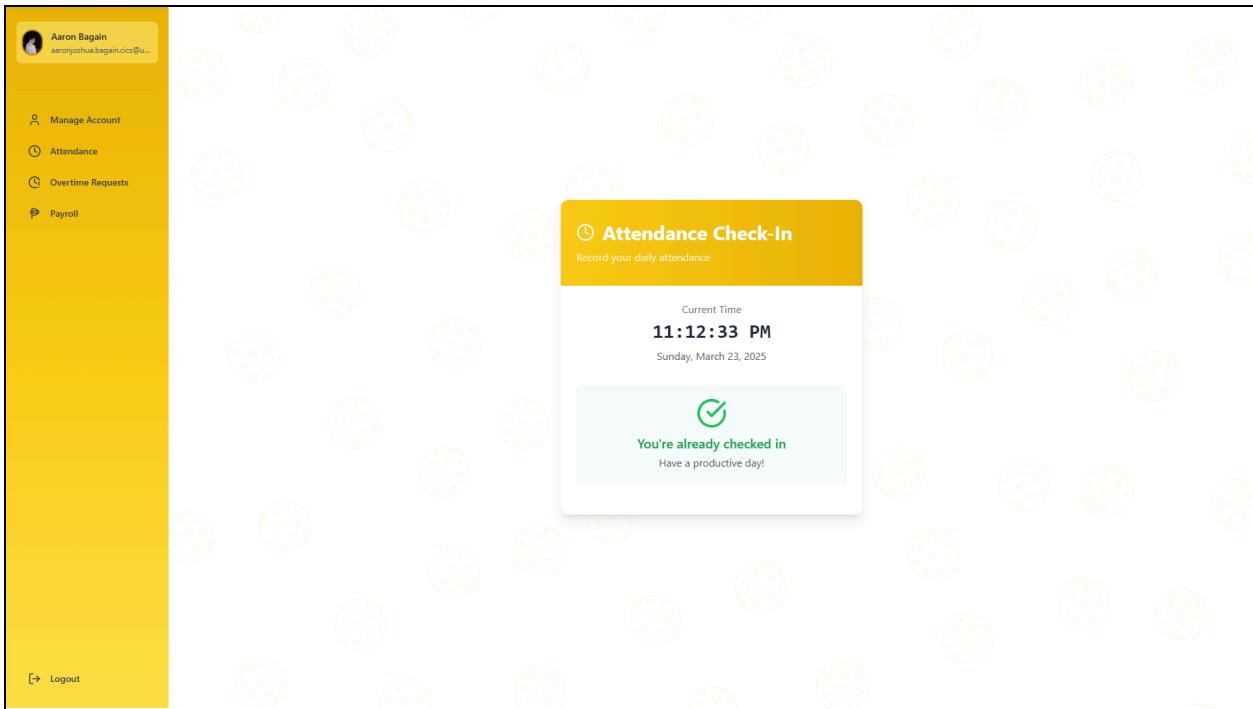


Figure D6.2.4: Employee - Attendance - Check-Out (Screenshot)

