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

Software Requirement Specification Document

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System Requirements Specification Sheet

1. Introduction

This document outlines the project for Tiger Cookies MNL, which aims to implement a unified attendance and salary computation system to improve bake shop management. It starts with an Introduction that details the project scope and objectives, focusing on automating attendance tracking and salary computation to boost productivity and reduce errors.

Following the introduction, the document provides an Overall Description, followed by sections on External Interface Requirements, System Features, Business Rules, Appendices, and insights from Interviews.

In summary, this document serves as a blueprint for implementing a system that addresses the operational challenges faced by Tiger Cookies MNL, improving both efficiency and accuracy in daily operations.

1.1. Project Purpose

This project aims to develop a unified attendance and salary computation system that utilizes facial recognition technology to streamline processes. By automating attendance tracking and salary calculations, the system reduces administrative workload, minimizes errors, and enhances operational efficiency. Integrating biometric technology also improves security, offering a reliable method for employees to mark their attendance.

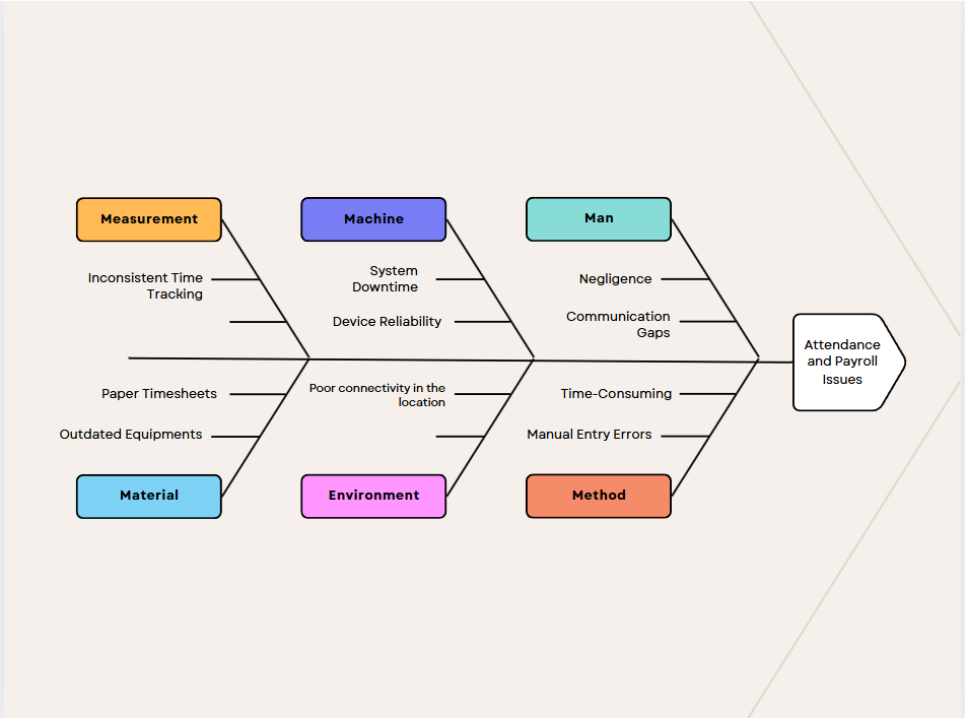

Figure R-1: Fishbone diagram

The fishbone diagram is an essential tool for identifying and analyzing the root causes of a problem. It helps break down complex issues into manageable categories, enabling a structured and systematic approach to problem-solving. By visually representing the various factors contributing to an issue, the fishbone diagram makes it easier to pinpoint underlying causes and develop targeted solutions.

The fishbone diagram in the image above divides the root causes of "Attendance and Payroll Issues" into six categories. "Measurement" targets irregularities in recording time, while "Machine" focuses on system downtime and device dependability. "Man" identifies problems related to people, such as carelessness and poor communication. "Method" issues implicate inefficient processes and handwriting errors. "Material" elaborates on problems with paper timesheets and outdated equipment, and "Environment" addresses connectivity issues. Using this diagram ensures a comprehensive analysis, allowing each category to address specific problems while providing a structured means for solving the core issue.

1.2. Project Scope

The project aims to develop a unified attendance and salary computation tailored specifically for Tiger Cookies MNL addressing the inefficiencies and challenges identified through the validation board. The system will streamline attendance monitoring, automate salary calculations, and enhance data accessibility for both employees and managers. A core feature of the solution is automated attendance tracking, allowing employees to clock in and out using a photo-based timestamp system that ensures accurate records. Real-time updates will synchronize attendance logs immediately, preventing delays and minimizing errors, while alerts for missing clock-ins or discrepancies will further enhance reliability.

Salary automation will be another key component, enabling basic salary computation by factoring in attendance, overtime, and holiday hours. Administrative confirmation prompts will validate salary data before finalization. To support operational oversight, the system will include a centralized dashboard displaying real-time summaries of attendance and payroll data. Additionally, report generation capabilities will allow for flexible, customizable reporting of attendance and payroll details on a daily, weekly, or monthly basis.

The system will prioritize usability with a simplified user interface accessible via tablets, and computers. Data security measures will safeguard records, preventing loss or breaches.

Figure R-2: Javelin Board

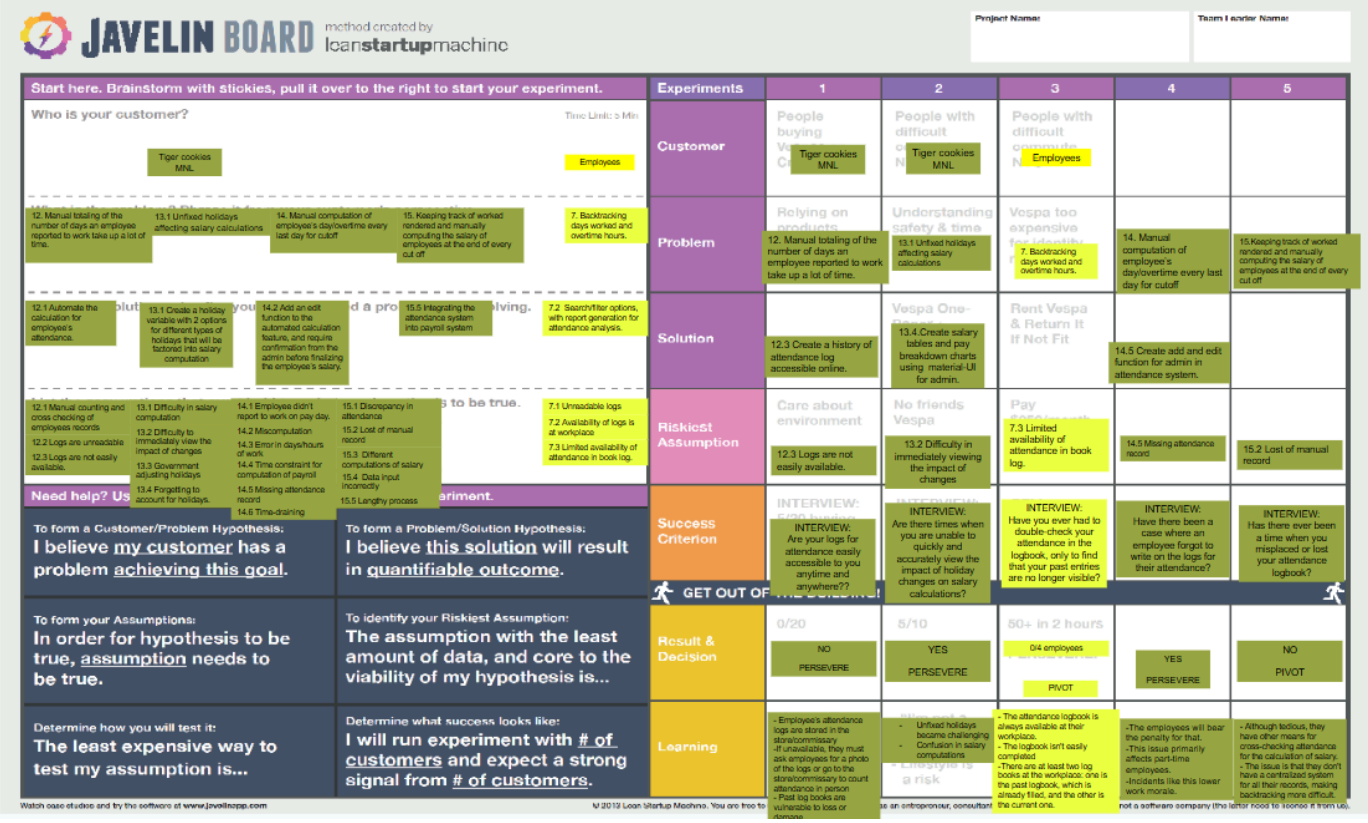

Figure R-2.1: Javelin Board

This is the Javelin Board with problem and solution hypotheses for attendance and payroll management in Tiger Cookies MNL business. Proposed solutions include auto-validation of attendance and data integration into the payroll system. Assumptions and risks suggested by the board include technical failures and the use of interviews and action research to test the potential effectiveness of a solution. Given the real-world feedback received, this procedure provides insight into whether this approach needs to be continued or changed.

