

# ACKNOWLEDGEMENT

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# **ABSTRACT**

Employee Payroll Management System is one of the core areas of your business. Usually, it is pursued to manage the employee's expenses. Allowances, salary, Gross salary, Deduction, Tax and many more for specific time period. Management and Accounting are two main essentials parts for payroll. Is designed to make the existing manual system automatic with the help of computerized equipment and full-edged computer software, fulfilling their requirements, so that their valuable data and information can be stored for a longer period with easy access and manipulation of the same. The required software is easily available and easy to work with.

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## Chapter-1

# INTRODUCTION

### 1.1 Project Definition

A payroll system is designed to organize all the tasks of employee payment and filing of employee taxes. These tasks can include keeping track of hours, calculating wages, withholding taxes and deduction, printing and delivering checks and paying employment taxes to government.

### 1.2 Project Description

The employee payroll Management system deals with the financial aspects of employees salary, allowances, deduction, gross pay, net pay, generation of pay slip, etc for a specific period.

### 1.3 Purpose

The purpose of this document is to describe the functionality and specifications of the design of a web application for Managing Employees and their payroll. Now with the help of this system the admin has the information on his finger tips and can easily prepare a good record based on their requirements.

Finally, we can say that this system will not only automate the process but save the valuable time of the manager or the admin, which can be well utilized buy his institute.

## Chapter -2

# LITERATURE SURVEY

Wilma PolleyRugay 2021, in their study entitled (City Accounting Department) stated that Employees who handle payroll preparation and processing can now attend to other office needs and concerns as the new payroll system will lessen their workload

Krithi P, Dr M Ramakrishna 2020, entitled Leave management Payroll management, Biometrics in 2020 stating that the Multiple user data access is provided by this system. Users like staff members or administrator can login into the software by writing id and password which are allocated to them from the organization.

A. Pavan Kumar (2018) in study entitled that Biometric Analysis of literature The output of this study can help researches to understand the landscape of the global research and issues on payroll system . Manual payment calculation of staff members is too complex and it even takes a lot of time and also requires a lot of efforts. Users like staff members or administrator can login into the software by writing id and password which are allocated to them from the organization.

Manish Singh, Prachi Singh, Rohil Singh, Shubham Singh, Shiwani Gupta  
Mumbai University Assistant Professor, TECT, Mumbai Leave and Payroll Management System” Management of leave payroll are critical operations for each institutions as it has effect on payment staff members of any institutions and also to complete it accurately and on time. The current leave and payroll management both are paper based system. Though the attendance is Biometric but still it is not that much efficient in terms of matters related to leave management.”

Payroll System: A Bibliometric Analysis of the literature

Fariza Hanim Rusly, Aidi Ahmi, Yuritha Yakimin Abdul Talib and Khairina Rosli

Payroll processing is an imperative process in an organization; it involves many tasks to ensure accurate and timely payments of the workforce services, and to protect organizations reputation through effective record-keeping compliance with the government authorities employment legislations.

## Chapter-3

### EMPLOYEE PAYROLL MANAGEMENT MODULES

- ✓ Employee Management
- ✓ Leave Module
- ✓ Allowance and Deduction
- ✓ Salary Module
- ✓ User Account

#### 3.1 Employee Management

Admin can add new class, add new employee and manage employee detail. Each employee has unique username and password for operate the system.

#### 3.2 Leave Module

Employee can apply for leave after login to system. Admin can respond leave by approve or reject. Employee can check his leave status it would be approve or reject.

#### 3.3 Allowance and Deduction

At the time of salary generation Admin can set manually HR, Travel, Medical, Washing Allowance for each employee Leave will be deducted from salary.