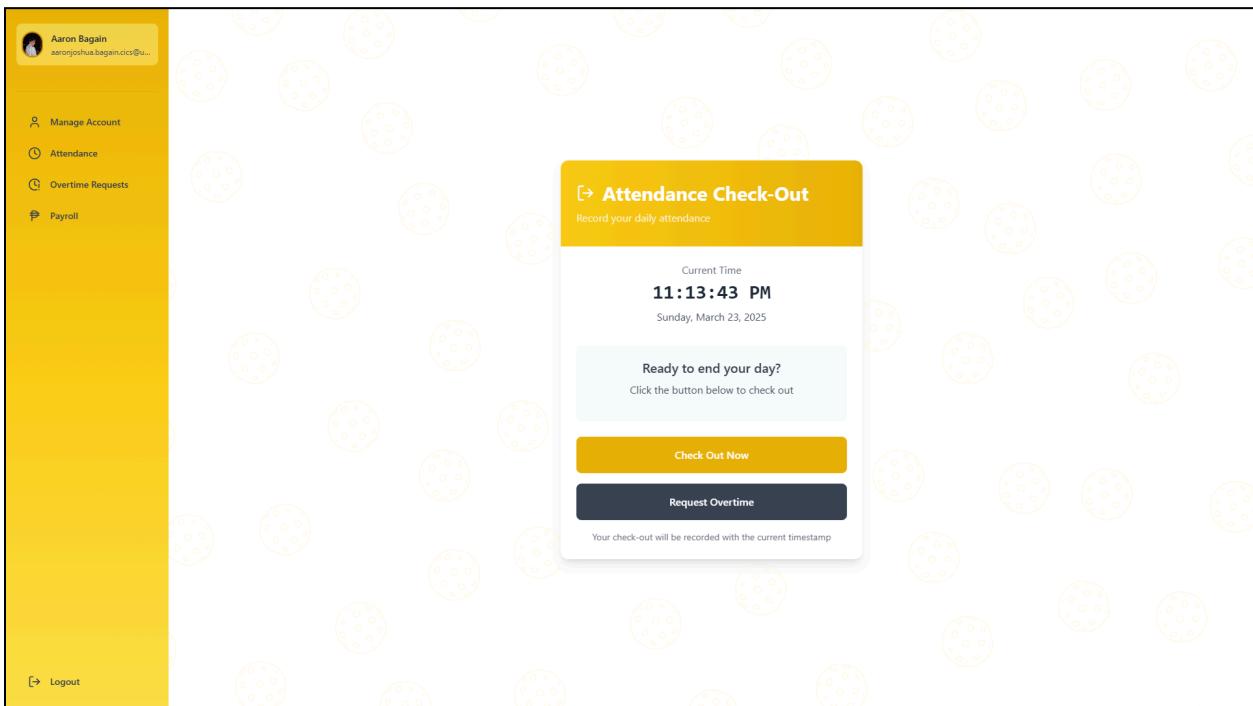


Figure D6.2.4.1

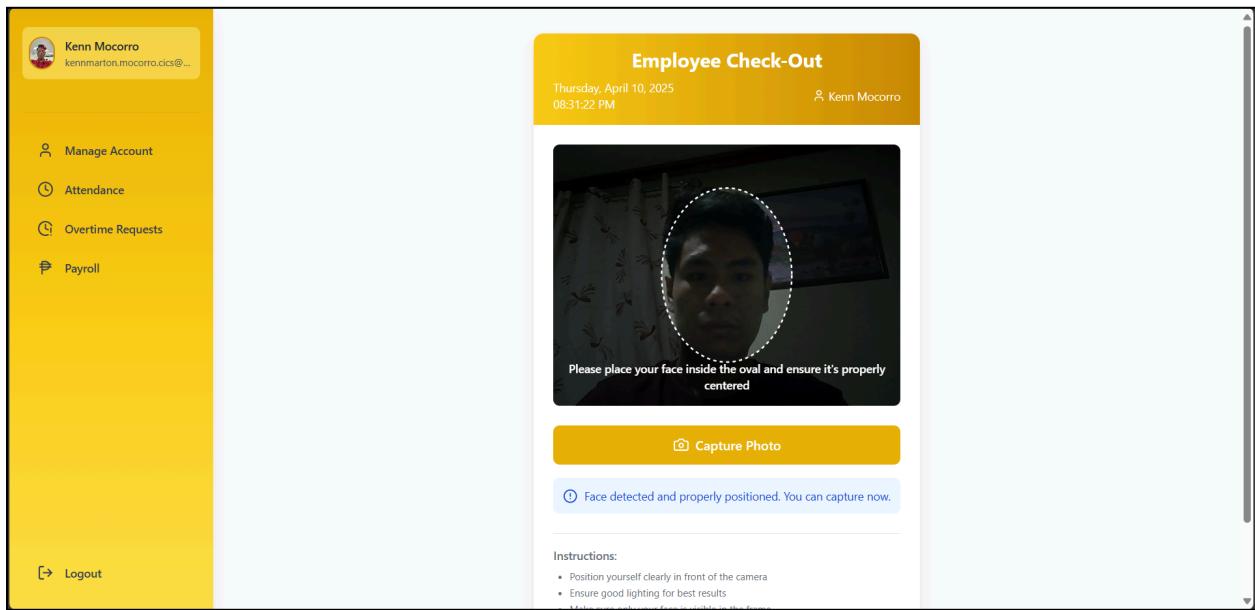


Figure D6.2.4.2

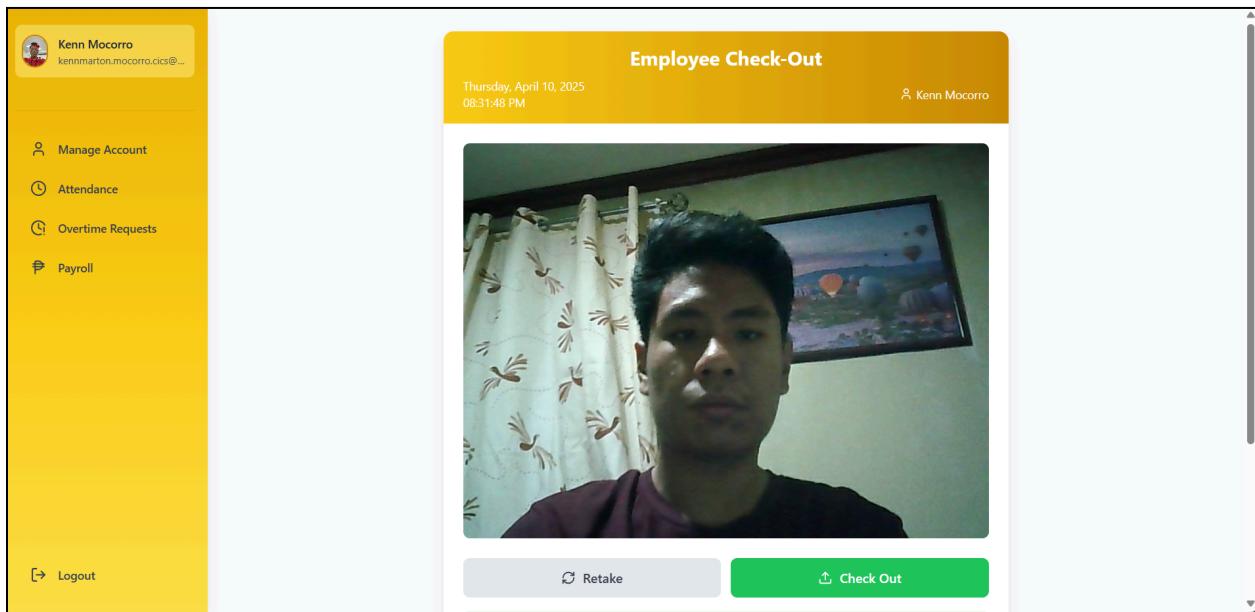


Figure D6.2.4.3

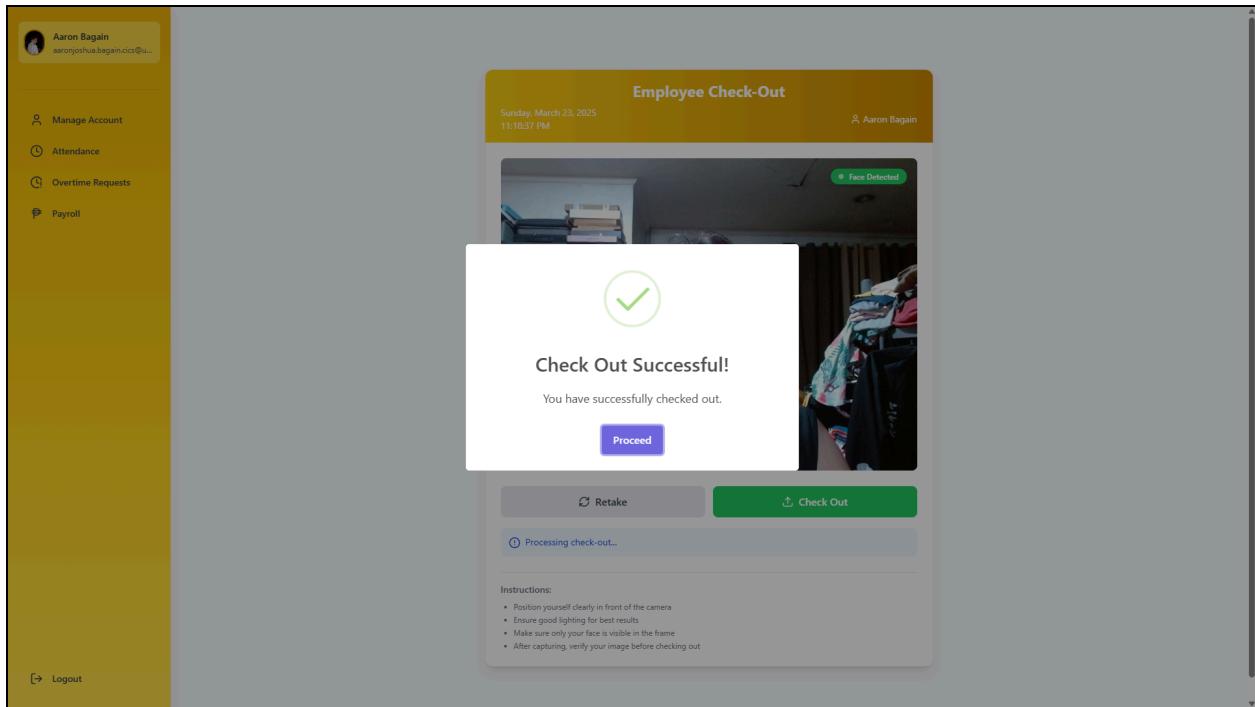


Figure D6.2.4.4

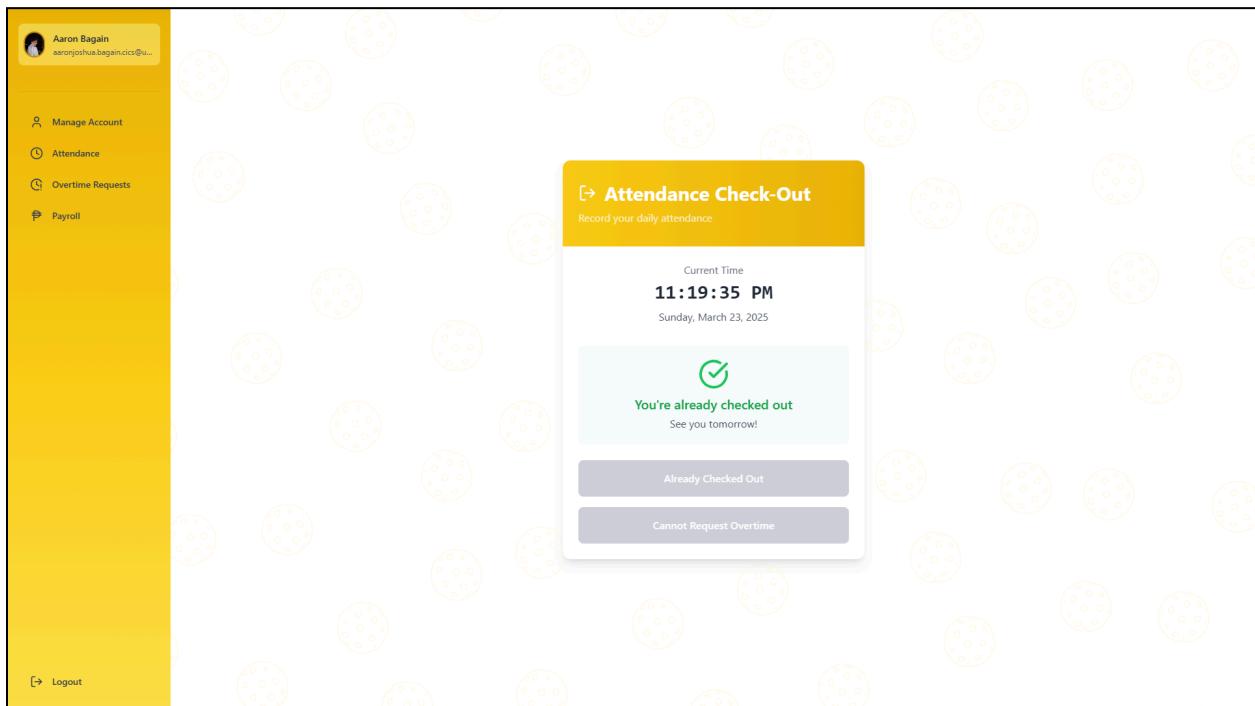


Figure D6.2.5: Employee - Attendance - Request Overtime(Screenshot)

A screenshot of a web application interface. On the left, there is a vertical sidebar with a yellow background. At the top of the sidebar is a user profile section showing a small profile picture, the name "Aaron Bagain", and the email "aaronjoshua.bagain.cics@u...". Below this are four menu items: "Manage Account", "Attendance", "Overtime Requests" (which is currently selected and highlighted in blue), and "Payroll". At the bottom of the sidebar is a "Logout" button. The main content area has a white background. At the top center, it says "Request Overtime". Below that is a yellow header bar with the text "Overtime Request Form". The form itself consists of two input fields: "Overtime Hours *
Enter hours" and "Reason for Overtime
Explain why you need overtime hours". At the bottom right of the form is a yellow "Request Overtime" button.

Figure D6.2.5.1

A screenshot of the same web application interface as Figure D6.2.5.1. The layout is identical, with the yellow sidebar on the left and the white main content area on the right. The "Overtime Requests" menu item is still highlighted in blue. The main content area shows the "Request Overtime" page. A yellow header bar at the top says "Overtime Request Form". Below it is a summary box containing "Summary", "Date: Mar 23, 2025, 11:15 PM", "Hours: 3", and "Notes: I need an extension to maximize my savings.". Below the summary is a green success message box stating "Overtime request submitted successfully!". The "Overtime Hours" and "Reason for Overtime" input fields are present, along with the "Request Overtime" button at the bottom right.

Figure D6.2.6: Employee - Overtime Requests(Screenshot)

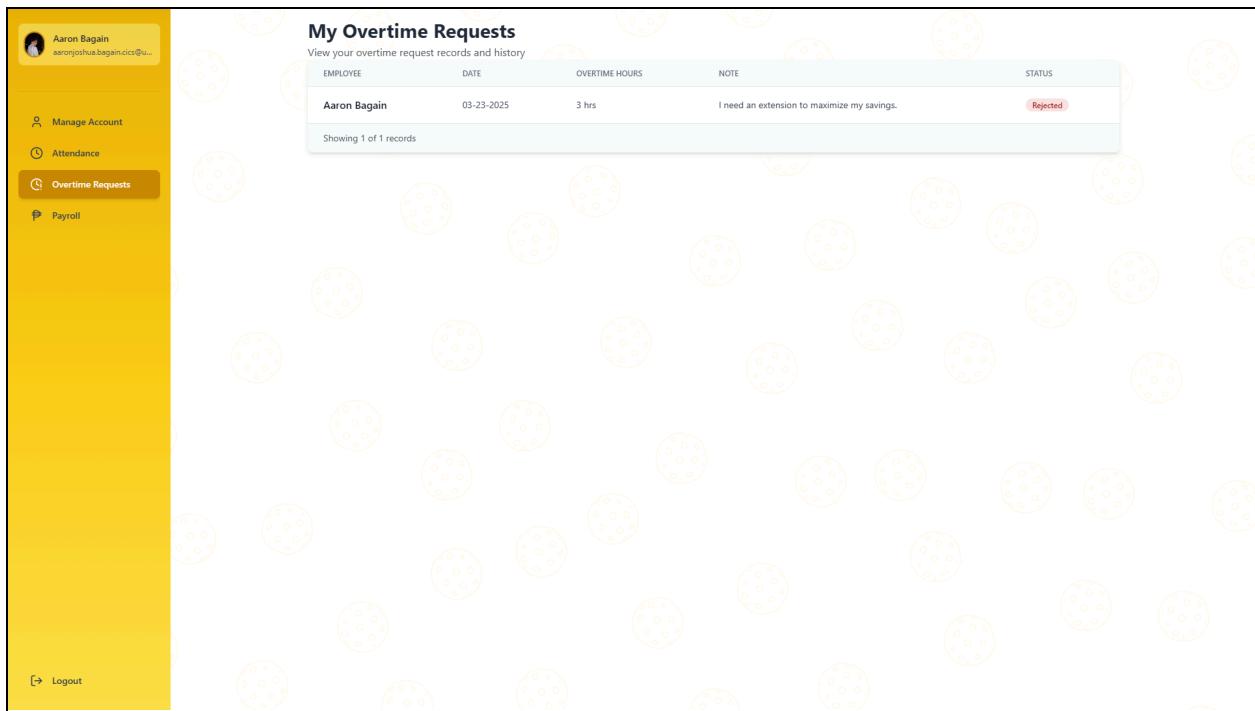


Figure D6.2.7: Admin - Attendance - View Attendance(Screenshot)

