PayrollCentral

PAYROLL MANAGEMENT SYSTEM



INTRODUCTION

- A payroll management system is a software application that automates the process of calculating and paying employee salaries.
- Payroll management systems can save businesses time and money by eliminating the need for manual calculations and processing.

• Project Profile:

■ Project Title : Payroll-Central

Project Duration : 2 Months

■ Team Members : Kishore Sunchu, Jyoti Dwivedi, Rupa Chauhan

Project Status : Completed



Environment Description

Environment Description

- Hardware Requirements
 - Processor : Intel core i3 or higher
 - SSD : 256GB or higher
 - RAM: 4GB or higher
- Soft Requirements
 - Windows 7 or higher
 - NodeJS
 - Microsoft visual studio code
 - Mongodb Compass
 - Google Crome



Environment Description

Analysis & Planning

System Analysis & Planning

- Existing System
 - greytHR
 - Keke HR
 - HROne
 - Workday HCM
- Drawbacks of above system:
 - High cost: implementing and maintaining of can be high.
 - Inflexibility: Traditional system can be difficult to adapt changes employee info.
 - Difficult to scale : Manual system can be difficult to scale as a company grows



Environment Description

Analysis & Planning

System Analysis & Planning

- Requirement gathering and analysis:
 - Payroll compliance: The system must be able to calculate and deduct all applicable taxes.
 - Expense management: The system must be able to track and manage employee expense
 - Dashboard & Reporting: The system must provide a dashboard with real-time data on payroll, expense, and other financial information.



Environment Description

Analysis & Planning

Proposed System

Proposed System

- Scope
 - To develop a user-friendly and efficient payroll management system that automates the process of calculating and disbursing employee salaries, bonuses, and deductions.
 - To ensure compliance with all relevant tax laws and regulations.
 - To provide accurate and timely payroll reports.
 - To improve the efficiency of the HR department by freeing up time to focus on other tasks.
 - To improve employee satisfaction by ensuring that they are paid accurately and on time.



Environment Description

Analysis & Planning

Proposed System

Proposed System

- Project Modules:
- I. Admin
 - I. Login
 - II. Add employee
 - III. Employee details
 - IV. Employee update
 - V. Employee status change
- II. Employees
 - I. Login
 - II. Profile
 - III. Change details
 - IV. Generate pay-slip