2. Overall description

2.1. Project perspective

The project aims to design and implement a unified attendance and payroll management system that caters to the needs of employees and business owners. As illustrated in the use case diagram, the system encompasses three main modules: **Login, Managing Attendance Report,** and **Payroll**

System, ensuring streamlined operations and user-friendly functionalities. The actors are admins and employees. The admins are the owner and manager of Tiger Cookies MNL, while employees are the employees of Tiger Cookies MNL.

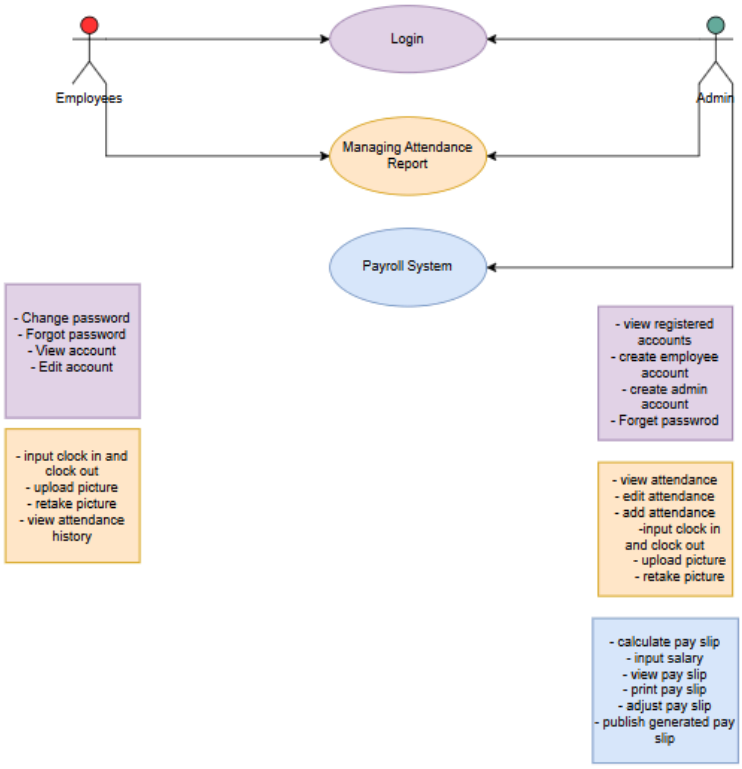

Figure R-3: Use Case Diagram

The Login module serves as the entry point for employees and admins , providing secure access to the system's features. Employees can use the Managing Attendance Report module to clock in and out, upload their pictures for verification, view their attendance records, input overtime hours, and benefit from auto-checkout functionality, which ensures accuracy in attendance tracking without manual errors.

On the other hand, the owner is provided with advanced functionalities in the Managing Attendance Report module. These include the ability to view attendance summaries, edit attendance records, configure shifts, upload employee verification photos, enable auto-clock out, and track overtime.

Additionally, the owner can search and filter records efficiently, allowing for easier access to relevant data.

The Payroll System module is designed to automate and simplify payroll processes. It enables CRU (Create, Read, Update) operations for payroll data, salary computation based on attendance, and holiday salary adjustments. Features like pay slip generation, adjustment of payroll details, publishing of generated pay slip, and integration of attendance records ensure accurate salary computations. A confirmation step allows owners to validate payroll data before finalizing it, reducing the likelihood of discrepancies.

Overall, the project focuses on creating a robust system that bridges attendance tracking and payroll processing, addressing both operational efficiency and data accuracy. With intuitive features for employees and administrative tools for owners, the system ensures seamless management of attendance and payroll, enhancing productivity and reducing administrative overhead.

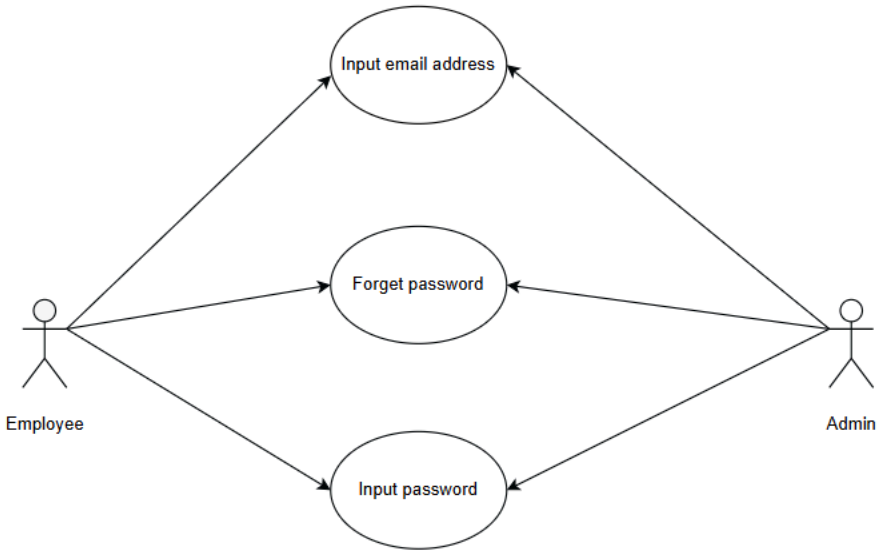

Figure R-3.1: Use Case Diagram - Login

This login system use case diagram describes the interaction process among the two primary actors - “Employees” and “Admins”. Employees and Admins share the functionalities of putting in the usernames and passwords to log in, which are required for authentication. Though Employees can recover their accounts with the "Forget Password" functionality. This diagram indicates how each user interacts with login and account management processes.

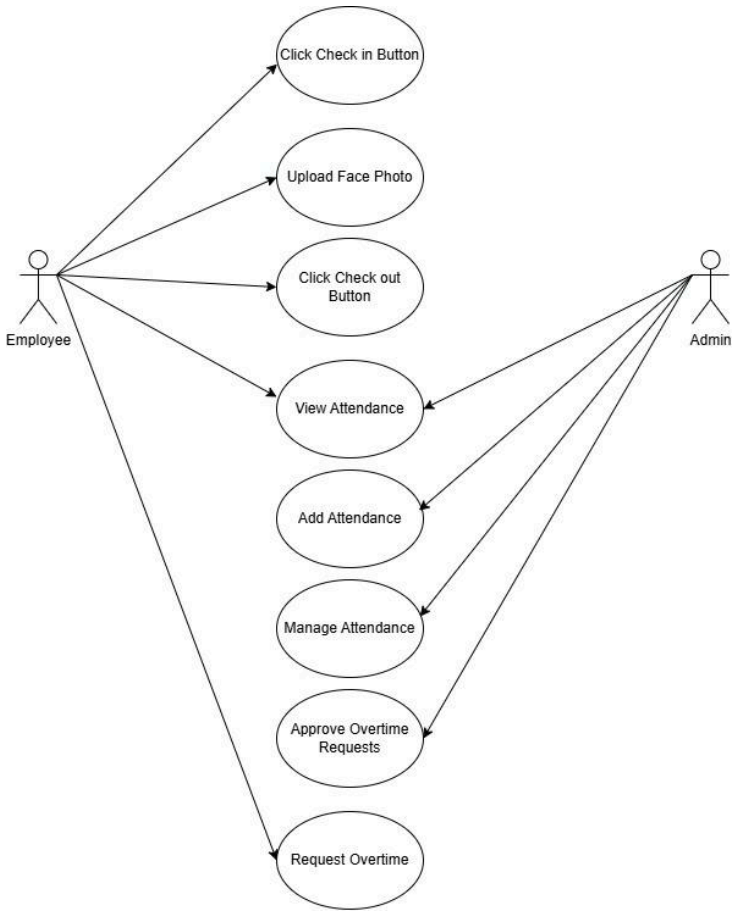

Figure R-3.2: Use case diagram (Attendance System)

The use case diagram of the “Attendance System” shows how the “Employees” and “Admins” will interact with it. Employees will be able to check in and check out by using their check-in and check-out buttons and upload a face photo that would be used to validate attendance or add over time.