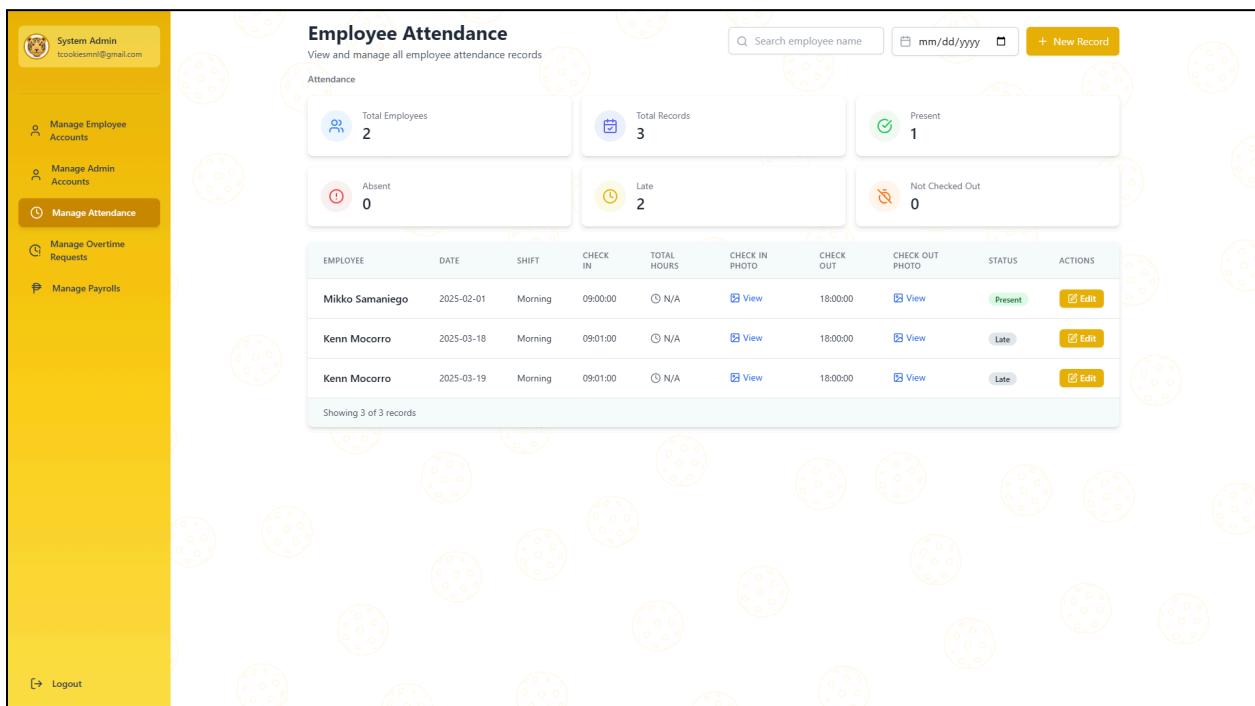


Figure D6.2.8: Admin - Attendance - Create Attendance(Screenshot)

Employee Attendance
Create and manage employee attendance records

Attendance > Create

Create Employee Attendance
Create a new attendance record for employees

Employee Name *: Aaron Bagain

Attendance Date *: 03/25/2025

Shift *: Morning

Check-In Time: 09:00 AM

Check-Out Time: 12:30 PM

Check-In Photo: Click to upload or drag and drop (PNG, JPG up to 5MB)

Check-Out Photo: Click to upload or drag and drop (PNG, JPG up to 5MB)

Success Message: Attendance recorded successfully!

[Logout](#)

Figure D6.2.8.1

Employee Attendance
Create and manage employee attendance records

Attendance > Create

Create Employee Attendance
Create a new attendance record for employees

Employee Name *: Select Employee

Attendance Date *: mm/dd/yyyy

Shift *: Select Shift

Check-In Time *: --:-- --

Check-Out Time: --:-- --

Check-In Photo: Click to upload or drag and drop (PNG, JPG up to 5MB)

Check-Out Photo: Click to upload or drag and drop (PNG, JPG up to 5MB)

Error Message: Employee Name is required.

[Logout](#)

Figure D6.2.9: Admin - Attendance - Update Attendance(Screenshot)

Attendance Management
Update employee attendance records
Attendance > Update

Update Employee Attendance
Edit attendance record for employees

Employee Name *: Kenn Mocorro

Attendance Date *: 03/19/2025

Shift *: Morning

Check-In Time: 09:01 AM

Check-Out Time: 06:00 PM

Check-In Photo: Click to upload or drag and drop PNG, JPG up to 5MB

Check-Out Photo: Click to upload or drag and drop PNG, JPG up to 5MB

X Cancel **Update**

Figure D6.2.9.1

Attendance Management
Update employee attendance records
Attendance > Update

Update Employee Attendance
Edit attendance record for employees

Employee Name *: Kenn Mocorro

Attendance Date *: 03/18/2025

Shift *: Morning

Check-In Time: 09:01 AM

Check-Out Time: 06:00 PM

Check-In Photo: Click to upload or drag and drop PNG, JPG up to 5MB

Check-Out Photo: Click to upload or drag and drop PNG, JPG up to 5MB

X Cancel **Update**

(Success message) Attendance updated successfully! X

Figure D6.2.10: Admin - Attendance - Manage Overtime Requests(Screenshot)

