



A college under Mapúa Malayan Colleges Laguna

MotorPH Payroll System Documentation

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Bachelor of Science in information Technology

2nd Term, S.Y. 2023-2024

TABLE OF CONTENTS

Section

- 1 **Introduction**
 User Roles
 Navigating The User Guide
- 2 **Getting Started**
 Hardware Prerequisites
 Software Prerequisites
 Accessing The System
- 3 **Using the Payroll System**
 Secure Login Procedures
 Salary and Deduction Calculations
 Leave Applications
- 4 **Technical Information**
 Use Case Diagram
 Class Diagram
 Testing

1. Introduction

The MotorPH Payroll System is a comprehensive software solution designed to streamline and automate payroll processes within the organization. It offers a centralized platform for managing employee information, time and attendance records, salary calculations, deductions, and tax filing. This system empowers MotorPH to ensure data accuracy, regulatory compliance, and efficient report generation.

This user guide serves as a comprehensive resource for the MotorPH Payroll System. It is designed to equip users with the necessary knowledge and skills to navigate the system effectively and leverage its functionalities to their advantage.

1.1. User Roles

| User | Role | Permissions |
|-----------------------|--|--|
| Employees | View personal information | <ul style="list-style-type: none">• Can view their own personal information (name, address, contact details) in the Employee table.• Can view their own attendance records in the Attendance table.• Can view their own payslips in the Payslip table.• Can view their own leave applications and history in the Leave table.• Cannot view or modify any other employee's data or system configurations. |
| HR/Payroll Department | Manage employee data and process payroll | <ul style="list-style-type: none">• Can view all employee information in the Employee table.• Can add, edit, and delete |

| | | |
|----|--|---|
| | | <p>employee information in the Employee table.</p> <ul style="list-style-type: none"> • Can manage attendance records in the Attendance table. • Can generate payslips in the Payslip table. • Can approve or reject leave applications in the Leave table. • Can view overtime records in the Overtime table. • Cannot modify system configurations or grant access to other users. |
| IT | Manage database security and integrity | <ul style="list-style-type: none"> • Can view all data in all tables. • Can add, edit, and delete all data in all tables (with caution for production data). • Can create and manage user accounts and assign permissions. • Can implement and manage security measures to protect the database. • Responsible for maintaining system logs and backups. |

1.2. Navigating The User Guide

2. Getting Started

2.1. Hardware Prerequisites

- **Personal computer (PC)** with at least 1.6 GHz and 1GB of RAM

2.2. Software Prerequisites

- **Operating system:** Windows 10 or 11 (64-bit)

- **Node.js and npm:** Download and install the latest version of Node.js from the website <https://nodejs.org/>. npm (Node Package Manager) is included with Node.js and is used to install JavaScript packages for the project.
- **Visual Studio Code:** Download and install the latest version of VS Code <https://code.visualstudio.com/download>.
- **Nodemon:** Install Nodemon using npm with the following command in your terminal: **npm install nodemon -g**

2.3. Accessing The System

- **Launch Visual Studio Code:** Locate and open the VS Code application on your computer.
- **Open the project folder:** Within VS Code, navigate to the folder containing Node.js project files.
- **Run the Node.js application with Nodemon:** Open the integrated terminal in VS Code and navigate to the project directory. Then, instead of using node, use the nodemon command followed by the main script name: **nodemon server.js**. Nodemon will start the application and automatically restart it whenever you save changes to the code.

3. Using The Payroll System

3.1. Secure Login Procedures

All user roles (Employees, HR, Payroll, and IT) would need a username and password to access the system.

- **Login Steps:**
 1. Launch the web interface.
 2. A login screen will appear prompting for username and password.
 3. Enter credentials and submit the login request.
- **Login Response:** Upon successful login with valid credentials, the system would grant access to the user interface corresponding to their assigned role (e.g., employee dashboard, HR dashboard, Payroll dashboard, or IT dashboard). If the username and password combination is incorrect, the system would display an error message indicating invalid login credentials.

- **Forgot Password:** The system offers a "forgot password" functionality. This involves a process to reset the password, through an email verification.