Admins have other tasks, like viewing attendance or adding attendance, managing attendance records, and approving overtime. This diagram explains the system's capabilities to enable and assist regular employee functions, administrative oversight, and the roles and permissions assigned to each user type.

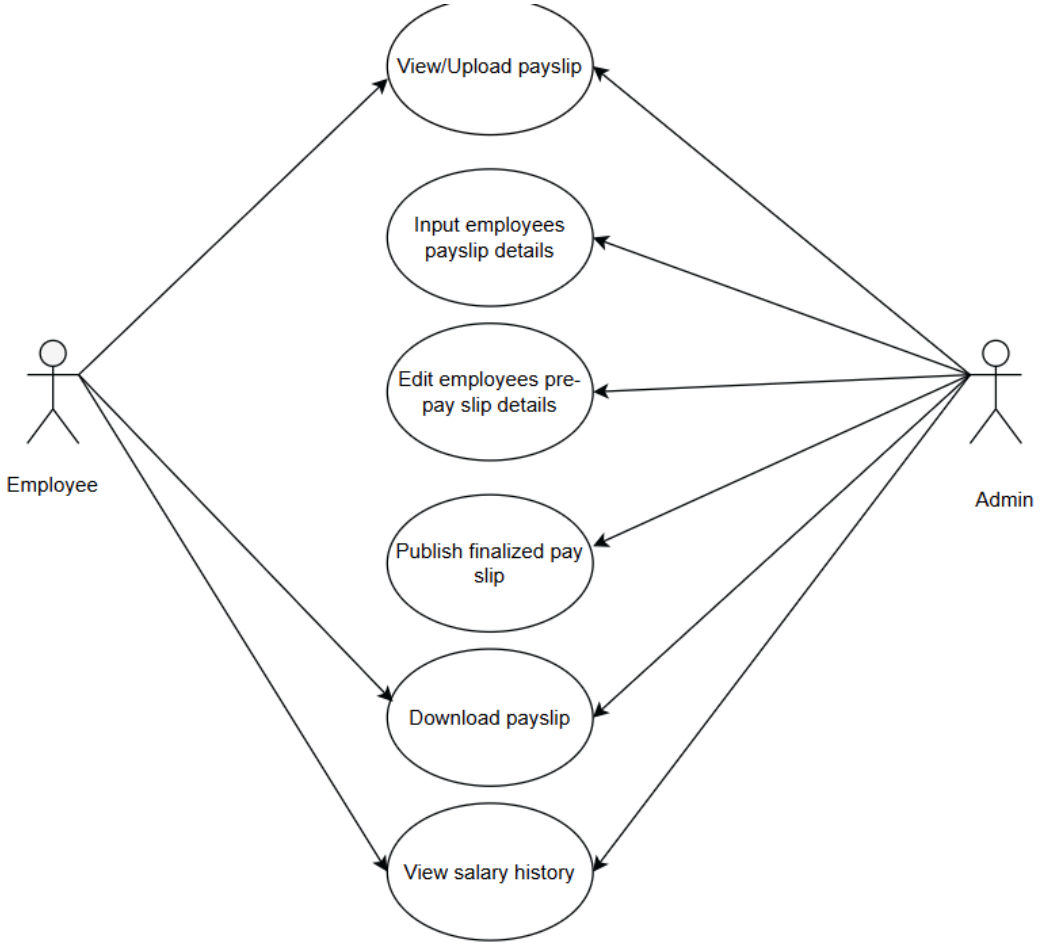

Figure R-3.3: Use case diagram - Payroll System

This image represents a use case diagram of a payroll system, which explains the interaction between two kinds of users: Employees and Admins. Employees can view and download payslips and check their salary history. In turn, admins are allowed to input and edit pre-pay slip details, create salary reports and publish it. The diagram explains how one of the users interacts with the system for the performance of payroll management.

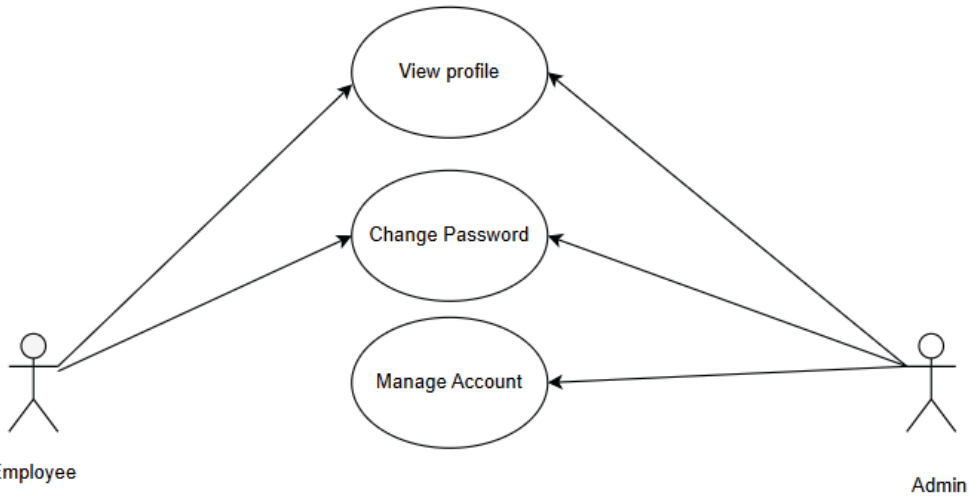

Figure R-3.4: Use case diagram - Manage Account

The use case diagram illustrates the "Manage Account" functionality for two primary actors: the Employee and the Admin. Both actors can perform three actions: "View Profile," "Change Password," and "Manage Account." The "View Profile" use case allows users to access and review their profile details, while the "Change Password" use case facilitates the updating of account security credentials. The "Manage Account" use case enables comprehensive account management, which likely includes editing account settings or performing administrative functions. This diagram highlights the shared responsibilities and interactions of the Employee and Admin roles in managing their respective accounts.

2.2. User accounts and characteristics

For the login, both the employees and admins can interact with the login system by entering their account credentials on the login page. Both actors also have the option to recover their password using Forgot Password if the user forgets their password for their account. The employees utilize this system for authentication; to gain access to the web application, they must first verify their credentials through the system to gain access and prevent unauthorized access.

The admins also go through the same process with the employees, but they have more privileges in the system. This includes creating, managing, and deleting employees' accounts, allowing them to maintain the user data in the system.

For the attendance system, the employees and the admins have different functions and privileges catered to their roles. The employees interact primarily with the system to log their attendance. They can check in and check out, with the integration of the facial recognition API, and upload their face photo as a proof of their presence when checking in and checking out. Employees also have an option to request overtime through the system if needed. Admins, on the other hand, have more access to functionalities centered in managing attendance of the employees. They can view the attendance record of the employees and manually add or edit attendance entries. Admins can also review and approve or deny overtime requests submitted by the employees.

For the payroll system, the admins have access to functionalities that are centered in managing salary data of the employees; they can input and update employee salaries such as adding bonus, overtime, or holiday pay. The admins can also generate detailed salary reports for recordkeeping. Employees have the access to the remaining functionalities as viewing and downloading their payslips, giving them access to view their salary breakdown, bonuses, or deductions. Employees can also view their history of salary payments, which provides a record of previous payslips.

2.3. Project functions

This project is a unified attendance and payroll management system designed to streamline daily operations for both employees and business owners. By integrating attendance and payroll processes, the system ensures efficiency, accuracy, and ease of use in managing workforce operations.

