**A PROPOSED OFFERING OF PAYROLL**

**SYSTEM FOR WILLTOP HARDWARE AND ELECTRICAL SUPPLIES**

A Project Proposal Presented to the

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**MAINTENANCE DOCUMENTATION**

**INTRODUCTION**

The purpose of the testing phase is to check if the Payroll System is working properly based on its requirements. The testing process helps identify errors, missing functions, or incorrect outputs before the system is fully deployed.

**Objectives**

• To verify that each feature of the system works as expected.

• To ensure that data is saved, updated, and displayed correctly.

• To check the stability and reliability of the system during usage.

• To confirm that the system meets the needs of its end-users.

**Scope**

The testing covers the main functions of the Payroll System, including login, employee records, attendance recording, payroll computation, and payslip generation. Only core features are included in the tests.

Out of Scope

External systems, online functions, and API-related features are not included in the testing since the system is offline and standalone.

**TESTING ENVIRONMENT**

This section describes the hardware, software, and test data used during the testing process. The testing environment ensures that the system runs in a setup similar to the actual user environment.

**Hardware Specifications**

**The system was tested on the following computer setup:**

• Processor: Intel Core i5

• Memory: 4GB RAM

• Storage: 500GB HDD / SSD

• Display: 1366 x 768 Resolution

• Operating System: Windows 10 (64-bit)

**Software Requirements**

**The following software tools were used during testing:**

• Database: SQL Server

• Application Platform: VB.NET

• Development Tool: Visual Studio (for debugging, if needed)

• Testing Tool: Manual testing (Black-Box approach)

**Test Data**

Sample employee records, attendance logs, and payroll entries were created to perform testing.

**Test data includes:**

• Sample employee names and positions.

• Test attendance data for multiple cutoff dates.

• Sample salary rates and deduction values.

**TESTING METHODOLOGY**

This section describes the testing approach used to evaluate the functions of the Payroll System. The goal is to ensure that the system behaves correctly and meets the expected results.

**Testing Approach**

• Black-Box Testing – This approach was used to test the system without checking the internal code. The tester focused on inputs, outputs, and user interactions.

• User Acceptance Testing (UAT) – This was performed to check if the system meets the needs of its end-users, such as store staff or payroll handlers.

**Testing Tools**

The testing was done manually without automated tools. The system was tested using:

• VB.NET Application Runs (for interface behavior)

• SQL Server Database (for saved data verification)

**Testing Criteria**

**The system was evaluated based on:**

• Correctness – System must produce correct results

• Usability – System must be easy to use and understand

• Reliability – System must run without crashes or system errors

• Output Accuracy – Payroll and attendance results must be correct

**Test Case Reference**

All tests follow a set of prepared test cases based on the core functions of the Payroll System, such as login, attendance, payroll computation, and payslip generation.

**TEST CASES**

The table below shows the test cases used to check the major functions of the Payroll System.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **TEST CASE ID** | **TEST DESCRIPTION** | **TEST STEPS** | **EXPECTED OUTPUT** | **ACTUAL OUTPUT** | **STATUS** | **REMARKS** |
| TC001 | Login with valid credentials. | 1.Enter correct username and password.  2.Click Login | User is redirected to the dashboard. | User redirected to dashboard. | Pass | N/A |
| TC002 | Login with invalid password. | 1.Enter username.  2.Enter wrong password.  3.Click Login | System shows "Invalid Login" message. | Error message displayed. | Pass | N/A |
| TC003 | Add employee record. | 1.Go to Employee Module.  2.Input details  3. Click Save | Employee record is saved in the database. | Record saved | Pass | N/A |
| TC004 | Generate payroll. | 1.Go to Payroll Module  2.Select employee  3.Click Generate | Correct payroll is computed and displayed. | Computed successfully | Pass | N/A |
| TC005 | Print payslip | 1.Generate payroll  2.Click Print or Preview Payslip. | Printble payslip appears. | Payslip generated | Pass | N/A |

*Table 1. Test cases*

**BUG TRACKING & ISSUE LOG**

This section lists the errors or problems found during testing. Each bug is documented with its severity, status, and resolution.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **BUG ID** | **DESCRIPTION** | **SEVERITY** | **REPORTED BY** | **STATUS** | **RESOLUTION** |
| B001 | Login page crashes on invalid password entry. | High | Tester 1 | Resolved | Fixed by developer. |
| B002 | Payslip not showing employee name. | Medium | Tester 1 | Open | To be corrected. |
| B003 | Attendance time not saving in database. | High | Tester 2 | Resolved | Database link repaired. |
| B004 | Wrong deduction formula for SSS | Low | Tester 1 | In progress | Formula adjustment |

*Table 2. Bug tracking & Issue log*

**Severity Levels:**

• \*\*Critical\*\* – Stops system from running properly.

• \*\*High\*\* – Affects major function but system continues to run.

• \*\*Medium\*\* – Causes minor errors that can be fixed easily.

• \*\*Low\*\* – Small issue, does not affect system performance.

The bug log helps monitor testing progress and ensures all identified problems are tracked until resolved.

**USER ACCEPTANCE TESTING (UAT)**

User Acceptance Testing (UAT) was conducted to confirm that the Payroll System meets the needs and expectations of its intended users. The testing was performed by selected end-users, such as store staff or authorized personnel who will use the system for payroll processing.

**UAT Test Scenarios**

**The following user scenarios were tested:**

• Logging in using authorized credentials

• Adding and updating employee information

• Recording attendance data

• Generating payroll computation

• Printing a payslip

• Logging out after usage

**User Feedback**

**The users reported that the system:**

• Was easy to use and simple to understand

• Generated accurate payroll results

• Displayed clear and organized information

• Improved their workflow compared to manual payroll processing

**However, users suggested:**

• Adding a “Search Employee” function for faster navigation

• Improving the layout of the payslip for better readability

**UAT Result**

The system passed User Acceptance Testing. The users agreed that the system is ready for deployment with minor improvements to be added in future versions.

**CONCLUSION & RECOMMENDATIONS**

**Conclusion**

Based on the results of the testing phase, the Payroll System is functioning properly and meets its desired objectives. The system successfully performed core processes such as login, attendance recording, payroll computation, and payslip generation. Test results also showed that the system is stable, user-friendly, and provides accurate output for payroll processing.

The issues found during testing were documented and addressed, and none of the remaining bugs prevent the system from being used in a live environment. Overall, the testing proved that the system is ready for deployment.

**Recommendations**

Even though the system passed major tests, the following improvements are recommended for future updates:

• Add a search bar for faster employee lookup

• Improve payslip layout for a more professional look

• Add automatic database backup feature

• Provide multi-user access support for future use

• Include more detailed logs for system monitoring

These recommendations will help improve the system’s usability, performance, and long-term maintainability.