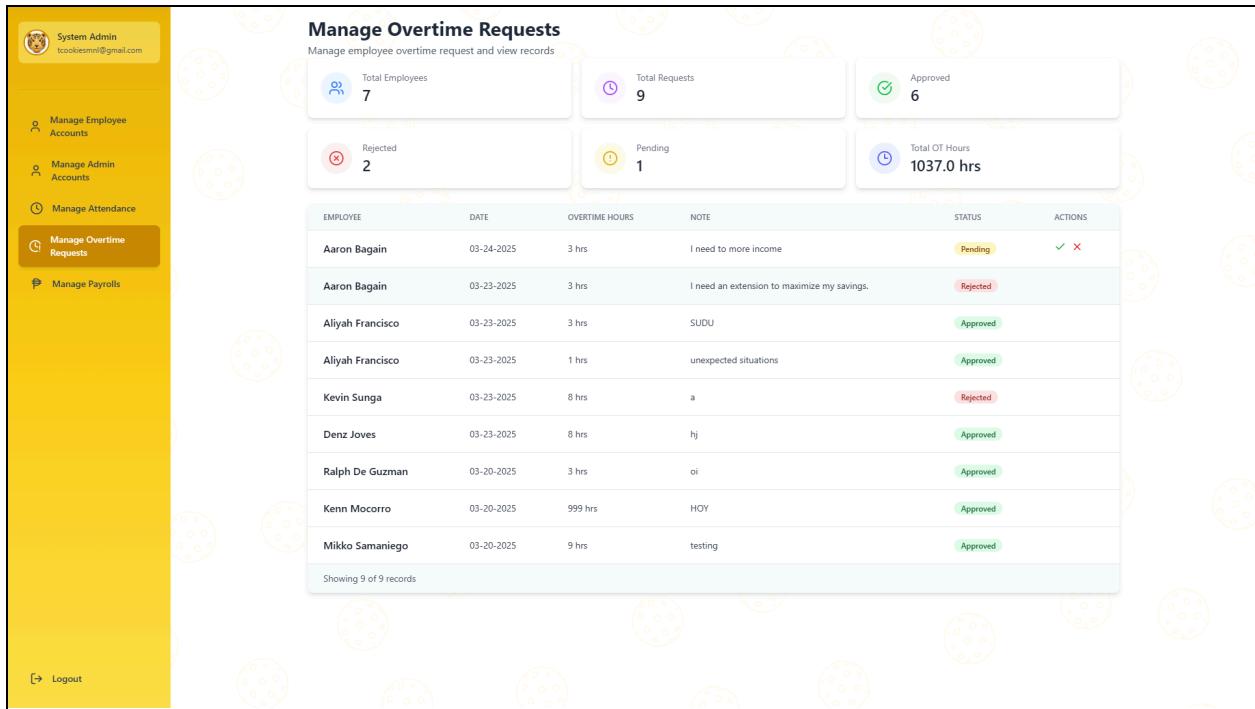


Figure D6.2.10.1

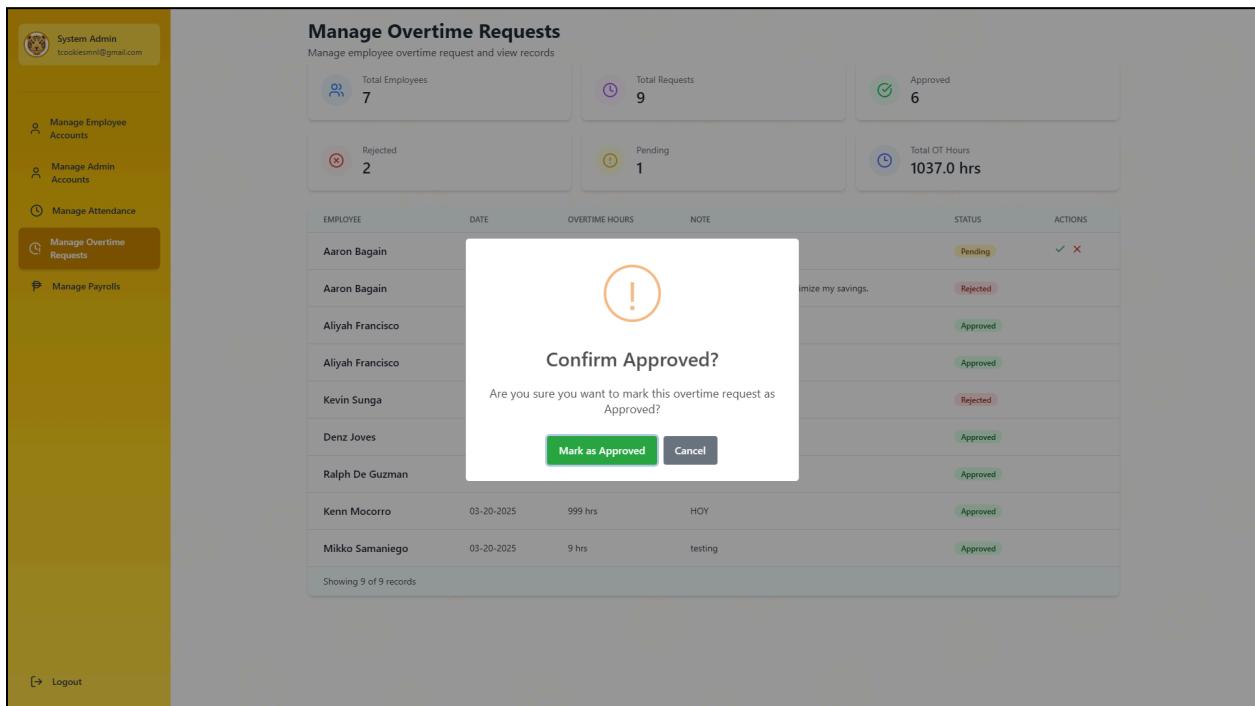


Figure D6.2.10.2

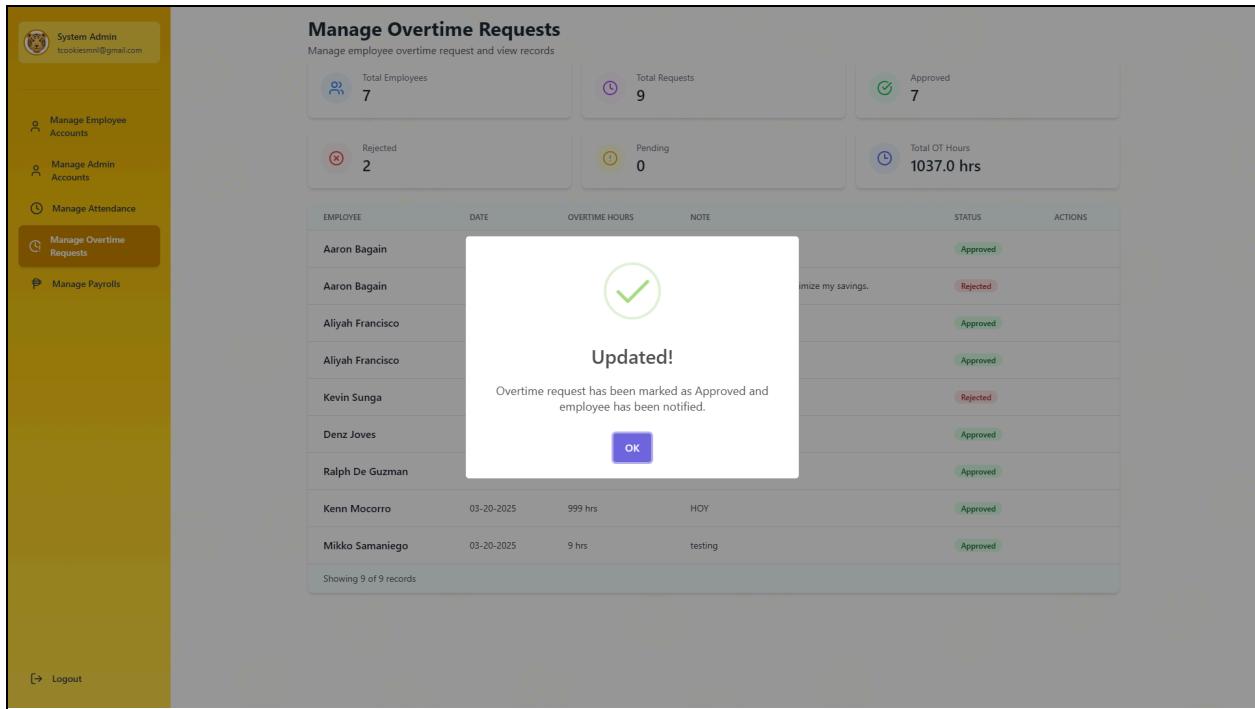


Figure D6.2.10.3

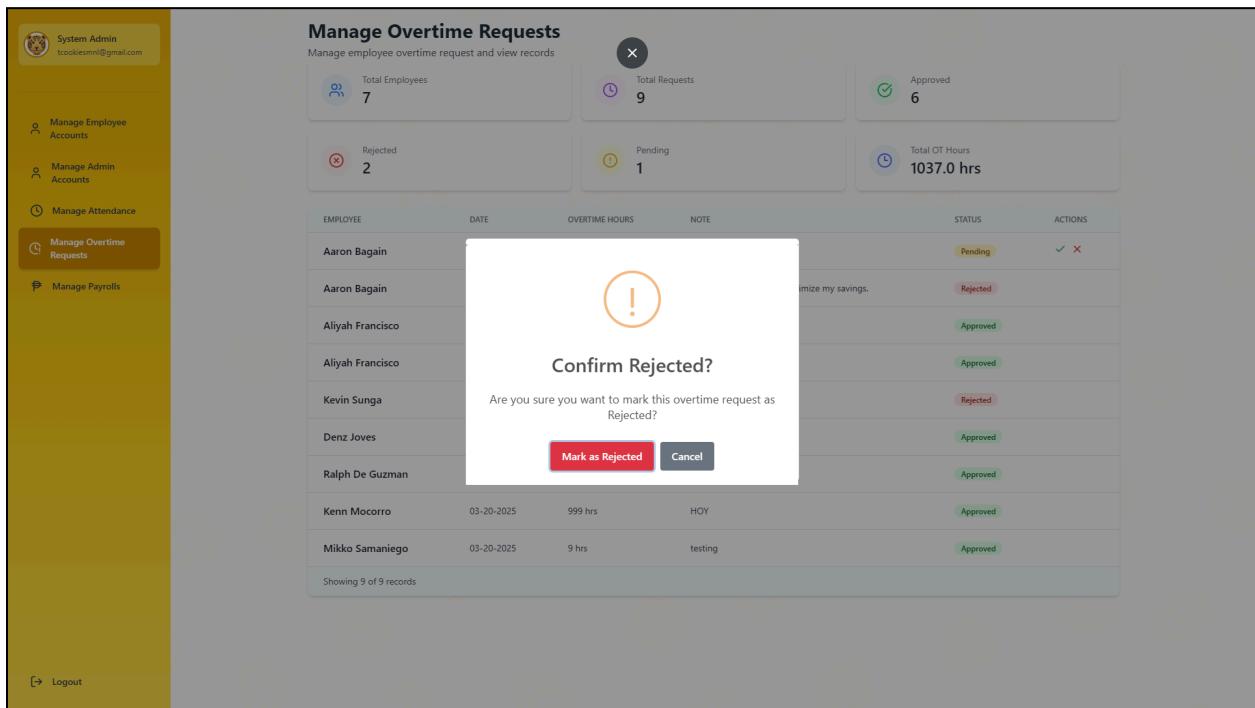


Figure D6.2.10.4

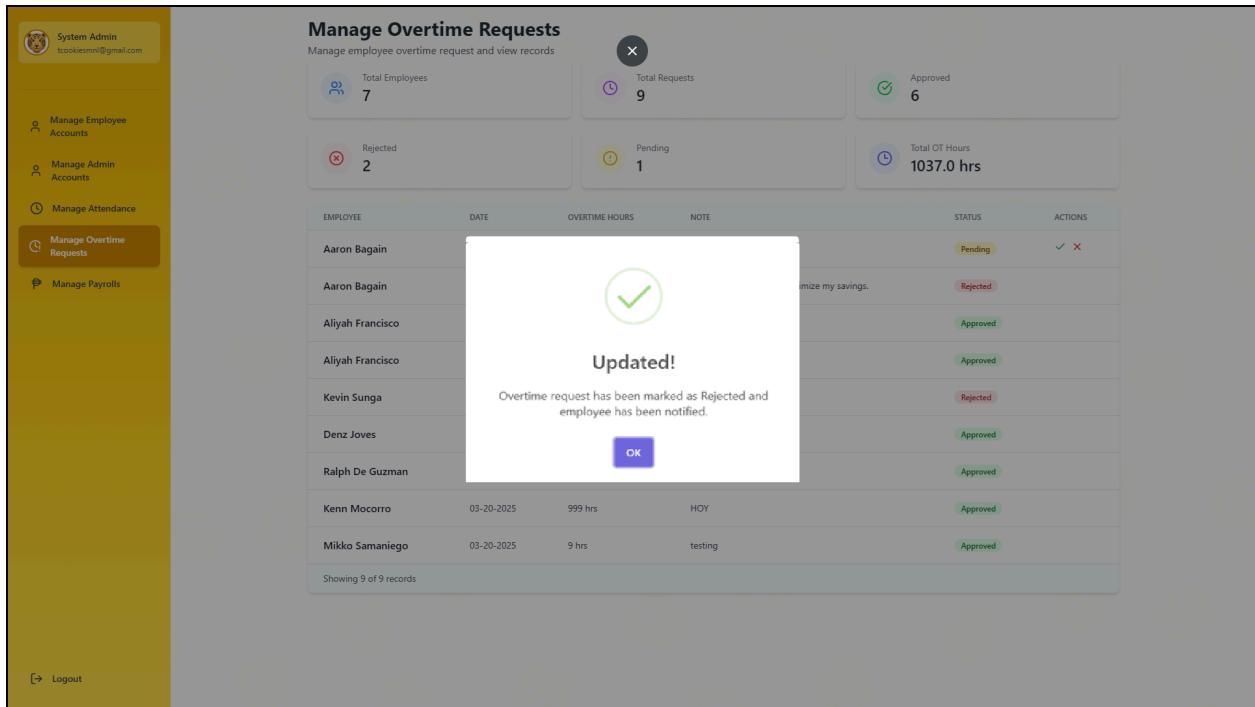


Figure D6.2.11: Employee - Manage Account - View Profile(Screenshot)