Environment Description

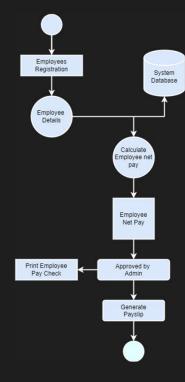
Analysis & Planning

Proposed System

Detail Planning

Detail Planning

Dataflow from diagram / UML





Environment Description

Analysis & Planning

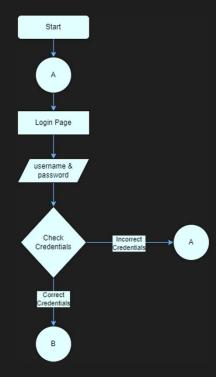
Proposed System

Detail Planning

Detail Planning

Process Specification / Activity Flow Diagram

➤ Admin side





Environment Description

Analysis & Planning

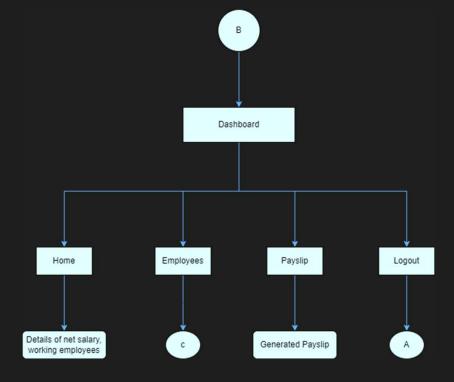
Proposed System

Detail Planning

Detail Planning

• Process Specification / Activity Flow Diagram

➤ Admin side





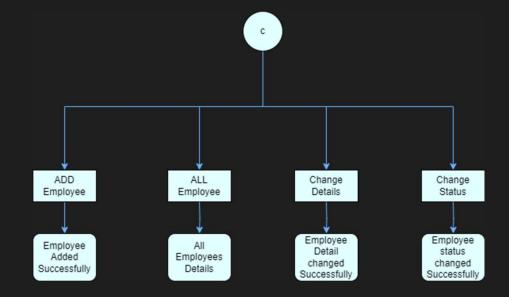
Environment Description

Analysis & Planning

Proposed System

Detail Planning

- Process Specification / Activity Flow Diagram
- ➤ Admin side





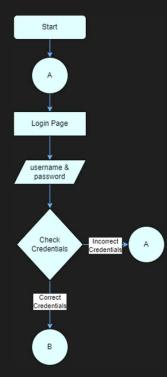
Environment Description

Analysis & Planning

Proposed System

Detail Planning

- Process Specification / Activity Flow Diagram
- > Employee side





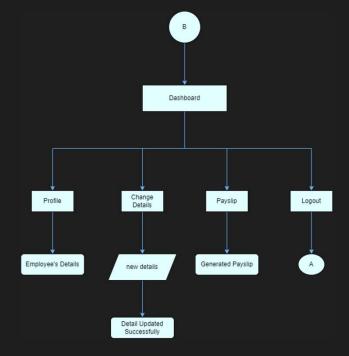
Environment Description

Analysis & Planning

Proposed System

Detail Planning

- Process Specification / Activity Flow Diagram
- > Employee side





Environment Description

Analysis & Planning

Proposed System

Detail Planning

- Data Dictionary
- > Admin Table

Field Name	Data Type	Description
Id	Integer	Unique identifier for admin
Username	String	Name of the admin
Email	String	Email address of admin
Password	String	Pass code to login into the system



Environment Description

Analysis & Planning

Proposed System

Detail Planning

- Data Dictionary
- > Employee Table

Field Name	Data Type	Description
Employee id	Integer	Unique Identifier for each employee
First Name	String	First name of the employee
Last Name	String	Last name of the employee
Email address	String	Email address of the employee
Phone No.	Integer	Contact No. of the employee
Date of Birth	Date	Birth date of the employee
Gender	String	Gender of the employee
Hire Date	Date	Hiring date of the employee
Designation	String	Designation of the employee
Salary	Integer	Salary of the employee



Environment Description

Analysis & Planning

Proposed System

Detail Planning

- Data Dictionary
 - Payrolls Table

Field Name	Data Type	Description
Transaction id	Integer	Unique id for each transaction
Salary month	Date	Month of salary month
Salary year	Date	Year of salary year
Employee id	Integer	Employee id for references to the employee
Net salary	Integer	Total salary of the employee
Status	Integer	Status of the salary (paid/unpaid)



Environment Description

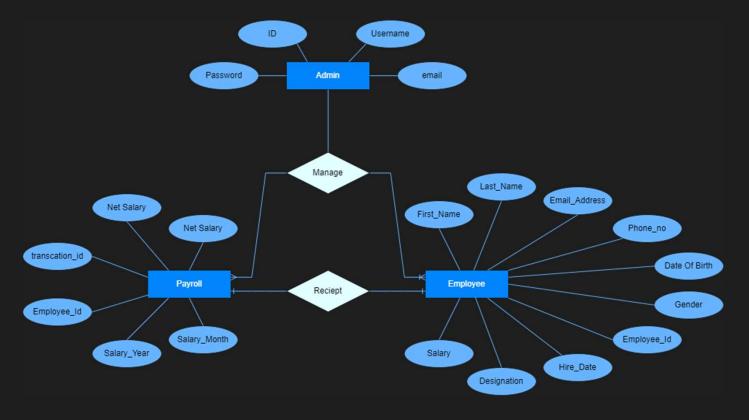
Analysis & Planning

Proposed System

Detail Planning

Detail Planning

• Entity-Relationship Diagram / Class Diagram





Environment Description

Analysis & Planning

Proposed System

Detail Planning

System Design

System Desing

- Database Design
 - Admin Table:

This table stores the basic information about admin, such as id unique identifier, name for login purpose, email, password for login into the system.

■ Employee Table:

This table stores the basic information about each employee, such as employee id, first and last name, email address, phone number, gender, date of birth, joining and hiring date of the employee, designation of the employee and the salary of the employee



Environment Description

Analysis & Planning

Proposed System

Detail Planning

System Design

System Desing

- Database Design
 - Payslip Table

This table stores the information about pay-slips, such as transaction id, month of the salary is given, year of the salary is given, employee name, net salary of employee and status of payment.