#### 3.4 Salary Module

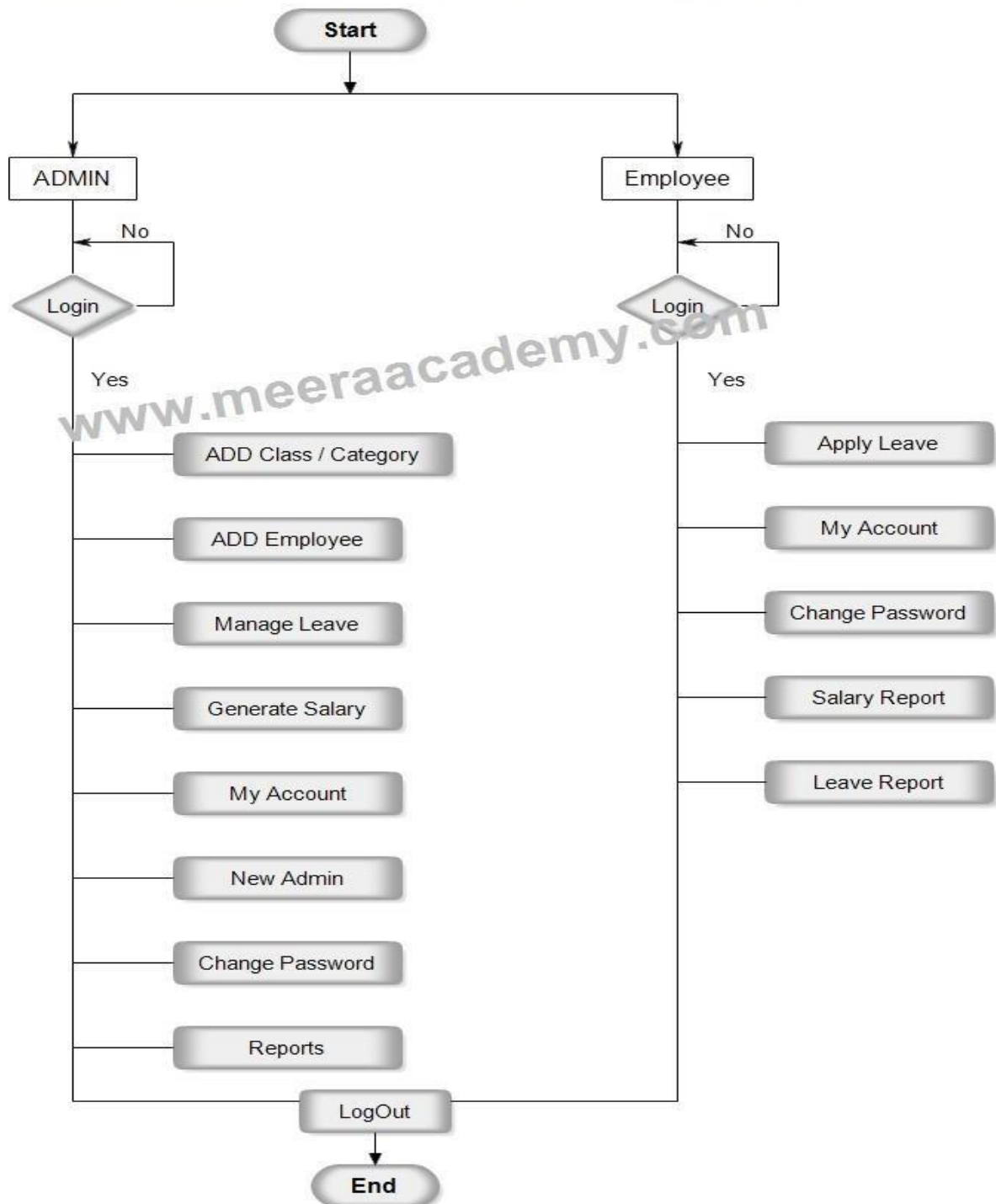
Admin can generate month wise salary for each employee one by one and generate salary pay slip.

#### 3.5 User Account

Create new admin account with username and password for operate system.

## Chapter-4

### Flow Chart Diagram - Payroll System





## Chapter- 5

### Proposed System

- A need for a new powerful, stable and result oriented software is required which is why a new system based on C++ is formulated
- C++ is used to provide front-end application for user friendly ambience
- C++ itself is used to maintain and update database for fast and reliable retrieval of data and processing of queries

#### 5.1 Advantages

It is cost effective as the user control the web application himself and does not go for professional service. It saves time as it speeds up every aspect of the employee database management and payroll process with a range of automated features. It is secure as the employee database and the payroll process is managed by the admin in house rather than sending private information to a third party. Validating procedures and checks restrict user from making mistakes. The software is easy to use and is user friendly so no expertise is required. The calculations are automated so no chance of error.