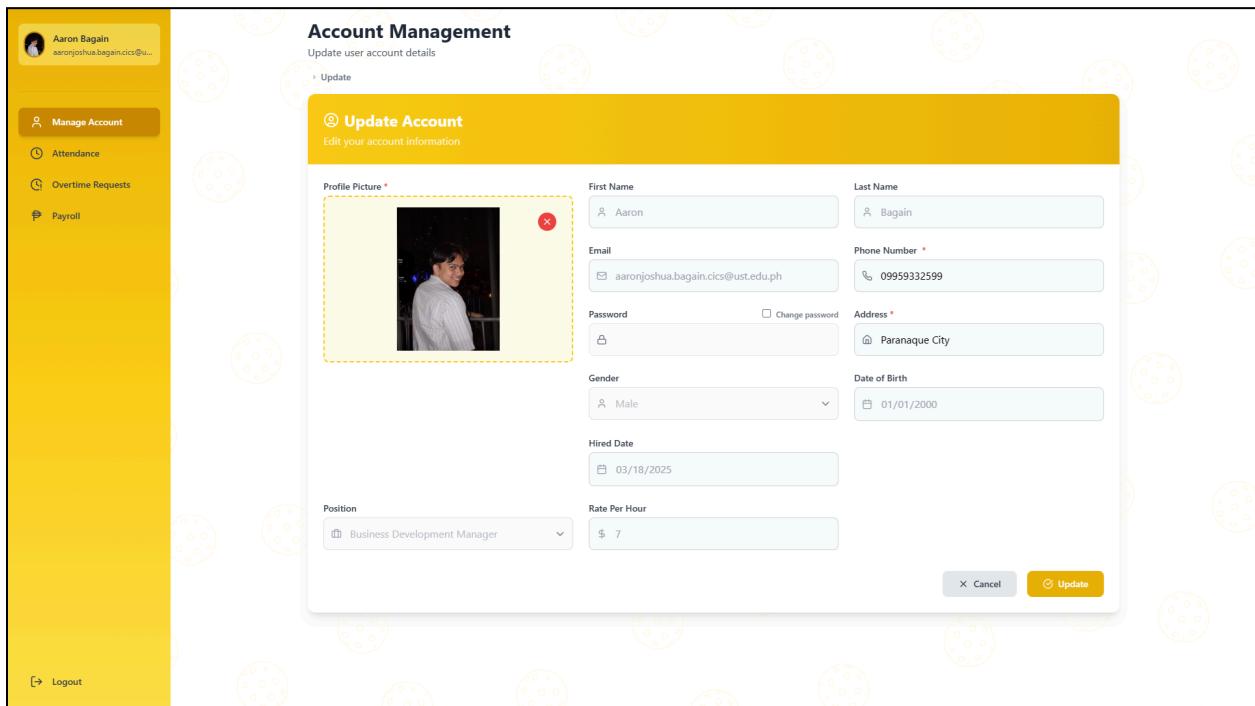


Figure D6.2.11.1: Employee - Manage Account - Update Profile(Screenshot)

Figure D6.2.12: Admin - Manage Employee Account - View Profile(Screenshot)

PROFILE	NAME	EMAIL	PHONE NUMBER	GENDER	DATE OF BIRTH	POSITION
	Mikko Samaniego 1324 Vicente Cruz St	mikko.samaniego123@gmail.com	09063642928	Male	2004-06-13	Sole Proprietor
	Ralph De Guzman Bulacan	ralphkenneth.deguzman.cics@ust.edu.ph	09123456781	Male	2001-09-11	Operations Manager
	JC Lopez Tabi tabi lang	jheromechristopher.lopez.cics@ust.edu.ph	09123456782	Male	2000-01-01	Operations Manager
	Aliyah Francisco Ewan	krismaaliyah.francisco.cics@ust.edu.ph	09123456783	Female	1999-01-01	Sales Assistant
	Denz Joves ewan din	joshdenzeljoves.cics@ust.edu.ph	09123456784	Male	2000-01-01	Sales Assistant
	Kevin Sunga sa qc? sa up? sa kalsada ng bg?	kevincarl.sunga.cics@ust.edu.ph	09123456785	Male	1998-05-01	Operations Manager
	Aaron Bagain Paranaque City	aaronjoshua.bagain.cics@ust.edu.ph	09959332599	Male	2000-01-01	Business Development Manager
	Kenn Mocorro Novaliches Quezon City	kennmarton.mocorro.cics@ust.edu.ph	09012345678	Female	1996-09-20	Business Development Manager
	John Doe 3rd Avenue Quezon City	rammenagi@gmail.com	09104106332	Male	1999-01-01	Sales Assistant
	G> Doe 3rd Avenue Quezon City	kafrancisco12@gmail.com	09124819401	Male	1990-01-02	Sales Assistant

Figure D6.2.12.1

The screenshot shows the 'Employee Accounts' page with the following interface elements:

- User Profile:** System Admin, tcookiesmn@gmail.com
- Navigation:** Manage Employee Accounts, Manage Admin Accounts, Manage Attendance, Manage Overtime Requests, Manage Payrolls, Logout.
- Section Header:** Employee Accounts, View and manage all employee accounts.
- Metrics:** Total Employees (10), Active Employees (8), Inactive Employees (2).
- Table:** A grid showing employee details like Phone Number, Gender, Date of Birth, Position, Hired Date, Rate, Status, and Actions (Edit, Deactivate).

PHONE NUMBER	GENDER	DATE OF BIRTH	POSITION	HIRE DATE	RATE	STATUS	ACTIONS
09063642928	Male	2004-06-13	Sole Proprietor	2025-03-18	93.125	Active	<button>Edit</button> <button>Deactivate</button>
.edu.ph	Male	2001-09-11	Operations Manager	2025-03-18	10	Active	<button>Edit</button> <button>Deactivate</button>
.it.edu.ph	Male	2000-01-01	Operations Manager	2025-03-18	10	Active	<button>Edit</button> <button>Deactivate</button>
.luph	Female	1999-01-01	Sales Assistant	2025-03-18	3	Inactive	<button>Edit</button> <button>Activate</button>
09123456784	Male	2000-01-01	Sales Assistant	2025-03-18	4	Active	<button>Edit</button> <button>Deactivate</button>
09123456785	Male	1998-05-01	Operations Manager	2025-03-18	9	Active	<button>Edit</button> <button>Deactivate</button>
.ph	Male	2000-01-01	Business Development Manager	2025-03-18	7	Active	<button>Edit</button> <button>Deactivate</button>
.uph	Female	1996-09-20	Business Development Manager	2025-03-20	9999	Active	<button>Edit</button> <button>Deactivate</button>
09104106332	Male	1999-01-01	Sales Assistant	2025-03-23	3	Active	<button>Edit</button> <button>Deactivate</button>
09124819401	Male	1990-01-02	Sales Assistant	2025-03-23	3	Inactive	<button>Edit</button> <button>Activate</button>

Figure D6.2.12.2 (Deactivate Account)

The screenshot shows the 'Employee Accounts' page with a modal dialog open:

- User Profile:** System Admin, tcookiesmn@gmail.com
- Navigation:** Manage Employee Accounts, Manage Admin Accounts, Manage Attendance, Manage Overtime Requests, Manage Payrolls, Logout.
- Section Header:** Employee Accounts, View and manage all employee accounts.
- Metrics:** Total Employees (11), Active Employees (9), Inactive Employees (2).
- Table:** A grid showing employee details.
- Modal Content:**
 - Header:** Deactivate Account?
 - Text:** Are you sure you want to deactivate Mikko Samaniego's account? This will change their status to inactive.
 - Buttons:** Cancel, Yes, Deactivate

Figure D6.2.12.3

The screenshot shows the 'Employee Accounts' page with a success message overlay. The message reads: 'Success! Mikko Samaniego's account has been deactivated.' It features a large green checkmark icon and an 'OK' button. The background table lists employee accounts, including one row for Mikko Samaniego which now shows an 'Inactive' status.

PHONE NUMBER	GENDER	DATE OF BIRTH	POSITION	HIRED DATE	RATE	STATUS	ACTIONS	
09063642928	Male	2004-06-13	Sole Proprietor	2025-03-18	80.625	Inactive	<button>Edit</button> <button>Activate</button>	
.edu.ph	09123456781	Male	2000-01-01	Business Development Manager	2025-03-18	10	Active	<button>Edit</button> <button>Deactivate</button>
it.edu.ph	09123456782	Male	1998-05-01	Operations Manager	2025-03-18	10	Active	<button>Edit</button> <button>Deactivate</button>
lu.ph	09123456783	Female	1996-09-20	Business Development Manager	2025-03-20	3	Inactive	<button>Edit</button> <button>Activate</button>
	09123456784	Male	1999-01-01	Sales Assistant	2025-03-23	4	Active	<button>Edit</button> <button>Deactivate</button>
ph	09959332599	Male	2000-01-01	Business Development Manager	2025-03-18	7	Active	<button>Edit</button> <button>Deactivate</button>
u.ph	09012345678	Female	1996-09-20	Business Development Manager	2025-03-20	9999	Active	<button>Edit</button> <button>Deactivate</button>
	09104106332	Male	1999-01-01	Sales Assistant	2025-03-23	3	Active	<button>Edit</button> <button>Deactivate</button>
	09124819401	Male	1990-01-02	Sales Assistant	2025-03-23	3	Inactive	<button>Edit</button> <button>Activate</button>

Figure D6.2.12.4 (Activate Account)

The screenshot shows the 'Employee Accounts' page with an activation confirmation dialog. The dialog asks: 'Are you sure you want to activate Mikko Samaniego's account? This will change their status to active.' It includes 'Cancel' and 'Yes, Activate' buttons. The background table lists employee accounts, including one row for Mikko Samaniego which is currently inactive.

PHONE NUMBER	GENDER	DATE OF BIRTH	POSITION	HIRED DATE	RATE	STATUS	ACTIONS	
09063642928	Male	2004-06-13	Sole Proprietor	2025-03-18	80.625	Inactive	<button>Edit</button> <button>Activate</button>	
.edu.ph	09123456781	Male	2000-01-01	Business Development Manager	2025-03-18	10	Active	<button>Edit</button> <button>Deactivate</button>
it.edu.ph	09123456782	Male	1998-05-01	Operations Manager	2025-03-18	10	Active	<button>Edit</button> <button>Deactivate</button>
lu.ph	09123456783	Female	1996-09-20	Business Development Manager	2025-03-20	3	Inactive	<button>Edit</button> <button>Activate</button>
	09123456784	Male	1999-01-01	Sales Assistant	2025-03-23	4	Active	<button>Edit</button> <button>Deactivate</button>
ph	09959332599	Male	2000-01-01	Business Development Manager	2025-03-18	7	Active	<button>Edit</button> <button>Deactivate</button>
u.ph	09012345678	Female	1996-09-20	Business Development Manager	2025-03-20	9999	Active	<button>Edit</button> <button>Deactivate</button>
	09104106332	Male	1999-01-01	Sales Assistant	2025-03-23	3	Active	<button>Edit</button> <button>Deactivate</button>
	09124819401	Male	1990-01-02	Sales Assistant	2025-03-23	3	Inactive	<button>Edit</button> <button>Activate</button>

Figure D6.2.12.5

The screenshot shows the 'Employee Accounts' page with a 'Success!' message: 'Mikko Samaniego's account has been activated.' A large green checkmark icon is displayed above the message. Below the message is an 'OK' button.