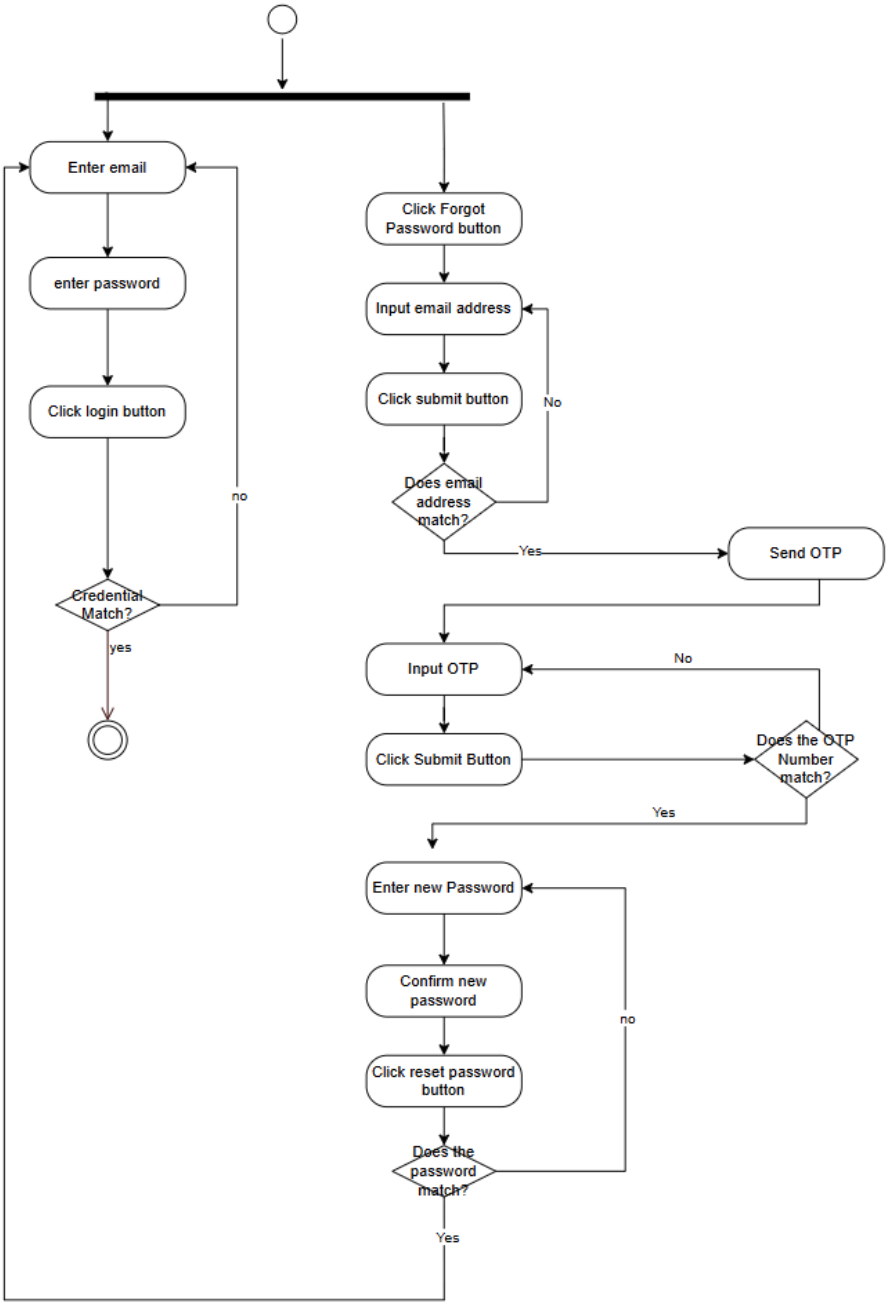

Figure R-4: Activity diagram (Login System - Employees and Admin)

This activity diagram shows the login and password recovery process for employees and administrators. Users enter their email and password to log in; if credentials match, access is granted. If

not, they can reset their password by clicking “Forgot Password”, entering their email, and receiving an OTP. After OTP verification, users create and add a new password, which must be different from the old one. The system ensures secure login and password management through these steps.

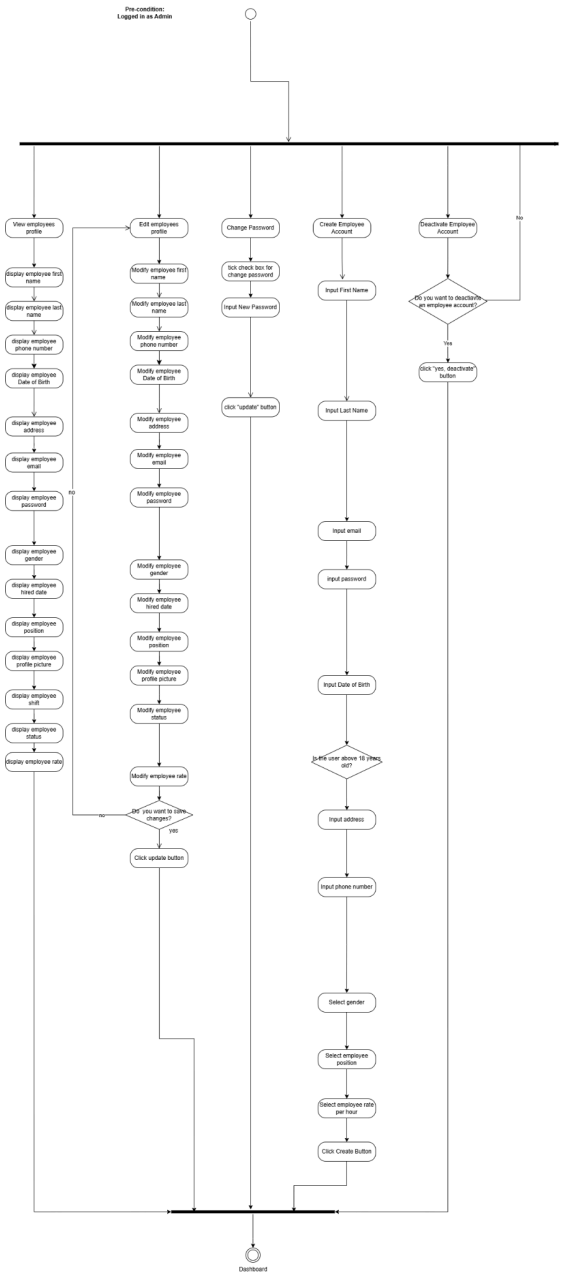

Figure R-4.1: Activity diagram (Manage Account - Admin)

The activity diagram illustrates the Manage Account process for an admin, focusing on three key functionalities. First, the admin can view and update employee profiles by modifying details such as name, email, phone number, and address, then saving the changes. Second, the admin has the ability to change an employee's password by entering and confirming a new password. Lastly, the admin can create a new employee account by entering required information, including the employee's name, email, password, date of birth, phone number, and address. After submitting these details, the system sends an email verification code, which the admin must enter to finalize the registration process. Once any of these actions are completed, the process concludes by returning to the dashboard.

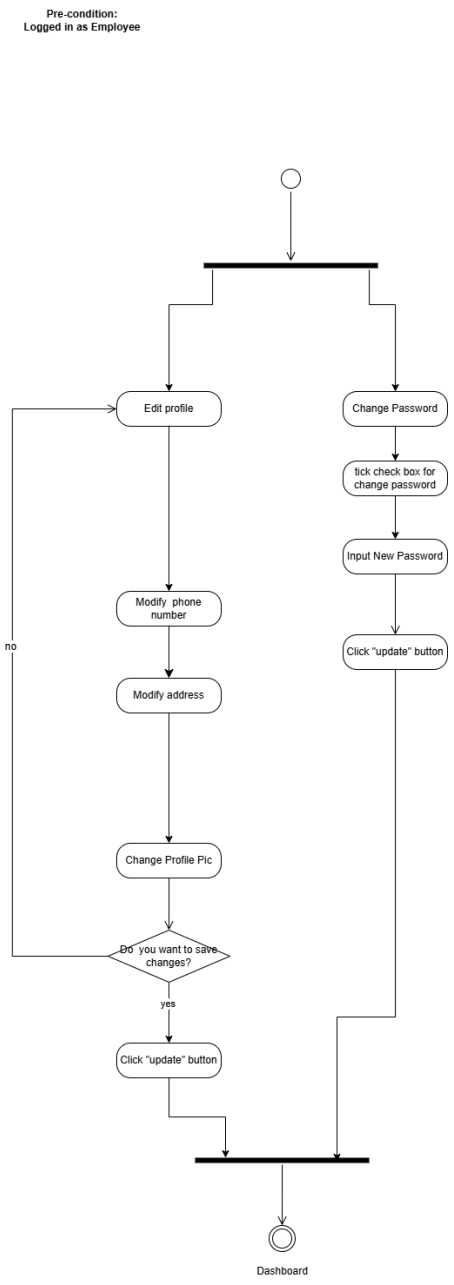

Figure R-4.2: Activity diagram (Manage Account - Employees)

This activity diagram represents the Manage Account process for an employee. It includes two main functionalities: viewing and modifying the profile, and changing the password. Employees can choose to update profile details such as phone number, address, gender, or profile picture. Once changes are made, they can save the modifications. Alternatively, employees can change their password by

entering a new unique password and confirming it. If the confirmation matches the new password, the change is applied. The process concludes by returning to the dashboard after completing either task.