Environment Description

Analysis & Planning

Proposed System

Detail Planning

System Design

System Desing

- Input Design
 - Login Page



Sign in to your acoount

Username

Password

Sign in

←-- Welcome to Payroll Central ---





Environment Description

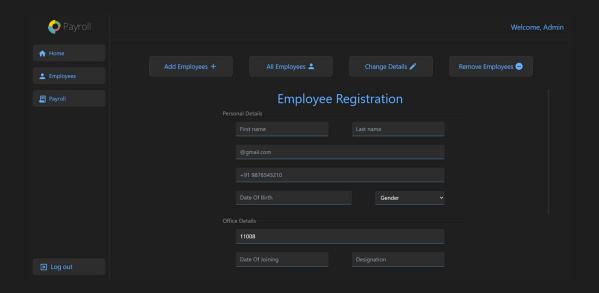
Analysis & Planning

Proposed System

Detail Planning

System Design

- Input Design
 - Employee Registration Form





Environment Description

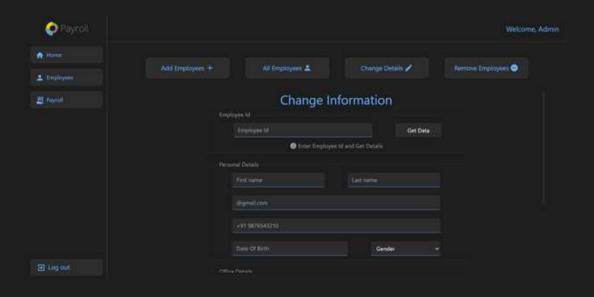
Analysis & Planning

Proposed System

Detail Planning

System Design

- Input Design
 - Employee Information Change Form (Admin Side)





Environment Description

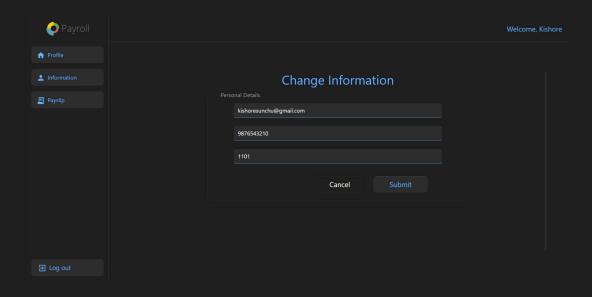
Analysis & Planning

Proposed System

Detail Planning

System Design

- Input Design
 - Employee Information Change Form (Employee Side)





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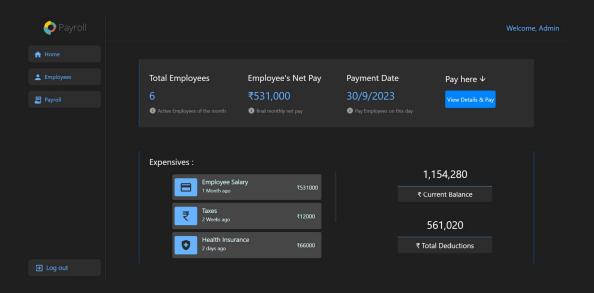
Analysis & Planning

Proposed System

Detail Planning

System Design

- Output Design
 - Admin Dashboard





Environment Description

Analysis & Planning

Proposed System

Detail Planning

System Design

- Output Design
 - Employee Dashboard





Environment Description

Analysis & Planning

Proposed System

Detail Planning

System Design

Software Testing

Software Testing

- 1. **Data entry**: Test the data entry fields to make sure they are properly formatted and validated. For example, the phone no field should only accept numeric values and 10-digit number and hire date field should only accept date values.
- **2.** Calculation: Test the payroll calculations to make sure they are accurate. For example, the system should correctly calculate all employee salary accurately.
- **3. Security:** Test the security of the payroll system to make sure it is protected form unauthorized access. For example, the system should require users to authenticate themselves before they can access sensitive data.
- **4. Reports:** Test the payroll reports to make sure they are accurate and easy to read. For example, the system should generate a report that list all employees and their pay stubs for a given period.



Environment Description

Analysis & Planning

Proposed System

Detail Planning

System Design

Software Testing

Limitation & Future Scope

Limitation and Future Scope of Enhancements

- I. Limitation:
 - Internet is required
 - Proper data is required
- II. Future scope of Enhancements:
 - Make the system more user-friendly.
 - Use AI and Machine Learning.
 - Automate more tasks.
 - Make the system more secure.
 - Make the mobile app for system.



Environment Description

Analysis & Planning

Proposed System

Detail Planning

System Design

Software Testing

Limitation & Future Scope

References

References

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Environment Description

Analysis & Planning

Proposed System

Detail Planning

System Design

Software Testing

Limitation & Future Scope

References

Thank You!