#### 5.2 Disadvantages

- It requires an internal connection.
- It requires large database

## Chapter-6

# System Requirements

### 6.1 Hardware Requirements

- Processor: AMD Ryzen 3 3250U with Radeon Graphics
- Speed: 2.60 GHz
- Primary Memory: 512MB
- Storage: Minimum 1Gb Available Space

### 6.2 Software Requirements

- Platform: Windows 10 or any other compatible OS
- Language used: C++
- Tools Used: Turbo C++

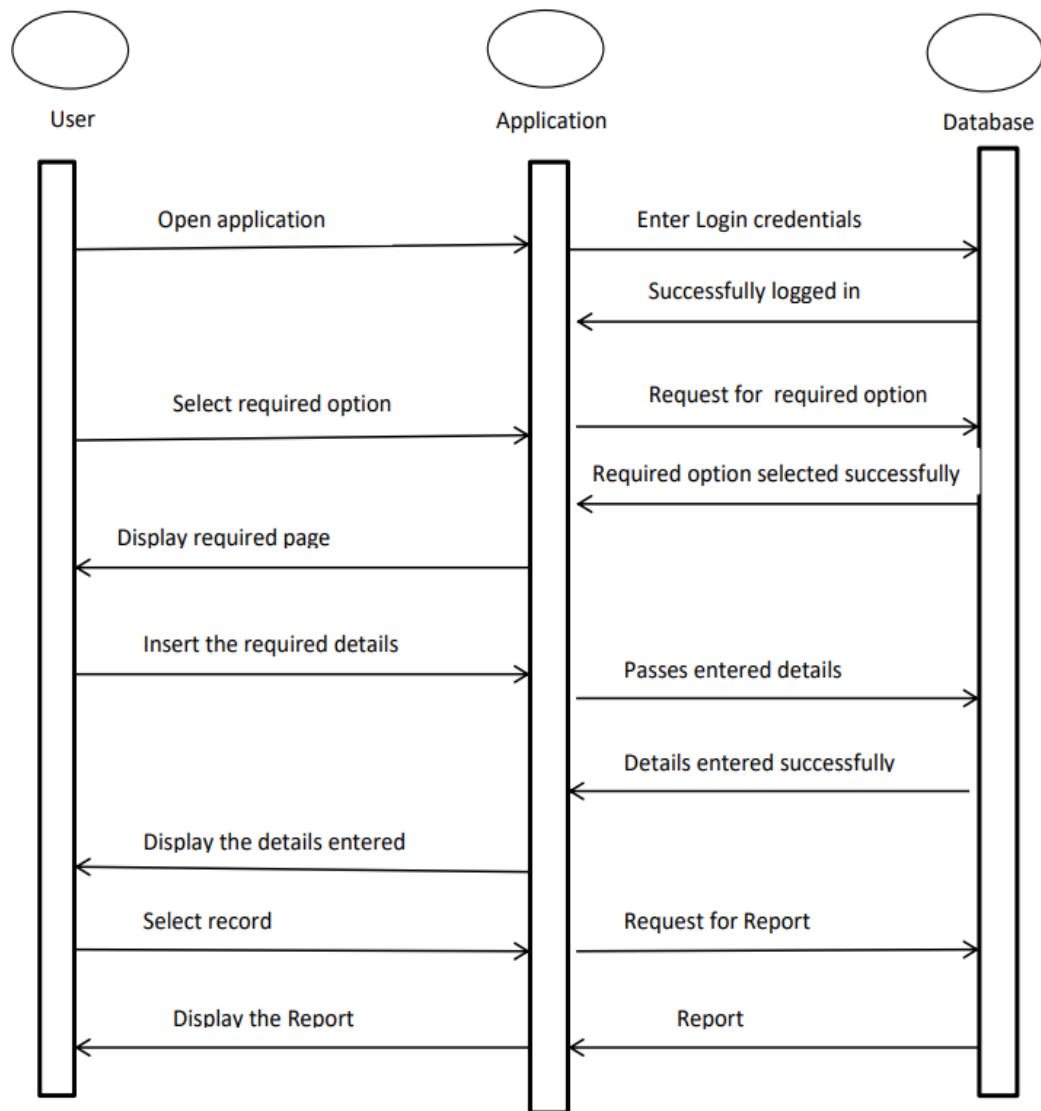
### 6.3 Tool: Turbo C++

Turbo C++ is a discontinued C++ compiler and integrated development environment and computer language originally from Borland. As the developer had focused more on professional programming tools, later Turbo++ products were made as scale down versions of the professional compilers.