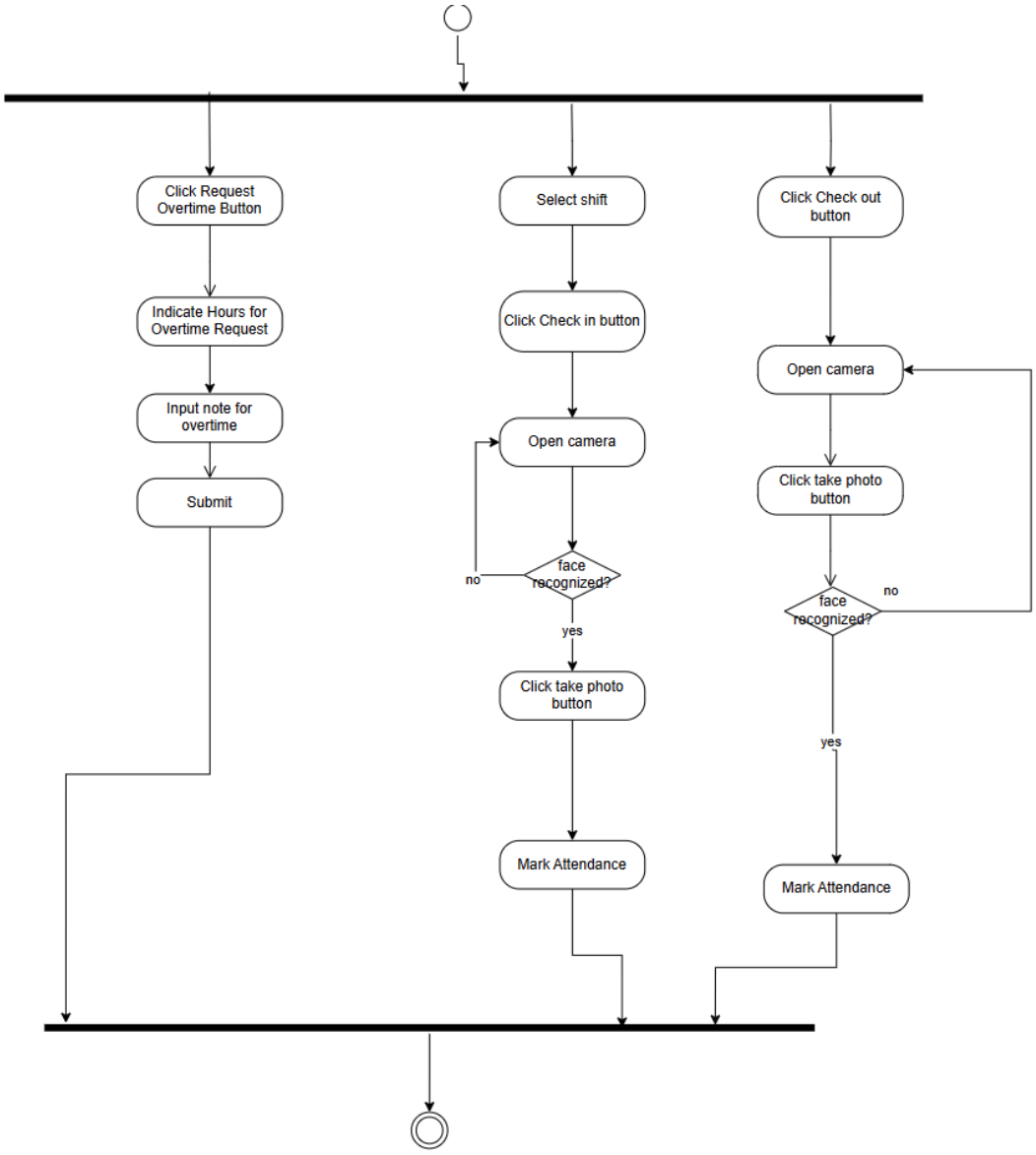

Figure R-4.3: Activity diagram (Attendance System - Employees)

This activity diagram illustrates the Attendance Management process for employees. It encompasses three main actions: logging attendance, viewing attendance records, and requesting overtime. To log attendance, employees can check in or check out by selecting a shift, opening the

camera, taking a photo for face recognition, and uploading the image. Successful recognition updates the time-in or time-out information on the dashboard. Employees can also request overtime by specifying the hours, adding a note, and submitting the request. Additionally, they can view their attendance records by clicking the "View Attendance" button, which displays the details. The process concludes after completing any of these tasks.

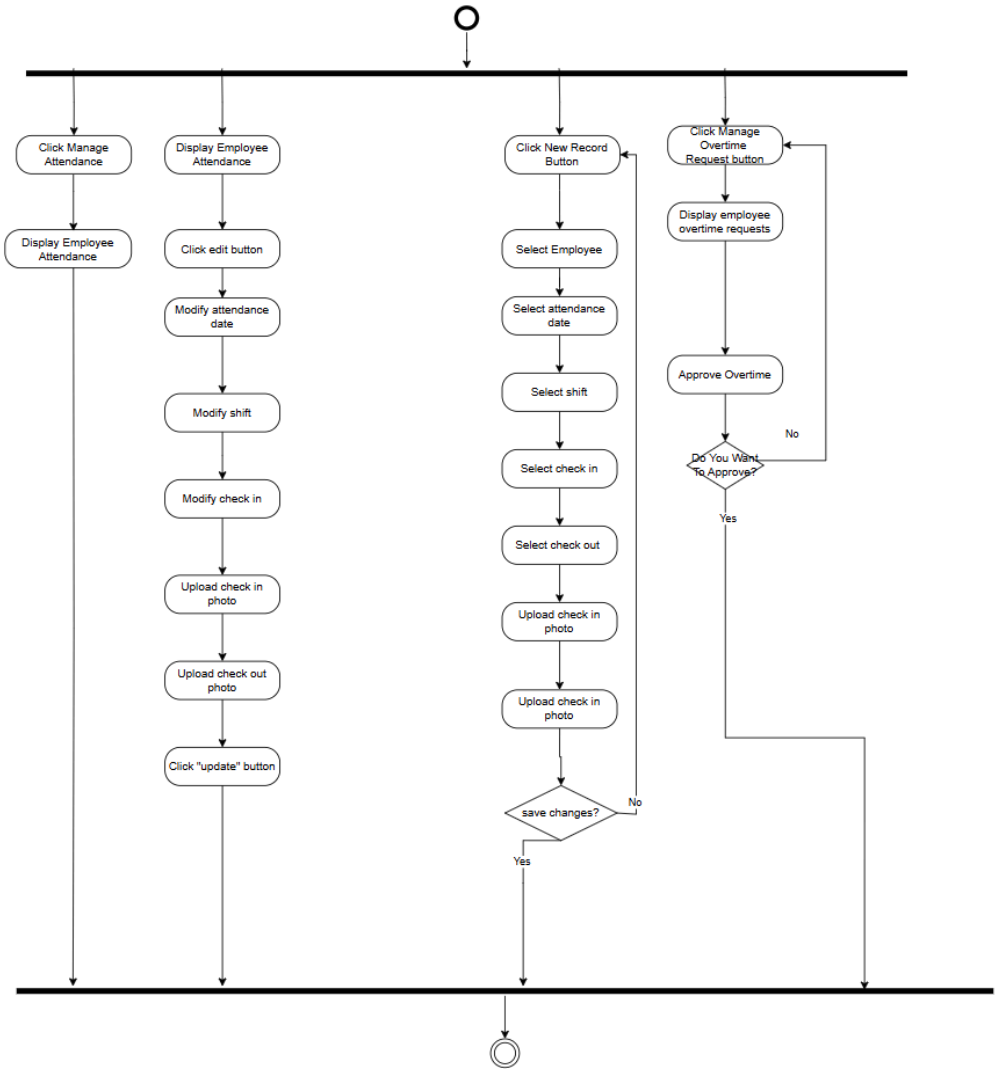

Figure R-4.4: Activity diagram (Attendance System - Admin)

The activity diagram illustrates the workflow of an attendance management system for administrators. It covers key functionalities such as viewing and editing attendance records, adding

attendance entries, approving or rejecting overtime requests, and deleting attendance entries. The process begins with the admin accessing the "Manage Attendance" button and provides detailed decision points and actions, such as inputting employee details, selecting shifts, and handling overtime approvals. The diagram ensures a clear representation of administrative operations, including photo uploads for check-in and check-out, to maintain accountability and accuracy in attendance tracking.