PHONE NUMBER	GENDER	DATE OF BIRTH	POSITION	HIRE DATE	RATE	STATUS	ACTIONS
09063642928	Male	2004-06-13	Sole Proprietor	2025-03-18	80.625	Active	<button>Edit</button> <button>Deactivate</button>
.edu.ph	Male				10	Active	<button>Edit</button> <button>Deactivate</button>
.it.edu.ph	Male				10	Active	<button>Edit</button> <button>Deactivate</button>
.lu.ph	Female				3	Inactive	<button>Edit</button> <button>Activate</button>
09123456784	Male				4	Active	<button>Edit</button> <button>Deactivate</button>
09123456785	Male	1998-05-01	Operations Manager	2025-03-18	9	Active	<button>Edit</button> <button>Deactivate</button>
.ph	Male	2000-01-01	Business Development Manager	2025-03-18	7	Active	<button>Edit</button> <button>Deactivate</button>
.u.ph	Female	1996-09-20	Business Development Manager	2025-03-20	9999	Active	<button>Edit</button> <button>Deactivate</button>
09104106332	Male	1999-01-01	Sales Assistant	2025-03-23	3	Active	<button>Edit</button> <button>Deactivate</button>
09124819401	Male	1990-01-02	Sales Assistant	2025-03-23	3	Inactive	<button>Edit</button> <button>Activate</button>

Figure D6.2.13: Admin - Manage Employee Account - Create Profile(Screenshot)

The screenshot shows the 'Create Employee Account' form under 'Accounts Management'. The form includes fields for Role (Employee), Profile Picture (with a placeholder to upload or drag-and-drop a file), First Name and Last Name, Email, Password, Phone Number, Address, Gender, Date of Birth, Hired Date, Position, and Rate Per Hour. Buttons for 'Reset' and 'Create' are at the bottom right.

Figure D6.2.13.1

Accounts Management
Create accounts
Employees > Create

Create Employee Account
Add a new employee to the system

Role *
Employee

Profile Picture
Click to upload or drag and drop
PNG, JPG up to 5MB

First Name * Enter first name
Last Name * Enter last name

Email * example@company.com
Password * *****

Phone Number * e.g., 09171234567
Address Enter address

Gender Select Gender
Date of Birth mm/dd/yyyy

Hired Date * mm/dd/yyyy

Position * Select Position
Rate Per Hour ₱ 0.00

X Reset **>Create** **Employee account create**

Figure D6.2.14: Admin - Manage Employee Account - Update Profile(Screenshot)

Employee Management
Update employee account details
Employees > Update

Update Employee Account
Edit employee information

Profile Picture

First Name * Aaron **Last Name *** Bagain

Email * aaronjoshua.bagain.cics@ust.edu.ph **Phone Number *** 09959332599

Password Change password **Address** Paranaque City

Gender Male **Date of Birth** 01/01/2000

Hired Date * 03/18/2025

Position * Business Development Manager **Status *** Active **Rate Per Hour** ₱ 7

X Cancel **Update**

Figure D6.2.14.1

The screenshot shows the 'Employee Management' interface with a yellow header bar. The main content area is titled 'Update Employee Account' with the sub-instruction 'Edit employee information'. The form contains fields for profile picture, first name (Aaron), last name (Bagain), email (aaronjoshua.bagain.cics@ust.edu.ph), phone number (09959332599), password, address (Paranaque City), gender (Male), date of birth (01/01/2000), hired date (03/18/2025), position (Business Development Manager), status (Active), and rate per hour (\$ 7). A progress bar at the bottom indicates 'Updating...' and a success message 'Employee account updated successfully!' is displayed.

Figure D6.2.15: Admin - Manage Admin Account - View Profile(Screenshot)

The screenshot shows the 'Admin Accounts' interface with a yellow header bar. The main content area displays a table with one account entry. The table has columns for PROFILE, NAME, EMAIL, and ACTIONS. The single row shows a profile icon, the name 'System Admin', the email 'tcookiesml@gmail.com', and an 'Edit' button in the ACTIONS column. A search bar at the top right is set to 'Search admin'.

PROFILE	NAME	EMAIL	ACTIONS
	System Admin	tcookiesml@gmail.com	

Figure D6.2.16: Admin - Manage Admin Account - Create Profile(Screenshot)

The screenshot shows the 'Accounts Management' interface with a sidebar on the left containing links for managing employee accounts, admin accounts, attendance, overtime requests, and payrolls. The main area is titled 'Create Admin Account' with the sub-instruction 'Add a new admin to the system'. It includes a dropdown for 'Role' set to 'Admin', a 'Profile Picture' input field with a placeholder 'Click to upload or drag and drop PNG, JPG up to 5MB', and fields for 'First Name' (System), 'Last Name' (Admin2), 'Email' (tcookiesmn12@gmail.com), and 'Password' (*****). A 'Create' button is at the bottom right, and a 'Reset' button is to its left.

Figure D6.2.16.1

The screenshot shows the 'Accounts Management' interface with a sidebar on the left containing links for managing employee accounts, admin accounts, attendance, overtime requests, and payrolls. The main area is titled 'Create Employee Account' with the sub-instruction 'Add a new employee to the system'. It includes a dropdown for 'Role' set to 'Employee', a 'Profile Picture' input field with a placeholder 'Click to upload or drag and drop PNG, JPG up to 5MB', and fields for 'First Name' (Enter first name), 'Last Name' (Enter last name), 'Email' (example@company.com), 'Password' (*****), 'Phone Number' (e.g., 09171234567), 'Address' (Enter address), 'Gender' (Select Gender), 'Date of Birth' (mm/dd/yyyy), 'Hired Date' (mm/dd/yyyy), 'Position' (Select Position), and 'Rate Per Hour' (0.00). A success message 'Admin account created successfully!' is displayed at the bottom right. A 'Create' button is at the bottom right, and a 'Reset' button is to its left.

Figure D6.2.17: Admin - Manage Admin Account - Update Profile(Screenshot)

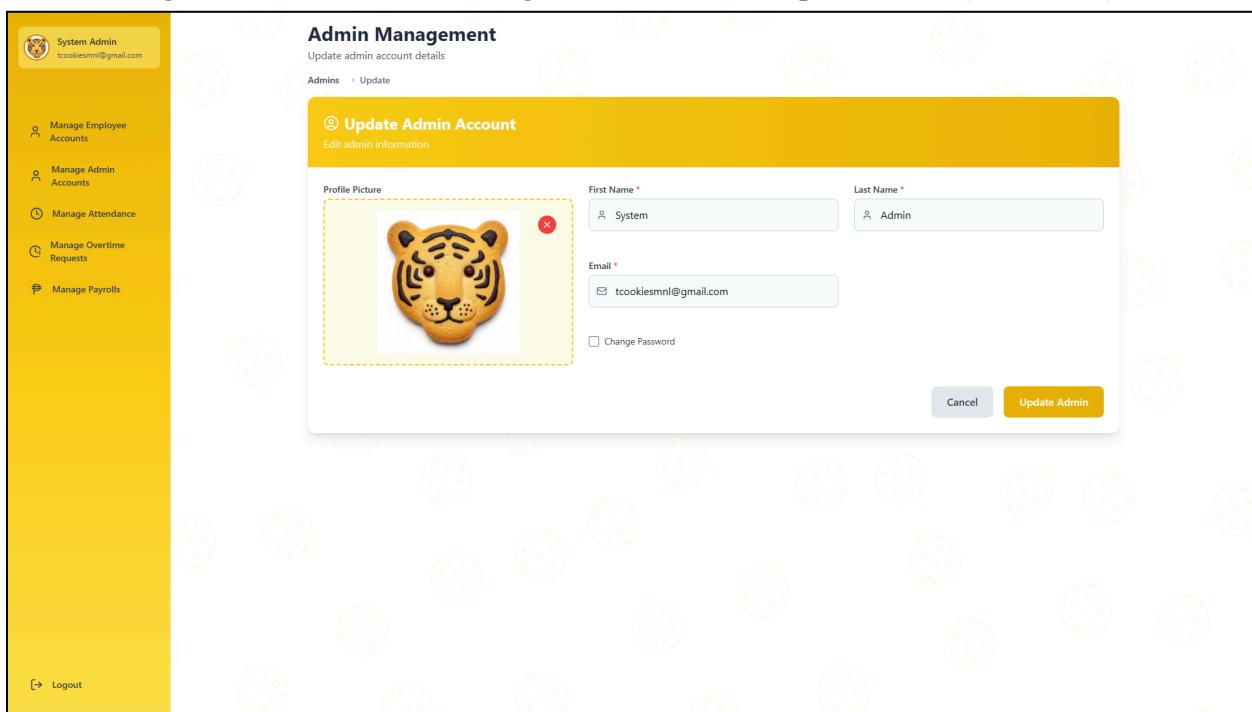


Figure D6.2.17.1

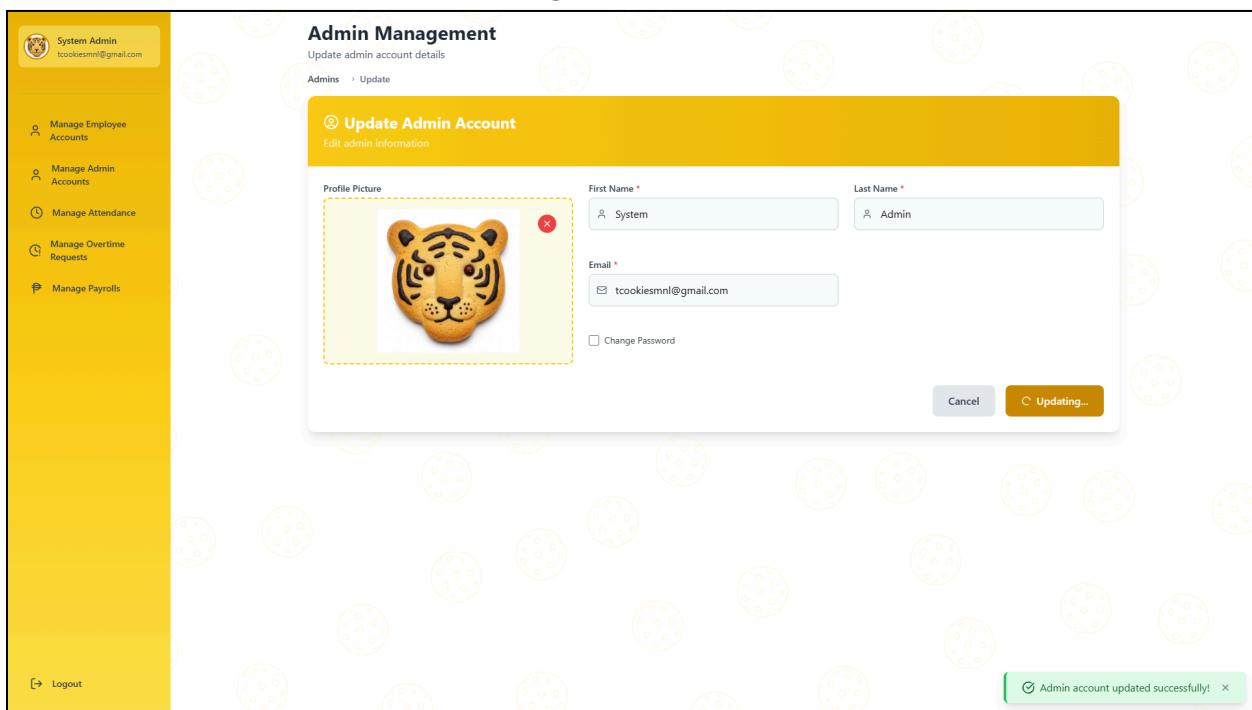


Figure D6.2.18: Employee - Payroll - View Payroll(Screenshot)