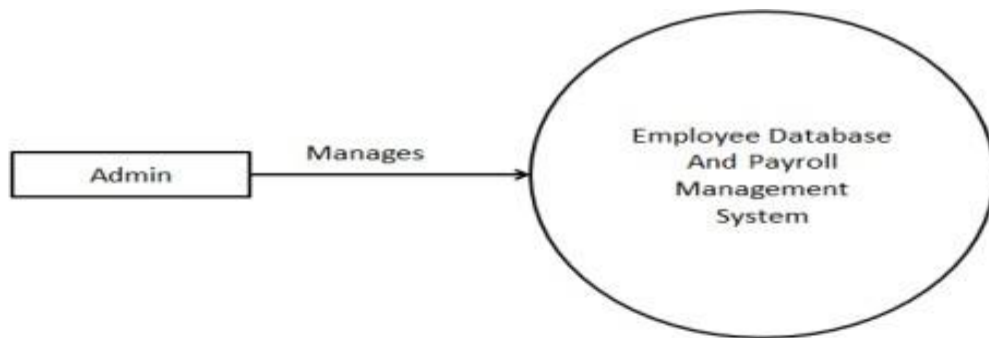
## Chapter-7

**Employee Management Diagram's**

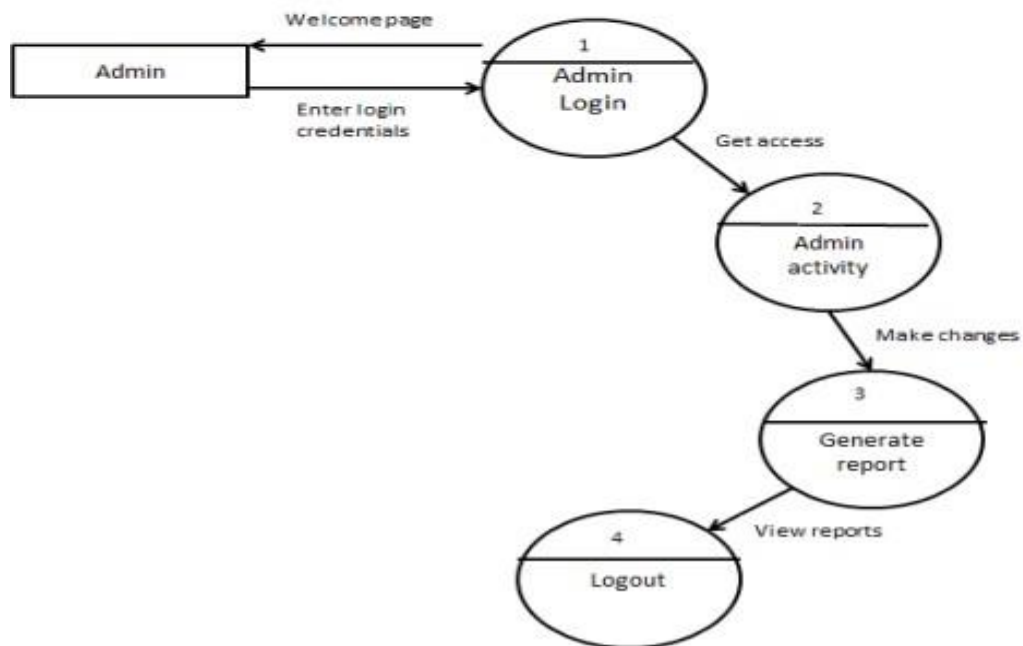
## 7.1 Data Flow Diagram(DFD)