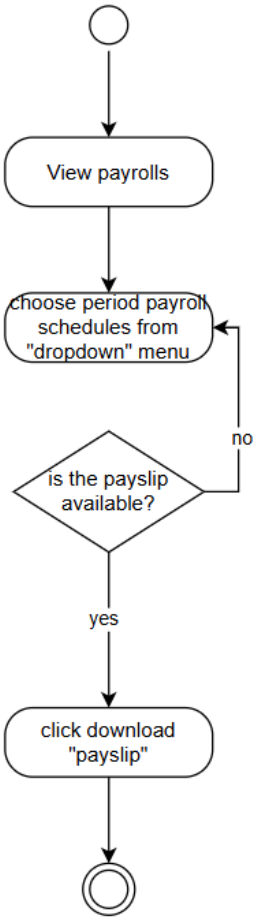

Figure R-4.5: Activity diagram (Payroll System - Employees)

The activity diagram illustrates the payroll system workflow for employees. It begins with the employee accessing the "Payroll" button, leading to two main options: viewing past payslip history or accessing current payslip details. If the employee chooses to view the current payslip, the system checks its availability. Once the payslip is available, the employee can view its details and optionally download it as a PDF. The process ensures efficient navigation and accessibility of payroll information for employees.

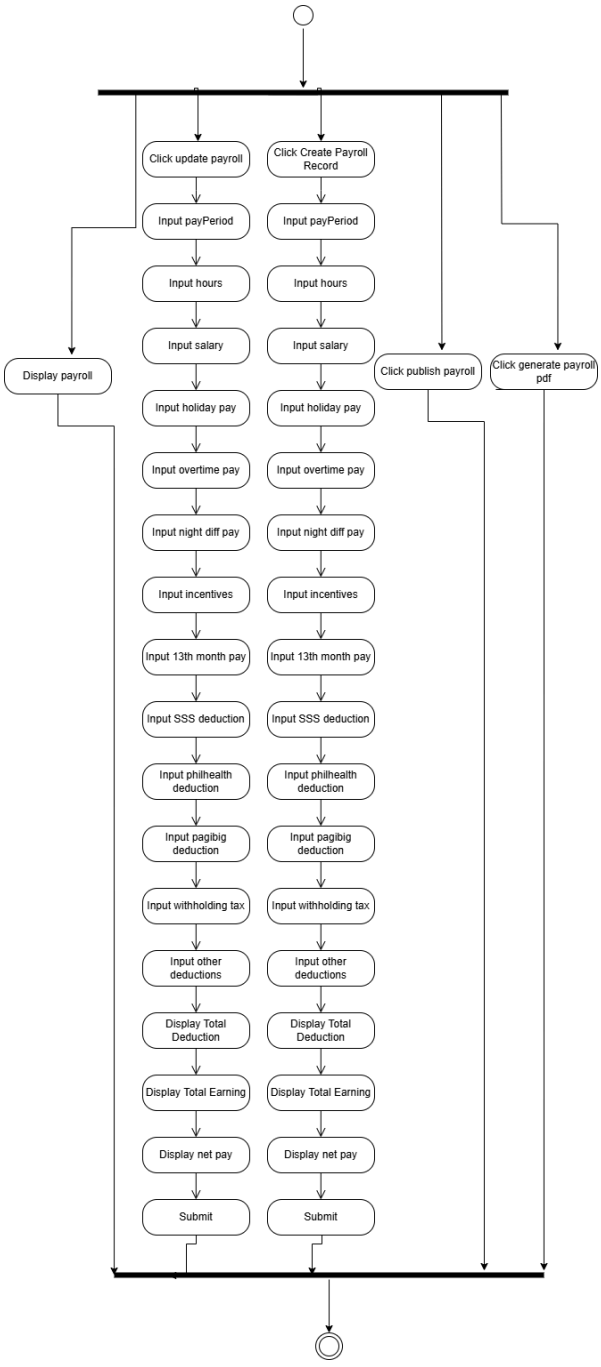

Figure R-4.6: Activity diagram (Payroll System - Admins)

The activity diagram illustrates the payroll system workflow for administrators, detailing key operations such as managing employee payslips. Admins can delete payslips, create new ones by

inputting start and end dates, and view detailed payslip information. Additional functionalities include adjusting employee salaries by inputting deductions or incentives, calculating totals, and generating PDFs of payslips. The diagram also accounts for special cases, such as employees working on holidays or receiving incentives, ensuring a comprehensive payroll management process. The workflow is designed to maintain accuracy and streamline payroll tasks efficiently.

2.4. Operating environment

The functional requirement of this project defines a specific behavior, feature, or function of a system that it must perform to fulfill its intended purpose. It focuses on what the system does and describes the tasks, processes, or outputs it must achieve.

Listed below in the table are the functional requirements of the system.

Requirements	Description
User Authentication	The system should allow the users to log in securely using their credentials.
Password Recovery	Users should be able to recover their password.
Account Management	Admins should be able to create, delete, and manage employee accounts.
Check - In and Check - Out	Employees should be able to check in and check out, as well as upload their photo as a proof of attendance.
Overtime Request	Employees should be able to request overtime.
Attendance Viewing	Admins should be able to view, add, and edit attendance records of the employees.
Managing Overtime Request	Admins should be able to approve or deny overtime requests submitted by the employees.
Payroll Data Input	Admins should be able to input and edit employees' salaries.
Payslip Generation	The system should generate payslips for the employees to view their salaries and have the option to download it.
Salary History Viewing	The users should be able to view the salary history for tracking payments.

Table R-5: Functional Requirements

This system is designed to streamline employee management and payroll processes. It offers secure user authentication and password recovery to ensure safe access. Admin of Tiger Cookies MNL can manage employee accounts, handle attendance records, and approve or deny overtime requests. Employees can check in and out, submit overtime requests, and view payslips with options for download. The system also facilitates payroll data input, and allows viewing of salary history.

On the other hand, non-functional specifies criteria that evaluate the performance, usability, reliability, or other qualities of a system. Unlike functional requirements, which focus on what the system does, non-functional requirements address how well the system performs or behaves while fulfilling its functions.

Listed below in the table are the non-functional requirements of the system.

Requirement	Description
Reliability	The system must maintain high reliability to ensure consistent access to avoid downtime.
Maintainability	The system should be designed for easy maintenance and updates, without requiring a long downtime.
Security	The system must secure user data with encryption, and secure login methods.
Usability	The interface should be user friendly, enabling users to navigate efficiently.
Compatibility	The system should be compatible with the modern web browsers available.
Data Backup and Recovery	The system must support automatic data backup and quick recovery options to prevent data loss.

Table R-5.1: Non-Functional Requirements.

The non-functional requirements for the payroll and attendance system emphasize key attributes

necessary for optimal performance and user satisfaction. Reliability is crucial, ensuring the system maintains high uptime to provide consistent access and avoid disruptions. Maintainability is also a priority, with the system designed for easy updates and minimal downtime, facilitating seamless operations. Security is paramount, requiring robust encryption and secure login methods to protect sensitive user data. Usability focuses on a user-friendly interface that enables efficient navigation, enhancing the user experience. Compatibility ensures the system works well with modern web browsers, broadening accessibility. Additionally, data backup and recovery capabilities are essential, supporting automatic backups and quick recovery options to safeguard against data loss. Together, these non-functional requirements ensure the payroll and attendance system is secure, and user-centric.

2.5. Design and implementation constraints

2.5.1. Risk assessment

When designing, developing, and implementing a system, it's crucial to assess potential risks to ensure smooth operation and prevent failures. Risks can manifest in various forms, including technical challenges, project management issues, or organizational problems. Identifying these risks early on allows teams to mitigate them proactively. Below is a table highlighting some common risks associated with system design, development, and implementation, along with an explanation of each.