3.2. Salary and Deduction Calculations

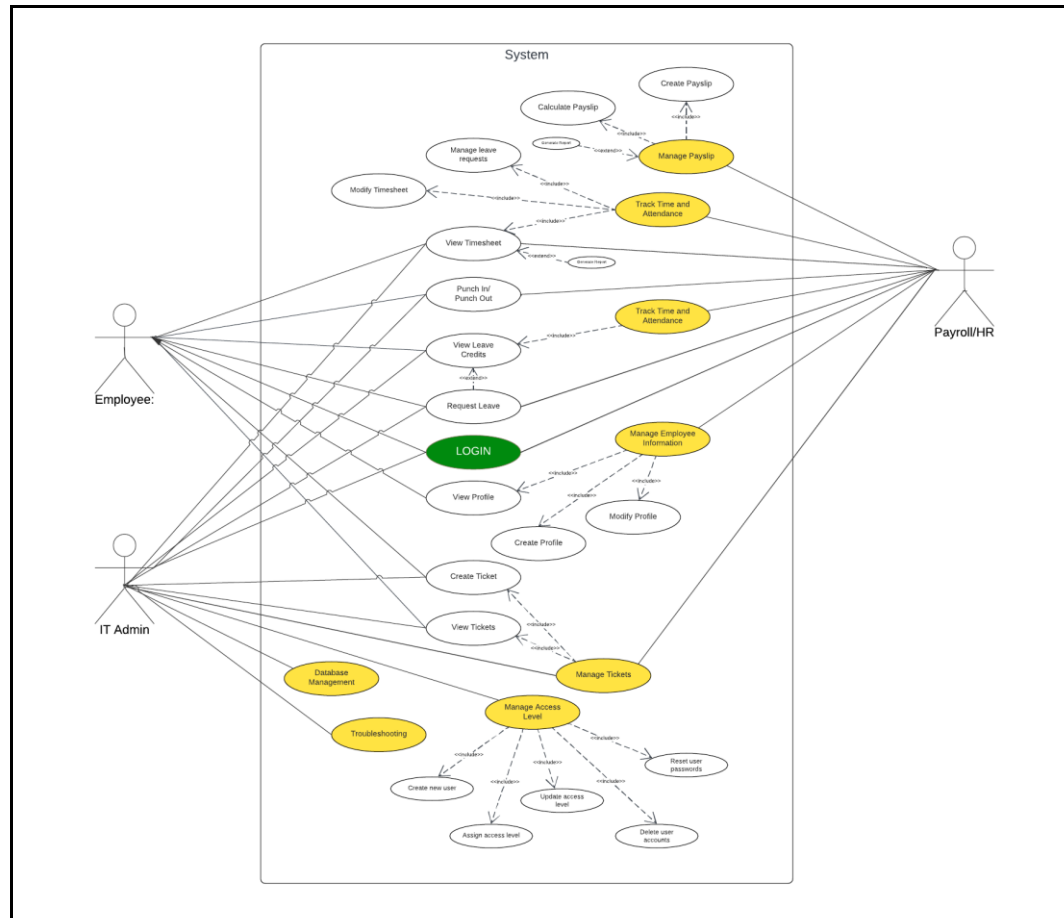
<Depending on the scope of your project, provide instructions for calculating salaries. This can be as simple as a basic salary calculation or a more complex computation that considers various factors.>

3.3. Leave Applications

<If your system includes leave management, explain how users can apply for leave. This can be a straightforward process or a more elaborate one, depending on your project's complexity.>