## 7.2 Sequence Diagram



### Level 0



### Level 1

## Chapter-8

### Employees Details SnapShots

#### 8.1 Home Interface

Adding New Employee

Display Employee

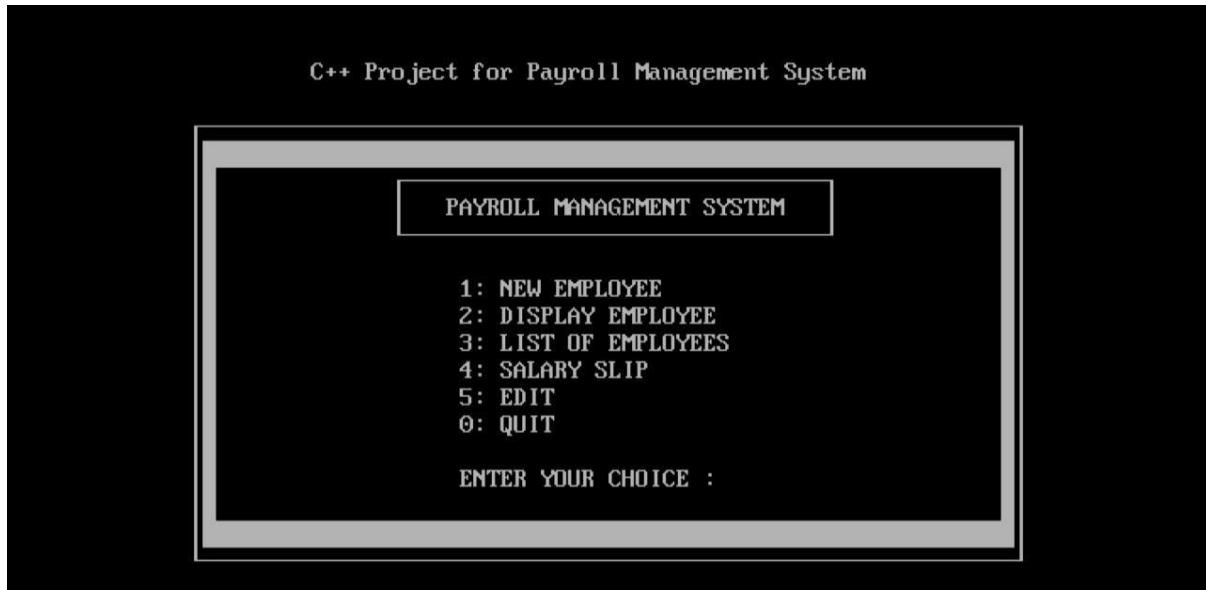
List of Employee

Salary Slip

Edit

Quit

## Snapshots



**Fig 8.1 Home Interface**

This window will display the Home Interface of the Employee Payroll Management which include

New Employee

Display Employee

List of Employees

Salary Slip

Edit

Quit

```

                                <0>=EXIT
                                ADDITION OF NEW EMPLOYEE

Employee Code # 1
Name      : Sachin
Address   : Bijapur
Phone no. : 888777666

JOINING DATE
Day       : 2
Month    : 2
Year     : 2001

Designation : Designer
Grade      : A
House (y/n) : y
Converse (y/n) : y
Loan       : 30000
Basic Salary : 20000

ENTER BASIC SALARY OF THE EMPLOYEE

```

Fig 8.2 Addition of new employee

In this window Admin can add new employee by typing and saving them

```

Employee Code # 1
Name      : SACHIN
Address   : BIJAPUR
Phone no. : 888777666

JOINING DATE
Day       : 2
Month    : 2
Year     : 2001

Designation : DESIGNER
Grade      : A
House (y/n) : Y
Converse (y/n) : Y
Loan       : 30000
Basic Salary : 20000

Press any key to continue..._

```

Fig- 8.3 Deletion of Employee

If the employee resigns from the office, admin can delete the name of the employee from the list of the present employees

| LIST OF EMPLOYEES |        |            |        |             |              |
|-------------------|--------|------------|--------|-------------|--------------|
| CODE              | NAME   | PHONE      | DOJ    | DESIGNATION | GRADE SALARY |
| 1                 | SACHIN | 8887776662 | 2/2001 | DESIGNER    | A 20000      |

Press any key to continue...\_

Fig 8.4 List of Employees

Here we can see the list of the employees who are present and working

|   |                 |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
|---|-----------------|--------------|------------|-----------|--|---------------|--|-------------|--|--------------|---------|------------|--|--------------|--|-------------|---------|------------|------------|
| MADEEM AKHTAR, PGDBA - 200754667  |                 |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| SALARY SLIP<br>July, 2022   | Date: 15/7/2022 |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| Employee Name : SACHIN<br>Designation : DESIGNER  | Grade : A       |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| <table> <tr> <td>Basic Salary</td><td>: Rs.20000</td></tr> <tr> <td colspan="2">ALLOWANCE</td></tr> <tr> <td>HRA : Rs.1000</td><td></td></tr> <tr> <td>CA : Rs.400</td><td></td></tr> <tr> <td>DA : Rs.1000</td><td>Rs.2400</td></tr> <tr> <td colspan="2">DEDUCTIONS</td></tr> <tr> <td>LD : Rs.4500</td><td></td></tr> <tr> <td>PF : Rs.400</td><td>Rs.4900</td></tr> <tr> <td>NET SALARY</td><td>: Rs.17500</td></tr> </table> |                 | Basic Salary | : Rs.20000 | ALLOWANCE |  | HRA : Rs.1000 |  | CA : Rs.400 |  | DA : Rs.1000 | Rs.2400 | DEDUCTIONS |  | LD : Rs.4500 |  | PF : Rs.400 | Rs.4900 | NET SALARY | : Rs.17500 |
| Basic Salary  | : Rs.20000      |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| ALLOWANCE   |                 |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| HRA : Rs.1000   |                 |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| CA : Rs.400   |                 |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| DA : Rs.1000  | Rs.2400         |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| DEDUCTIONS  |                 |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| LD : Rs.4500  |                 |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| PF : Rs.400   | Rs.4900         |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| NET SALARY  | : Rs.17500      |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |
| CASHIER   | EMPLOYEE        |              |            |           |  |               |  |             |  |              |         |            |  |              |  |             |         |            |            |