The screenshot shows a user interface for viewing payroll information. On the left, there's a vertical sidebar with a yellow background containing icons for Manage Account, Attendance, Overtime Requests, and a prominent Payroll button (which is highlighted with a red box). The main area has a white background with a decorative pattern of floating yellow coins. At the top, it says "My Payroll" and "View future payroll schedules and download payslips". Below that, it shows "Next payroll processing: Sat Apr 05 2025". A table displays one record for "Aaron Bagain" with the following details:

EMPLOYEE	PAY PERIOD	HOURS WORKED	HOURLY RATE	BASE SALARY	OVERTIME	TOTAL EARNINGS	DEDUCTIONS	NET PAY	ACTIONS
Aaron Bagain	March 20, 2025	8	₱500.00	₱4,000.00	₱0.00	₱4,000.00	₱70.00	₱3,930.00	Download Payslip

At the bottom of the table, it says "Showing 1 of 1 records".

Figure D6.2.18.1: (View Payslip)

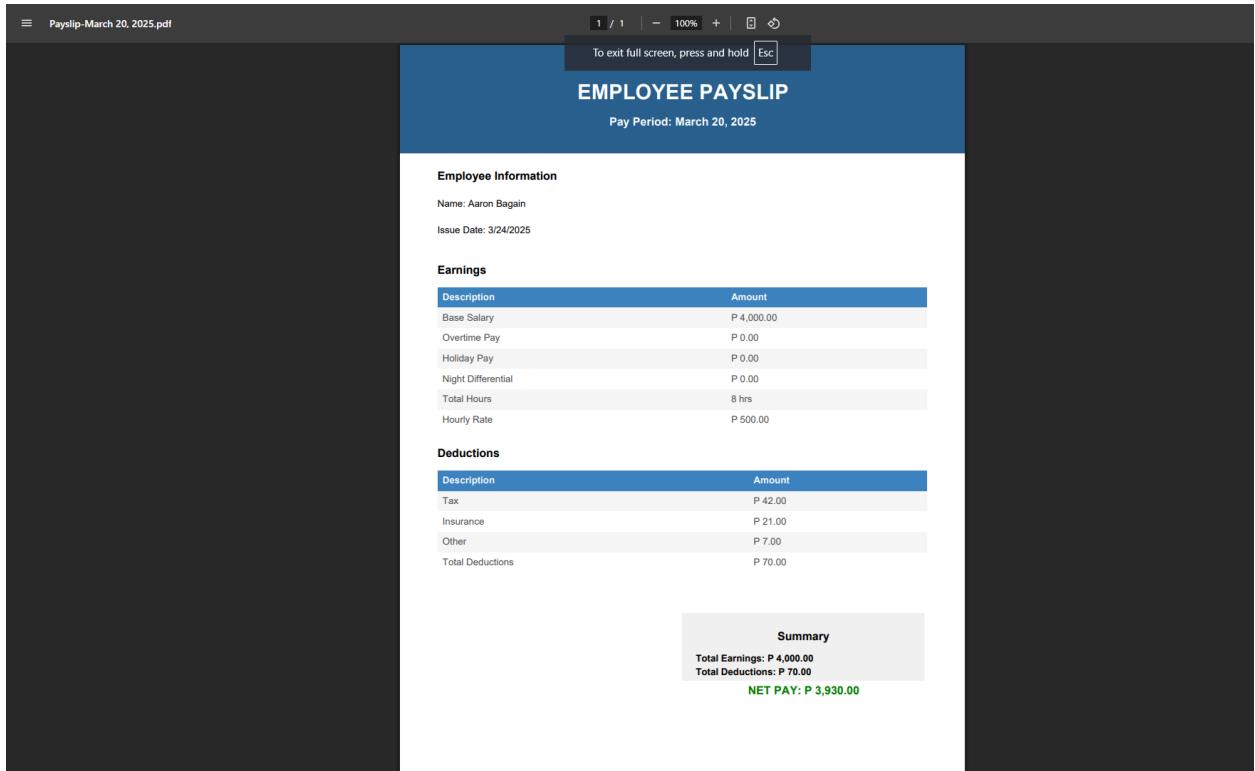


Figure D6.2.19: Admin - Payroll - Manage Payroll(Screenshot)

EMPLOYEE	PAY PERIOD	REGULAR HOURS	HOURLY RATE	BASE SALARY	OVERTIME	TOTAL EARNINGS	DEDUCTIONS	NET PAY	STATUS
Mikko Samaniego	March 5, 2025	7	P 7.00	P 49.00	P 0.00	P 49.00	P 0.00	P 49.00	Published
Aliyah Francisco	March 1-15, 2025	3	P 200.00	P 600.00	P 200.00	P 1,000.00	P 0.00	P 1,000.00	Published
JC Lopez	January 16-31, 2025	4	P 200.00	P 800.00	P 0.00	P 800.00	P 0.00	P 800.00	Pending
Aaron Bagain	March 20, 2025	8	P 500.00	P 4,000.00	P 0.00	P 4,000.00	P 70.00	P 3,930.00	Published

Figure D6.2.19.2

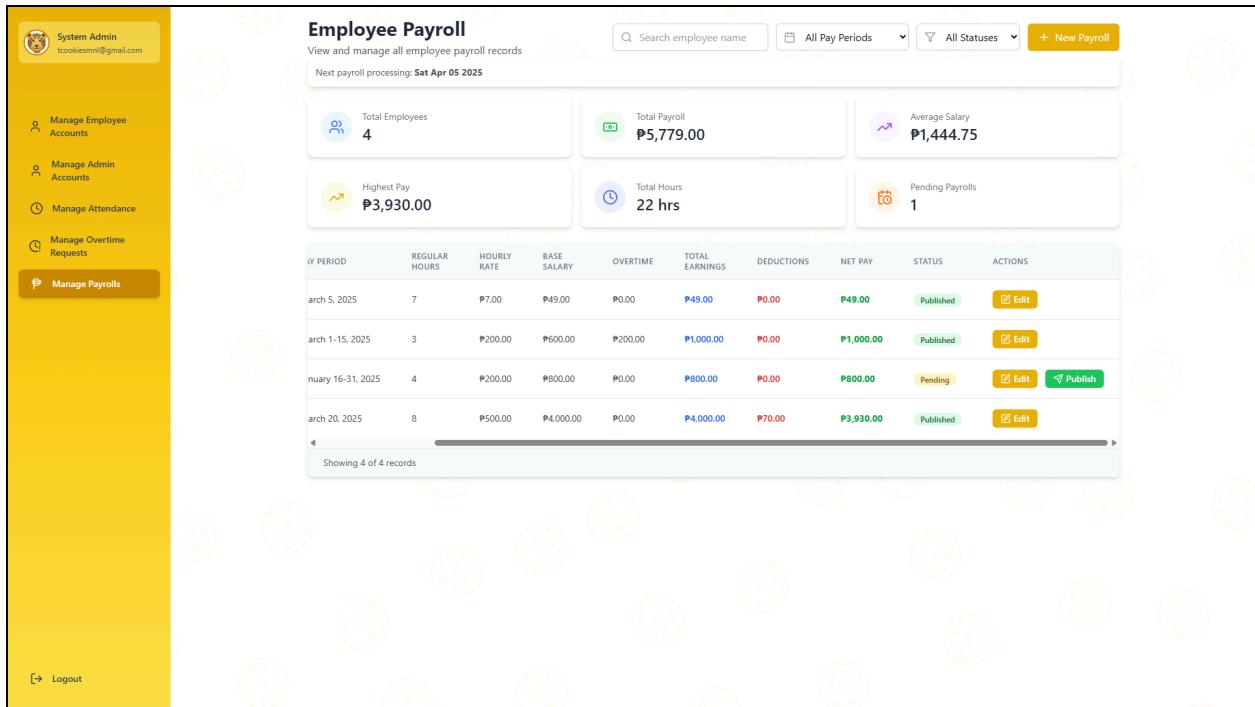


Figure D6.2.19.3(Publish Payroll)