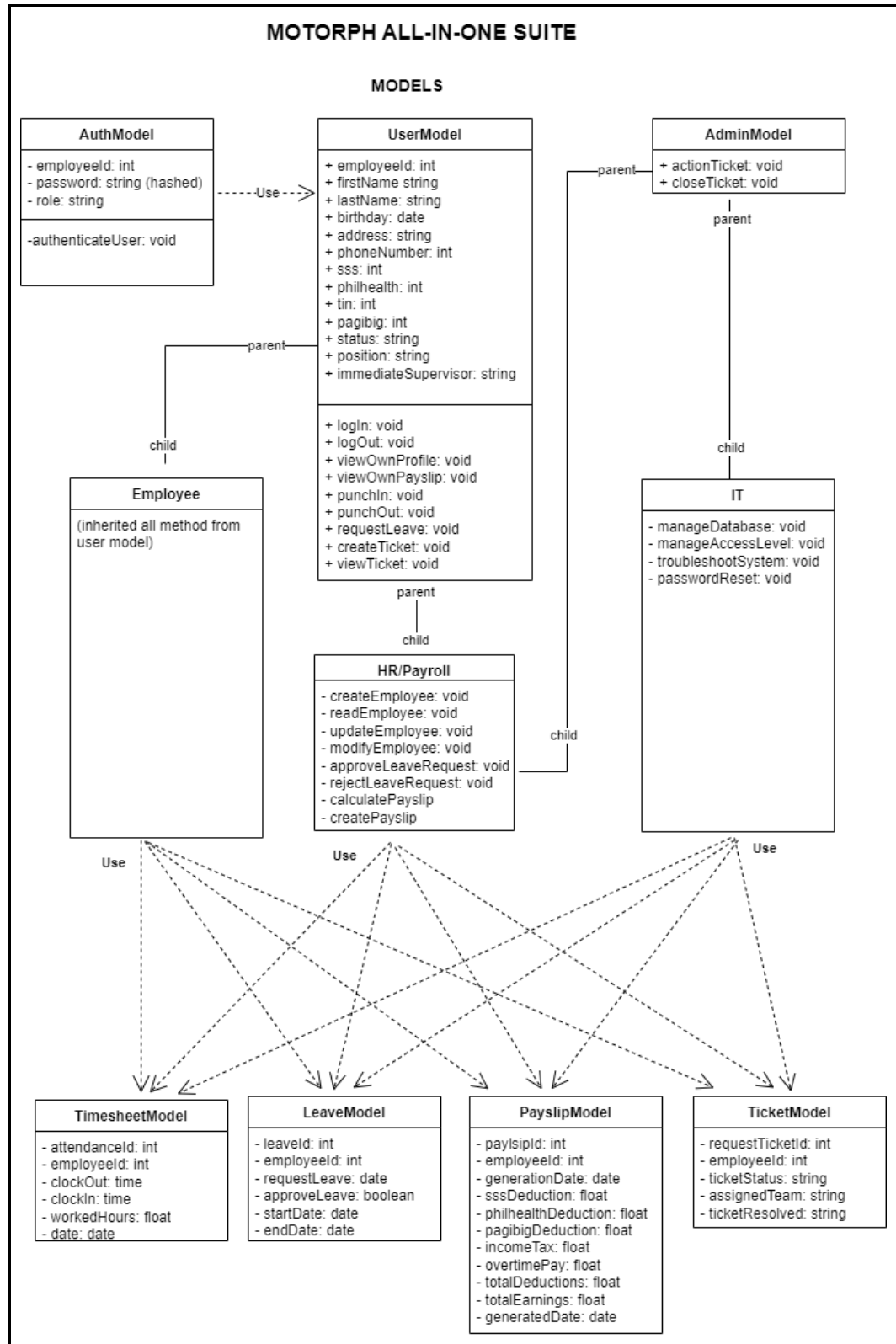
4. Technical Information

4.1. Use Case Diagram



The use case diagram offers a skeletal structure for a payroll system built using object-oriented principles. It identifies key classes like Employee, Payroll/HR, IT Admin, and Login. The diagram outlines inheritance for the Employee class and an aggregation relationship between Login and Employee. This indicates that Employee objects can exist independent of login functionality, while Login objects likely reference specific Employee data. Overall, the diagram provides a starting point for understanding potential object interactions within the payroll system design.

4.2. Class Diagram



The class diagram provides a foundational understanding of how object-oriented principles can be applied to design a payroll system. It highlights the core classes

involved in employee data management, timekeeping, leave requests, payslip generation, payroll processing, system administration, and login functionalities. The inheritance and associations provide insights into potential collaborations between these classes to achieve the system's functionalities.

4.3. Testing