
Software Requirements Specification

for

Payroll Management System

Version 1.0

Prepared by

KURMILLA C S S KASHYAP

SANJANA MISHRA

LOHITH S

Revision History

Name	Date	Description	Version
Payroll management	15/05/2023	First Release	1.0

1. Introduction

The payroll system is a crucial component of an organization's record and resource management. Its primary function is to accurately calculate employee salaries according to company policies, while also factoring in deductions such as income tax and various fund contributions. Additionally, the system must generate important documents such as pay-slips, contributions and reports.

1.1 Purpose

The primary objective behind developing an Employee Payroll Management system is to streamline the process of managing employee leave and payroll activities within a company. This system aims to automate these functions and generate comprehensive reports that can be used by management to gain insights into employee leave utilization. Ultimately, the goal is to provide a user-friendly solution that simplifies the management of payroll and leave for employees, while also facilitating effective decision-making for the organization.

- The primary goal is to enhance organizational efficiency.
- The system aims to enable swift access to employee information, ensuring that details can be retrieved quickly and easily.
- The application has been designed to provide users with a seamless and rapid means of accessing information.
- The system offers a user-friendly interface, which is intuitive and easy to navigate.

1.2 Product Scope

Our application allows multiple users across various departments, who may be situated in different locations, to access and utilize the same database simultaneously. This is made possible by hosting the various database in a central location. By doing so, users are able to access the system using multiple computers, enabling them to work collaboratively and efficiently, regardless of their physical location.

The System has the following modules as:

Employee Management Module: This module refers to the management of employees such that adding them into the system, updating their record it needed also searching for their records.

1.3 References

- Google.com
- Youtube.com
- Wikipedia.org

2. Overall Description

2.1 Product Perspective

The objective of this system is to replace the outdated manual system, and introduce a more efficient means of managing and accessing records. By utilizing digital technology, users will now be able to access a range of records and data that was previously not available. Each user will have their own unique account, which will enable them to enter data according to their specific needs and requirements. The software has been specifically developed for employee management, and is designed to be self-contained and highly effective. The system offers a simple database that caters to basic requirements, and features a user-friendly graphical interface that is accessible to both novice and experienced computer users.

2.2 Product Functions

2.2.1 The System has various modules as:

- Security Management
 - User Management
 - Reports Management
 - Attendance Management
 - Salary Management
-
- The Security Management Module will control access to the system based on user privileges and authenticate users attempting to access the system.
 - The User Management Module will manage user records, allowing for updates and searching as needed.
 - The Reports Management Module will generate various reports for both users and employees, including individual user and employee reports, attendance reports, salary reports, and total salary reports.
 - The Attendance Management Module will manage employee attendance and perform calculations related to employee salaries.
 - The Salary Management Module will manage employee salaries, allowing for the addition and updating of salary information as needed.

2.3 User Classes and Characteristics

2.5.1 End Users:

The system is designed to be user-friendly, and requires no specialized knowledge or skills from the end user.

Basic understanding of computer operations and databases is recommended for optimal use.

2.5.2 Administrator:

The administrator must possess the skills necessary to manage user rights and access levels within the system.

The proper functioning of the system is reliant upon a stable network connection; issues with the network connection may affect system performance.

2.4 Operating Environment

- | | | |
|---|------------------|--------------------------------|
| • | Operating system | Windows 7 and Higher Versions. |
| • | Front End | Visual Studio 2022 |
| • | Backend | Oracle 19c (SQL plus) |

2.5 Assumptions and Dependencies

- The interface must be user-friendly and easy to comprehend, allowing for seamless usage by individuals with varying levels of technical proficiency.
- Adequate hardware and software must be available to enable the successful implementation and operation of the tool.
- The system will be developed in accordance with the specifications detailed in the software requirements document.
- End users are expected to possess a basic level of computer knowledge

3. System Features

Security Management

➤ Login process

- User will provide its login credentials to enter into the system i.e. username and password.
- System will authenticate the user and provide access to the system according to the privileges of that specific user.

User Management

The three types of users present in the system are :-



Employee module

The employee module typically allows employees to view only the details that are updated by the administrator and manager while also ensuring the privacy and security of employee data. By limiting access to only updated information, the module helps ensure data consistency and accuracy in the payroll process, ultimately leading to a more efficient and effective payroll system.

Limited access: The employee module is designed to provide employees with access to a limited set of information, as determined by the administrator and manager.

Read-only access: Employees can view the information but cannot make any changes to it. Access to the employee module is controlled by the administrator, who determines which employees have access to which information. This helps ensure that sensitive information is only accessible to authorized personnel.

Data consistency: By limiting access to only updated information, the employee module helps ensure data consistency across the system. This reduces the likelihood of errors and discrepancies in payroll processing.

Privacy and security: The employee module ensures the privacy and security of employee information by limiting access to only authorized personnel. This helps protect employee data from unauthorized access or misuse.



Manager module

The **manager module** in a payroll system typically allows authorized managers to access and perform various tasks related to employee payroll and compensation. This module is an essential component of a payroll system as it provides managers with the necessary tools to manage their employees efficiently and effectively. Some of the common functionalities that a manager module in a payroll system may offer are:

Adding and managing employee records: Managers can add new employees working under them to the system and manage their personal and employment information, including job titles, pay rates, and benefit plans by providing user's details i.e. **name, email, phone number, address, username and password**.

➤ **Administrator module**

The **administrator module** in a payroll management system typically provides various HR and payroll administrators with access to a range of functionalities to manage the payroll process efficiently and effectively. Some of the key functionalities of the admin module include

In addition to having all the functionalities of the manager module inclusive of **adding and managing employee records** and **managing benefits**, this module also can:-

Processing payroll: The administrator module can enable administrator to process payroll for employees, including calculating employee wages, taxes, and deductions, and generating paychecks.

4. Other Nonfunctional Requirements

4.1 Performance Requirements

- To ensure efficiency, the system should be optimized for speed and accuracy, minimizing processing time and minimizing errors.
- The system should have integrated error-checking and correction capabilities, enabling the prompt identification and correction of errors.
- To accommodate the processing of large quantities of data, the system should be capable of handling and managing substantial volumes of information with ease.

4.2 Security Requirements

The system requires the users to identify themselves by using login-id and password. Any user who uses the system shall have a login-id and a password.

4.3 Software Quality Attributes

- User-Friendliness: With proper guidance and user manuals, it is expected that regular users should be able to operate the system within a week of training.
- Reliability and Availability: The system should be accessible during standard working hours for its users. Bugs or Defect Rate: The occurrence of bugs and defects should be minimal.
- Robustness: The system should handle exceptions effectively, generating appropriate responses.
- Accuracy: The system should produce precise results, adhering to the user's requirements.
- Correctness: The system should fulfill all requirements gathered during the requirements gathering phase, meeting the user's requirements.