Risk	Category	Severity Level	Likelihood Level
Data inconsistency: Data inconsistencies may occur due to errors in data input, database design, or system logic, which may only become apparent during development. Mitigation involves thorough planning, validation, and regular data integrity checks throughout the design and development phases.	Technical	High	High

Data security: The system may be vulnerable to unauthorized access, data breaches, or loss of sensitive information, compromising user trust and compliance with regulations.	Technical	High	High
Further Expansion of the System to Address Emerging Issues During Development	Technical	High	Medium
Sudden shift in priorities by the client or business	External	High	Low
Timely completion of SDD document: The SDD may be challenging to complete on time, as it is the first system we are proposing and developing based on a client's specific needs, requiring detailed technical specifications.	Technical	Medium	Medium
Incorrect Software Testing: Insufficient or improper testing could result in undetected bugs, performance issues, or security vulnerabilities.	Technical	High	Low

Low Team Motivation	Operational	Low	Medium
Delays in Project: Timeline Due to Class Suspensions	Operational	High	Low
Proposed Project Effectively Addresses the Identified Problems	Technical	High	Medium
Integration of the Project with the Current Workflow	Operational	High	Low

Table R-6: Risk Management Table

Based on the risk management table provided, we can observe a range of potential risks that can arise during the system design, development, and implementation stages, each with varying severity and likelihood levels.

Overall, each risk should be carefully managed according to its assessed severity and likelihood, with proactive measures in place to mitigate or address them during the project's lifecycle.

2.5.2. Assumptions and dependencies

The project outlined provides an overview of the key assumptions and dependencies that are critical to its successful execution. These assumptions cover a variety of factors such as resource availability, team commitment, and the stability of the infrastructure required for the project. By establishing these assumptions, the project team aims to ensure that all necessary elements are in place for smooth development and delivery.

Listed below are the assumptions and dependencies.

ASSUMPTIONS
The required resources (hardware, software, and personnel) will be available throughout the project.
Team members will remain available and committed for the project's duration.
Existing infrastructure will support the system without requiring significant upgrades.
APIs or third-party tools used in the system will remain operational and accessible during development.
Deliverables will be completed as planned.
Client actively participates in providing feedback.
The project will adhere to the established timeline without unexpected delays.
The project will be approved by the panelists and client.
The project will be used by the client.
End-users willingness to adapt to the new system.
DEPENDENCIES
Availability of devices for accessing the Web System.
Successful and reliable integration of the attendance system with the payroll solution system.
Secure internet connectivity on the end of our client.
Secure account registration and login process.
Successful rental of domain and cloud storage.
Successful integration of APIs.

Table R-7: Assumption and Dependencies Table

The key assumptions of the project include the availability of resources such as hardware, software, and personnel throughout the project duration. Additionally, it is assumed that the project team

will remain committed and available, and that the existing infrastructure will support the system without requiring significant upgrades. The project also assumes that APIs or third-party tools will remain operational and accessible during development, and that deliverables will be completed as planned. Furthermore, the client is expected to provide active feedback, and the project will adhere to the approved timeline, with no unexpected delays. The end-user's willingness to adapt to the new system is also assumed to be a positive factor in the project's success.

Dependencies for the project include the availability of devices for accessing the web system, successful integration of the attendance system with the payroll management system, secure internet connectivity, and a reliable account delegation and login process. Other dependencies involve successful domain and cloud storage setup, as well as smooth integration of external APIs.

In conclusion, the project depends on a variety of assumptions and external factors that need to be carefully managed to ensure successful completion. If the outlined assumptions hold true, and the dependencies are met, the project is likely to proceed without significant obstacles. Ensuring consistent collaboration from Tiger Cookies MNL, maintaining secure and reliable infrastructure, and addressing the technical requirements will be crucial to the project's success.

2.6. User documentation

For the three systems, user training and documentation are essential to ensure a smooth and effective use of the web application. For the user training, it should focus on guiding the admin and employees on the functionalities. Admins should have comprehensive training in account management, attendance tracking, payroll management, and gathering reports. On the other hand, employees should focus training on checking in and checking out, uploading their photo as a proof of attendance, viewing payslips, and requesting overtime. The user manuals for both employees and admins will provide a step-by-step guidance for the functionalities, including screenshots and a short FAQs. An installation manual would support us the developers in deploying and maintaining the system, setup procedures, and troubleshooting guides.

3. External Interface Requirements

3.1. User interfaces

The proposed system will be developed with user-friendly flexibility for both employees and owners to become intuitive and user-friendly. Secure authentication at a login page will help in accessing the system. After logging in to the employee account, he will be given the managing attendance report module. Then, the options will be straightforward: clock in and out of work, upload pictures to prove attendance, view his attendance records, and add overtime. All such functions will be through simple buttons and form fields with clear instructions to guide users at every step. Auto-checkout will also log out automatically at the end of shifts to make the user's experience even less cumbersome.

The attendance UI will also present the owner with a dashboard for viewing attendance summaries and allow easy editing or adjusting of records. The interface will comprise drop-down menus and basic search filters to simplify going through large data sets. The owner can manage shift settings, configure auto-lockout, and monitor overtime. The payroll system will implement CRUD operations with intuitive forms to input and modify salary details, as well as features such as payroll calculation, display and printing of payslips, and confirmation of final payroll data. Overall, the UI will be simple and efficient throughout, with a clean layout and logically implemented navigation paths intended to facilitate access for every kind of user.

3.2. Communication interfaces

This communication interface outlines the technical requirements and specifications for a web-based attendance and payroll management system. It details the necessary hardware and software components, including desktop or mobile devices with appropriate web browsers, and the use of biometric devices for facial recognition.

Communication interfaces are listed below.

1. User Device
    a. Hardware
        i. Desktop or laptop computers with a web browser installed.

ii. Mobile devices or tablets (optional, for on-the-go access).
iii. Biometric device (Phone, tablet, laptop) for facial recognition.

b. Software
   i. Supported web browsers (e.g., Google Chrome, Mozilla Firefox, Safari, Microsoft Edge).
   ii. Compatible operating systems (Windows, macOS, Android, iOS, or Linux).

2. Internet Requirement:
   a. A stable internet connection with at least 2 Mbps upload/download speed for smooth operation.
3. Web Application
   a. Accessible via a URL, hosted on a cloud platform (e.g., AWS, Microsoft Azure, Google Cloud) or a dedicated server.
   b. User login system requiring secure credentials (e.g., email and password) for authentication.
4. Server Requirements
   a. Hosting Environment
      i. Cloud-based hosting with sufficient bandwidth and scalability options.
      ii. High availability servers to minimize downtime.
5. Security Measures
   a. SSL/TLS for encrypted communication.
   b. Two-factor authentication (2FA) for enhanced login security.
   c. Regular backups to ensure data integrity and prevent loss.
6. Database Accesses
   a. The system will connect to a centralized database (e.g., MySQL, PostgreSQL, or MongoDB) hosted on the cloud.
   b. Role-based access control to restrict database operations based on user roles (e.g., Admin, Employee).

7. Attendance Integration
    a. Face Recognition Integration
        i. External API (e.g., Microsoft Face API, Amazon Rekognition) or an internal AI model for attendance tracking.
8. Payroll Management
    a. Integrated payment systems for salary disbursement (e.g., GCash).
    b. Compliance with data protection laws for handling sensitive payroll data.

The system requires a stable internet connection and supports various operating systems, ensuring accessibility across different platforms. Cloud hosting is recommended for scalability and high availability, with secure login systems and encryption measures like SSL/TLS and two-factor authentication to enhance security. Additionally, it integrates face recognition technology for attendance tracking and provides seamless payroll management through platforms like GCash, while ensuring compliance with data protection laws.

4. System features

The system outlines the essential features and functionalities of an employee management system designed to streamline attendance tracking and payroll processing. The system aims to improve efficiency, enhance security, and offer an easy-to-use interface for both employees and administrators. By focusing on key areas like user authentication, attendance management, and payroll, the system ensures that all necessary operations can be conducted smoothly and securely.

4.1. User Authentication

- The system must enable users to log in securely using their credentials to ensure only authorized access.

4.2. Password Recovery

- Users should have the ability to recover their password if forgotten, ensuring they can regain access to the system.

4.3. Account Management

- Admins should be able to create, delete, and manage employee accounts, allowing for efficient user management.

4.4. Check-In and Check-Out

- Employees should be able to check in and check out of work. They should also be able to upload a photo as proof of attendance.

4.5. Overtime Request

- Employees should have the capability to request overtime through the system.

4.6. Attendance Viewing

- Admins need the ability to view, add, and edit attendance records for employees, ensuring accurate tracking and management.

4.7. Managing Overtime Request

- Admins should be able to approve or deny overtime requests submitted by employees, facilitating proper authorization.

4.8. Payroll Data Input

- Admins must be able to input and edit employee salary information, ensuring accurate payroll processing.

4.9. Payslip Generation

- The system should generate payslips for employees, allowing them to view and download their salary details.