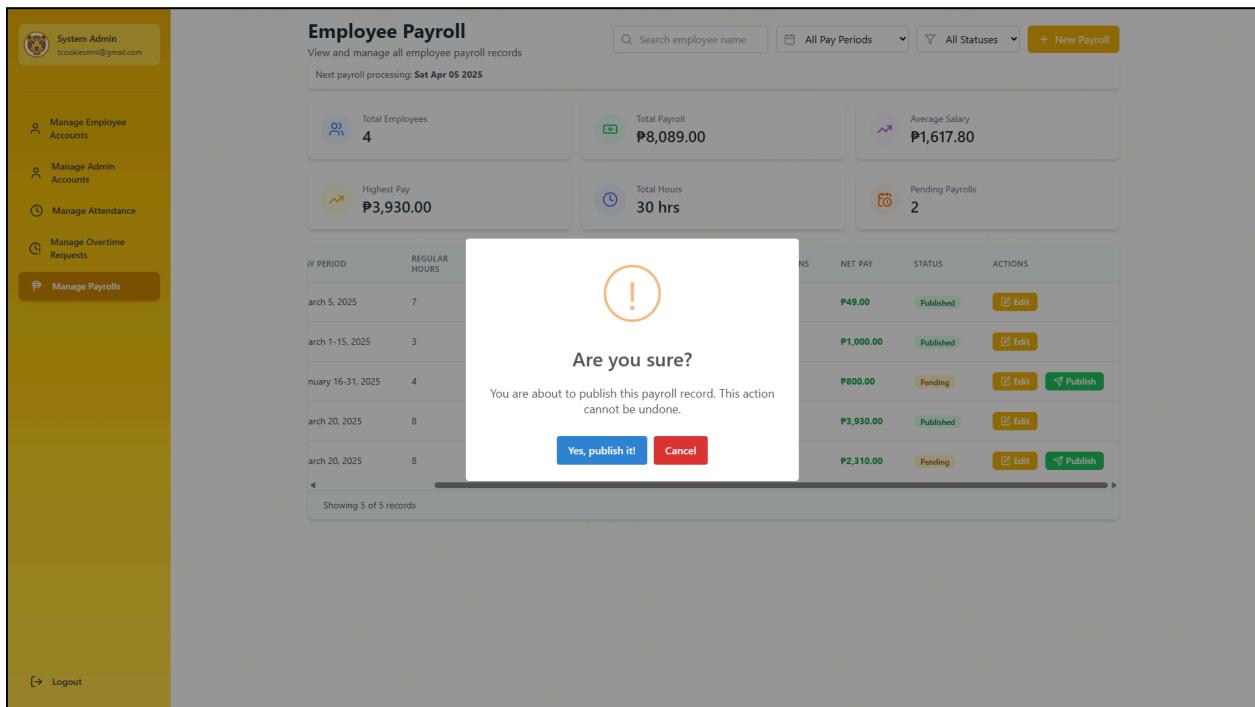


Figure D6.2.19.4

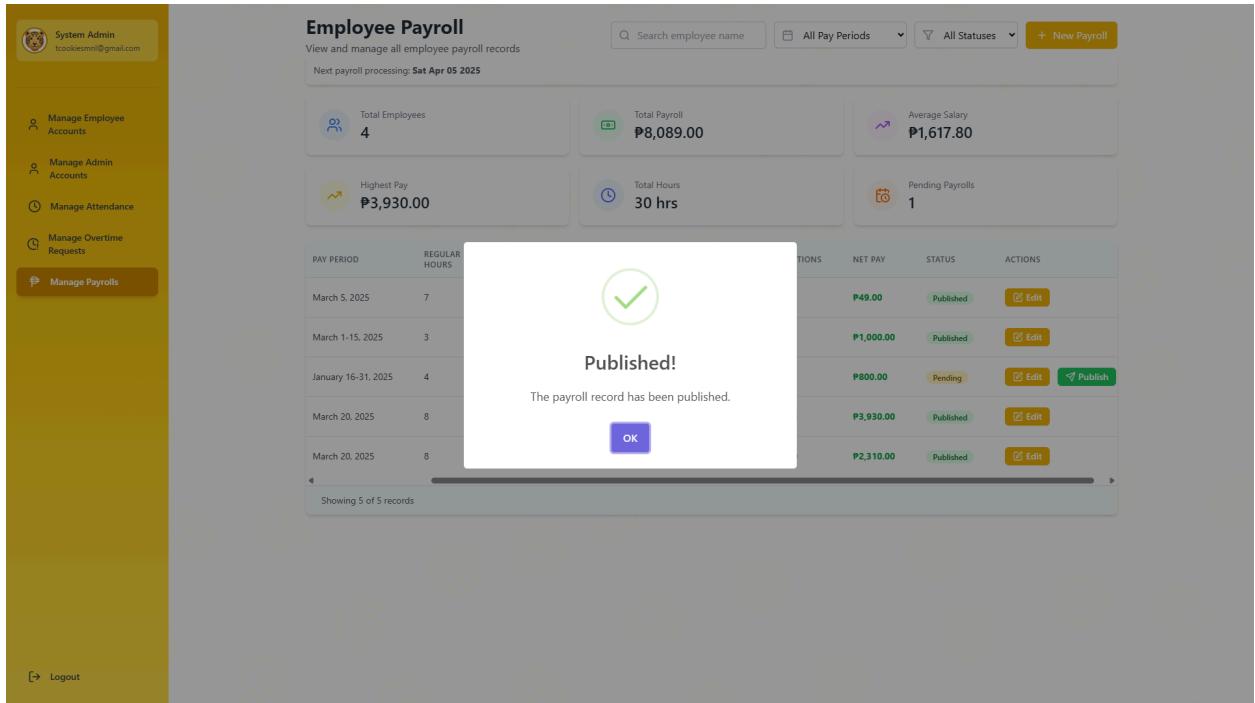


Figure D6.2.20: Admin - Payroll - Create Employee Payroll(Screenshot)

The screenshot shows the "Create Employee Payroll" form. It includes fields for Employee Name (Aaron Bagain), Pay Period (March 20, 2025), Time & Rate (Regular Hours: 8, Hourly Rate: ₱ 300), Earnings (Base Salary: ₱ 2400.00, Holiday Pay: ₱ 0.00, Overtime Pay: ₱ 0.00), Deductions (SSS Contribution: ₱ 10, PhilHealth: ₱ 20, Pag-IBIG: ₱ 50, Withholding Tax: ₱ 20, Other Deductions: ₱ 0.00), and a Payroll Summary section.

Figure D6.2.20.1

Employee Name *: Aaron Bagain

Pay Period *: March 20, 2025

Time & Rate

Regular Hours *: 8

Hourly Rate *: ₱ 300

Earnings

Base Salary	Holiday Pay	Overtime Pay
₱ 2400.00	₱ 0.00	₱ 0.00

Calculated from hours × rate

Night Differential	Incentives/Bonus	13th Month Pay
₱ 0.00	₱ 0.00	₱ 0.00

Deductions

SSS Contribution	PhilHealth	Pag-IBIG
₱ 10	₱ 20	₱ 50

Withholding Tax	Other Deductions
₱ 20	₱ 0.00

Payroll Summary

Total Earnings ₱ 2,400.00	Total Deductions ₱ 100.00	Net Pay ₱ 2,300.00
------------------------------	------------------------------	-----------------------

Figure D6.2.20.2

Employee Name *: Select Employee

Pay Period *: Select Pay Period

Time & Rate

Regular Hours *: 0.00

Hourly Rate *: ₱ 0.00

Earnings

Base Salary	Holiday Pay	Overtime Pay
₱ 0.00	₱ 0.00	₱ 0.00

Calculated from hours × rate

Night Differential	Incentives/Bonus	13th Month Pay
₱ 0.00	₱ 0.00	₱ 0.00

Deductions

SSS Contribution	PhilHealth	Pag-IBIG
₱ 0.00	₱ 0.00	₱ 0.00

Withholding Tax	Other Deductions
₱ 0.00	₱ 0.00

Payroll Summary

Total Earnings ₱ 0.00	Total Deductions ₱ 0.00	Net Pay ₱ 0.00
--------------------------	----------------------------	-------------------

(Success) Payroll record created successfully! X

Figure D6.2.21: Admin - Payroll - Update Employee Payroll(Screenshot)

\$ Payroll Management
Update employee payroll information
Payroll > Update Payroll

₱ Update Employee Payroll
Edit the existing payroll record

Employee Name *: Aaron Bagain
Pay Period *: March 20, 2025

⌚ Time & Rate

Regular Hours *: 8
Hourly Rate *: ₱ 300

✉ Earnings

Base Salary *	Holiday Pay	Overtime Pay
₱ 2400.00	₱ 0	₱ 0

Calculated from hours × rate

Night Differential: ₱ 0
Incentives/Bonus: ₱ 0
13th Month Pay: ₱ 0

⊖ Deductions

SSS Contribution	PhilHealth	Pag-IBIG
₱ 10	₱ 20	₱ 50

Withholding Tax: ₱ 20
Other Deductions: ₱ 0

⌚ Payroll Summary

Total Earnings ₱2,400.00	Total Deductions ₱90.00	Net Pay ₱2,310.00
------------------------------------	-----------------------------------	-----------------------------

[Logout](#)

Figure D6.2.21.1

\$ Payroll Management
Update employee payroll information
Payroll > Update Payroll

₱ Update Employee Payroll
Edit the existing payroll record

Employee Name *: Aaron Bagain
Pay Period *: March 20, 2025

⌚ Time & Rate

Regular Hours *: 8
Hourly Rate *: ₱ 300

✉ Earnings

Base Salary *	Holiday Pay	Overtime Pay
₱ 2400.00	₱ 0	₱ 0

Calculated from hours × rate

Night Differential: ₱ 0
Incentives/Bonus: ₱ 0
13th Month Pay: ₱ 0

⊖ Deductions

SSS Contribution	PhilHealth	Pag-IBIG
₱ 10	₱ 20	₱ 50

Withholding Tax: ₱ 10
Other Deductions: ₱ 0

⌚ Payroll Summary

Total Earnings ₱2,400.00	Total Deductions ₱90.00	Net Pay ₱2,310.00
------------------------------------	-----------------------------------	-----------------------------

[Cancel](#) [Update](#) [Logout](#)

Figure D6.2.21.2

The screenshot shows a user interface for managing employee payrolls. On the left, a sidebar lists navigation options: Manage Employee Accounts, Manage Admin Accounts, Manage Attendance, Manage Overtime Requests, and Manage Payrolls. The main area is titled 'Payroll Record' and contains fields for 'Employee Name' (Aaron Bagain), 'Pay Period' (March 20, 2025), 'Regular Hours' (8), and 'Hourly Rate' (₱ 300). Below this are sections for 'Earnings' (Base Salary ₱ 2400.00, Holiday Pay ₱ 0, Overtime Pay ₱ 0), 'Deductions' (SSS Contribution ₱ 10, PhilHealth ₱ 20, Pag-IBIG ₱ 50, Withholding Tax ₱ 10, Other Deductions ₱ 0), and a 'Payroll Summary' section. The summary shows Total Earnings ₱ 2,400.00, Total Deductions ₱ 90.00, and Net Pay ₱ 2,310.00. A success message at the bottom right states 'Payroll record updated successfully!'.

Process of Deployment

The deployment process for this system begins with preparing both the frontend and backend for production. The frontend is built using the command ‘npm run start’, which compiles the React app into static files ready for deployment. Simultaneously, the backend is configured with environment variables and any necessary production settings are applied. Once both parts are ready, the application is deployed to a cloud hosting service such as Vercel. MongoDB Atlas is used as the cloud database to ensure secure and scalable data management. After deployment, a domain is purchased or configured via a domain registrar. Finally, the app is tested live to ensure both attendance and salary features work seamlessly in production, marking the system ready for operational use by Tiger Cookies MNL’s staff and management.