Fig 8.5 Employee Salary Pay Slip

Here particular Employee Can see their pay slip of which they have been worked for days and getting paid.



## 8.6 Edition of Records

- Deletion Of Record
- Modification Of Record



Fig- 8.6 Edition OF Records

From this window, admin can either delete the records of the employee or modify the record of the employee or else can exit from the window.

```

                                DELETION OF THE EMPLOYEE RECORD                                <0>=EXIT

Employee Code # 1
Name      : SACHI
Address   : BANGALORE
Phone no. : 777888666

JOINING DATE
Day   : 2
Month : 2
Year  : 2001

Designation : MANAGER
Grade       : A
House (y/n) : Y
Converse (y/n) : Y
Loan        : 50000
Basic Salary : 45000

Do you want to delete this record (y/n) _

```

```

Record Deleted
Press any key to continue...

```

Fig- 8.6.1 Deletion Of Record:-

Admin can delete the records of the employee if there is any mistake

```

                                MODIFICATION OF THE EMPLOYEE RECORD                                <0>=EXIT

Employee Code # 1                                Employee Code # 1                                JOINING DATE : 2/2/2001
Name      : SACHIN                                Name      : sachi
Address   : BANGALORE                                Address   : Bangalore
Phone no. : 888777666                                Phone no. : 777888666
Designation : Manager                                Designation : Manager
Grade     : A                                Grade     : A
House (y/n) : Y                                House (y/n) : y
Converse (y/n) : Y                                Converse (y/n) : y
Loan      : 30000                                Loan      : 50000
Basic Salary : 20000                                Basic Salary : 45000

Do you want to modify this record (y/n) _

Do you want to save (y/n) _

```

```

Employee Code # 1                                JOINING DATE : 2/2/2001
Name      : sachi
Address   : Bangalore
Phone no. : 777888666
Designation : Manager
Grade     : A
House (y/n) : y
Converse (y/n) : y
Loan      : 50000
Basic Salary : 45000

Do you want to save (y/n) y

Record Modified
Press any key to continue...

```

Fig 8.6.2 Modification of Record

Admin Can modify the record of employees in this window

## Chapter-9

### Future Scope of the work:

- Intend to add a leave structure in the future.
- Would like to implement a regular backup mechanism to back up the employee database to avoid disasters
- The system can be developed in such a way that its existing features can be modified to better versions.
- The records which are deleted can be retrieved by inclusion of a trash bin to avoid permanent deletion of the record. This simple feature helps to access the records that were once eliminated if in-case they are to be included again.
- Access to the file of records can be granted to the concerned staff only, by adding a security feature of username and password to every student. This feature helps in avoiding trivial/random access of records from outsiders.

## Chapter-10

### Features

- i. Easy to use.
- ii. It is completely secure.
- iii. It is completely controlled by admin.
- iv. This system is easily compatible with most of the web browsers.
- v. It is very interactive and saves time.
- vi. Reduces paper works.
- vii. Calculations are automated so it is highly accurate.
- viii. Admin can view all the records whenever necessary with ease.

## Conclusion

This project is built keeping in mind that it is to be used by only one user that is the admin. It is built for use in small scale organization where the number of employees is limited. According to the requested requirement the admin can add, manipulate, update and delete all employee data in his organization. The admin can add new departments and delete them. The Admin can also add predefined pay grades for the employees. The required records can be easily viewed by the admin anytime time he wants in an instant. The payment of the employee is based on monthly basis. Numerous validations implemented would enable the admin to enter accurate data. The main objective of this framework is to save time, make the system cost effective and management records efficiently.

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