4.10. Salary History Viewing

- Users should be able to view their salary history, which aids in tracking payment records over time.

The attendance management and payroll system provides a comprehensive solution for managing key aspects of employee records, attendance, and payroll. With features that support secure logins, account management, attendance tracking, and payroll processing, it is designed to enhance both operational efficiency and security. By incorporating functionality like overtime requests, salary history viewing, and automated payslip generation, the system ensures that both employees and administrators can seamlessly manage their work-related tasks. This integrated approach ultimately helps organizations maintain accurate records, improve administrative control, and enhance overall productivity.

5. Business Rules

The system for attendance report management and payroll for Tiger Cookies MNL involves various interactions between two primary user groups, namely employees and the owner.

They start by visiting the login module to access the respective features with role-based access. Employees use this module to input clock-in and clock-out times, upload pictures for attendance verification, view their attendance records, input overtime hours, and apply an auto-checkout when they are done. On the other hand, the owner has more privileges, granting them the liberty to view overall attendance summaries, edit attendance records, change clock-in and clock-out times, and manage uploaded pictures. The owner can also implement shift schedules, enable auto-clock out, track overtime, and browse and filter attendance records for review. Its payroll system component deals with payroll-related functions wherein the employees can view their payslips. The owner, however, manages the CRUD operations on payroll, computes payroll using Attendance data that can be integrated, adds or modifies salary information, prints payslips, and even computes holiday salaries. The system can incorporate accurate attendance into payroll; however, details are overseen and adjusted to make them precise and reliable.

6. Suggested Appendices
   6.1. Interview transcripts

Date: September 09, 2024

Time: 11:49 pm - 12:07 am

Location: Virtual Meeting - Google Meet

Participants:

Client:

Daphne P. Dalumpines -Sole Proprietor (TIger Cookies MNL)

Louie Manalo - Branch Manager

Interviewer:

Josh Denziel S. Joves, Project Manager (3ITD Group 4)

Krisma Aliyah A. Francisco, Business Analyst (3ITD Group 4)

Meeting Notes:

- Typewritten logs on the phone (e.g., how many kilos of dough for chocolate chip, how many grams, how much can be derived from the dough-making process) will then be dispatched to track how much dough is produced for mass production.
- Ingredient measurements are not being tracked.
- Employees write down how many items they produce.
- It is not confirmed how much dough has been made.
- The system just depends on what is produced and what is in the store.
- A system should be created because there will be a shift to face-to-face (operations).
- Baking should be separated from dough making.
- Toppings need to have an inventory system.
- The desired maximization from the start has not been applied.
- Attendance is declining, and the system is not functioning properly.
- The system works for online orders, but the order punching process is still manual.
- In the system, for regular-sized boxes, there is no option to select the flavor per box (assorted box of 6). It's a manual note, and the receipt is set aside to indicate how many assorted items were subtracted. This delays the transaction.
- Manual checking of inventory is done through a logbook.
- The system cannot synchronize if there is no Wi-Fi. It is possible but causes problems.
- To prevent losses, it will be done onsite so that both the customer and business can benefit.
- A blanket promo (good for 3 months to give a lower price) applies to orders above 50,000.
- Standard chocolate consumption per cookie is tracked.
- For a specific day, it's either 5 kilos, 1.5 kilos, or 3 kilos. Orders should be placed in advance.
- Raw materials usage and remaining stock are not tracked.
- Consumption is just estimated.
- Opening and closing have product tracking: products are photographed and inventoried, and the opening count is checked.

- The tablet's network is broken. The SIM card can no longer be read because the signal is too weak.
- The tablet is provided by the system.
- The system notifies when there is an order.

Date: September 16, 2024

Time: 8:00 pm - 9:00 pm

Location: Virtual Meeting - Google Meet

Participants:

Client:

Daphne P. Dalumpines -Sole Proprietor (TIger Cookies MNL)

Louie Manalo - Branch Manager

Interviewer:

Josh Denziel S. Joves, Project Manager (3ITD Group 4)

Krisma Aliyah A. Francisco, Business Analyst (3ITD Group 4)

Meeting Notes:

- Unavailability of products results in missed sales.
- The staff is contacted via Messenger when stock is unavailable. Either an employee or Tiger Cookies can make contact.
- The system doesn't have a chat feature in the app.
- Employees used to chat through the Utak system, but now they use the Grab app. They

load the employees' phones for calls.

- The signal is weak or non-existent, especially when there are a lot of people.
- Searching for a signal leads to the loss of customers.
- Seniors often make side comments.
- No credit cards, no card terminal.
- Order confirmations are manually sent through Instagram.
- It takes a long time to reply to inquiries or cancel orders.
- Bulk orders are handled through direct calls to the customer.
- Orders for companies are sent through emails.
- Marketing struggles: They've lost their online presence.
- The Utak system has a menu. If orders aren't made through the Utak system, prices are sent manually (customer reaction: they still proceed). Sometimes, customers want regular-sized boxes of 1 dozen, but only pound-size boxes are available, which is not removed from the system, so it can still be selected. Compensation is given by offering a free product.
- Inventory monitoring, sales monitoring, and staff monitoring are in place.
- The Wi-Fi signal is weak.
- When there are bulk orders for flavors, they tend to increase, especially on weekends.
- What happens if sales momentum isn't met or if overproduction occurs?
- After a long weekend or a storm, sales tend to drop.
- Palm-sized products are popular and bestsellers.

Date: September 18, 2024

Time: 9:00 pm - 10:00 pm

Location: Virtual Meeting - Google Meet

Participants:

Client:

Daphne P. Dalumpines -Sole Proprietor (TIger Cookies MNL)

Louie Manalo - Branch Manager

Interviewer:

Josh Denziel S. Joves, Project Manager (3ITD Group 4)

Krisma Aliyah A. Francisco, Business Analyst (3ITD Group 4)

Meeting Notes:

- They use walkie-talkies for communication, but it's not effective because there are signal blockages in certain areas. Signal issues are a concern.
- There are problems with the delivery of stocks.
- They are strict about attendance, but lately, there have been problems with the POS system not working.
- Attendance procedure: The employee clicks and selects their name, takes a picture, and the timestamp is recorded.
- Employee issues: Schedules are disrupted, the store opens late, leading to losses, delays, or canceled orders, which will affect ratings.
- Employees are being friendly to other stalls.

Operational:

- There is no menu, so it takes extra effort to assist customers.
- Employees need to memorize product information.
- Employees are from provinces, and language differences may cause misunderstandings.
- Customer complaints: Orders were changed due to misunderstandings.
- When there are complaints, employees are not trained to properly handle them.
- There are forms (similar to Google Forms) for customer complaints.
- Senior citizens have difficulty accessing the forms because they are not tech-savvy.
- Payments made via GCash sometimes double, so they have to backtrack.
- GCash issues: Sometimes, payments are not deducted due to internet problems.
- Occasionally, there are glitches with GCash, causing double deductions.

- Payment process (MOP): For GCash QR to QR, or if it's a bank to GCash transfer, the number is dictated, the receipt is photographed, and then sent to GCash.

Date: September 25, 2024

Time: 11:00 pm - 12:00 pm

Location: Virtual Meeting - Google Meet

Participants:

Client:

Daphne P. Dalumpines -Sole Proprietor (TIger Cookies MNL)

Louie Manalo - Branch Manager

Interviewer:

Josh Denziel S. Joves, Project Manager (3ITD Group 4)

Krisma Aliyah A. Francisco, Business Analyst (3ITD Group 4)

Meeting Notes:

- Employees use their phones to take pictures of receipts and send them via Messenger.
- Employees must send proof of payment in real-time because payments come in at the same time, making it difficult to track.
- A logbook for promos is used, where employees record the customer's name, signature, and the time.
- When there are many customers, inventory management becomes problematic, leading to errors in fulfilling customer orders due to human/employee mistakes.

Customer Complaints:

- Prices are high.
- There's no menu, so customers are surprised by the price once they find out.

Customer Feedback:

- 50-60% of customers return.
- Customer feedback is mostly conveyed through facial expressions and communication.

Logbook:

- Some pages are missing or torn from the inventory notebook.
- There is some tampering in the inventory notebook.
- Employees are late in providing updates regarding the inventory logbook.
- They use Messenger and CCTV alarms in case of emergencies.
- The handwriting in the logbook is hard to read.

Stock Issues:

- Raw material prices are in high demand and fluctuate.
- Geographical location affects availability and pricing.