

A Project Report
ON
PAYROLL MANAGEMENT SYSTEM

*Submitted in partial fulfillment of the
requirement for the award of the degree of*
Bachelor of Computer Application



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May, 2022



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CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the project, entitled "**PAYROLL MANAGEMENT SYSTEM**" in partial fulfillment of the requirements for the award of the **BACHELOR OF COMPUTER APPLICATIONS** submitted in the **School of Computing Science and Engineering** of Galgotias University, Greater Noida, is an original work carried out during the period of **JANUARY-2022 to MAY-2022**, under the supervision of **Dr Avneesh Kumar**, Associate Professor, Department of Computer Science and Engineering of School of Computing Science and Engineering, Galgotias University, Greater Noida.

The matter presented in the project has not been submitted by us for the award of any other degree of this or any other places.

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This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

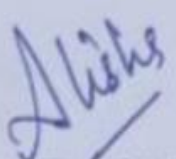
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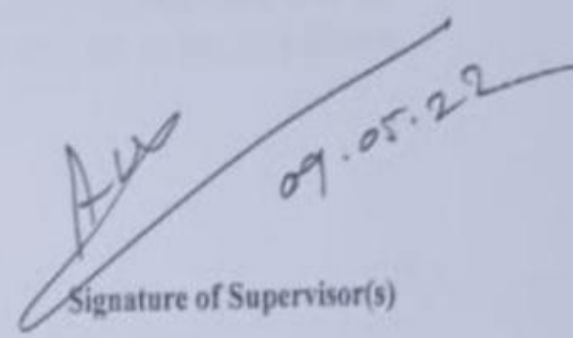
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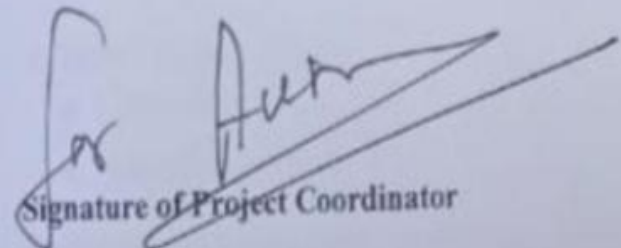
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CERTIFICATE

The Final Thesis/Project/ Dissertation Viva-Voice examination of
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ABSTRACT

Payroll management is one of the key operational aspects of business. Any business who have more than one employee must have a payroll system. If you want to record administrator, employee's monetary records like salaries, wages, bonuses ,deduction and net pay then you'll use this Payroll management system that keeps all your data record in a database and additionally helps to change and add records of employee by using C/C++ programming language. These records should be maintained and kept by the employer for needs like payrolls taxes such as Income tax withholding records etc. Its admin module has been developed in such a pattern that enables to vary the working rules any time as per the business demand.

Technologies Used

- C/C++
- MYSQL SERVER
- SQL
- MS ACCESS

Software Requirements

- TURBO C++
- Windows 7,8,10

Hardware Requirements

- Hard disk -2 GB
- RAM -1 GB
- Processor -Dual core or above
- Mouse
- Keyboard

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INTRODUCTION OF THE TECHNOLOGIES USED IN THIS PROJECT

C PROGRAMMING

- **C programming** may be a general-purpose, procedural, imperative language developed in 1972 by Dennis M. Ritchie at the Bell Telephone Laboratories to develop the UNIX operating system. C is the most generally used machine oriented language. It keeps the most wanted number one scale of recognition together with Java programming language, that's cojointly equally popular and most generally used among trendy software system programmers.

Advantages of c programming are as follows:-

- Easy to find the concepts
- Structured language
- It produces effective programs
- It can handle low-level activities
- It will be compiled on a variety of computer platforms

C++ PROGRAMMING

- **C++** is a middle-level programming language developed by Bjarne Stroustrup beginning in 1979 at Bell Labs. C++ runs on a range of platforms like Windows, Mac OS, and therefore the various versions of OS. This C++ tutorial adopts a straightforward and sensible approach to explain the concepts of C++ for beginners to advanced computer engineers.

Advantages of c programming are as follows

- C++ provide you a transparent understanding regarding object oriented programming.

- C++ is one among the programming languages and loved by millions of developers. If you have an excellent knowledge of C++ programming then you'll never sit without work and additionally significantly you'll get highly paid for your work.
- C++ is the most usually used programming languages in application and system programming thus you will be able to opt for your space of interest.
- C++ really teaches you what is the distinction between compiler, linker and loader.

STRUCTURED QUERY LANGUAGE

SQL is a database machine oriented language designed for the retrieval and management of information and data. SQL stands for Structured Query Language.

Applications of SQL

As mentioned before, SQL is one in all the foremost wide used search language over the databases. Few of the applications are listed below

- Allows users to access data within the electronic information service management systems.
- Allows users to form the data.
- Allows to insert the data in intervals form and manipulate that information.
- Allows to embed within other languages using SQL modules, libraries & pre-compilers.
- Allows users to make and drop databases and tables.
- Allows users to make view, keep procedure in an exceedingly information.
- Allows users to line permissions on tables, procedures and views.

MY SQL SERVER

MySQL is an open-source Relational Database Management System(RDBMS).

It is a MySQL instance where the particular information is getting stored and processed. Important Programs of MySQL Server parts are:

MySQL: It is a MySQL server daemon program. It runs at interval and manages requests from MySQL clients.

mysqld_safe: It's a program that restarts the server whenever an error happens. This was one feature of this program; the opposite one is that it maintains the logs for the runtime information to an error log.

mysql.server: It's a MySQL utility that has been provided to begin out the mysqld_safe script.

mysqld_multi: This program is employed to manage several mysqld processes that listen for connections that are fully completely different.

CHAPTER 1

INTRODUCTION

Payroll Management system may be a software that has been developed for organization, keeping in sight the necessities of staff to arrange regular payments. The objective of the project was to computerize the payroll system that was earlier being handled manually each precaution has been taken at every method concerned within the complicated task of regular payment preparation. By computerization it implies that every one method handling is entirely being done by computer. All the records necessary for the processes concerned within the regular payment are stored in a computer based record keeping system using a back end tool. All the processes handling is done at the front end by using a front end tool. The project provides sample facilities to its users. Payroll management system is essentially used to build an organization that manage the records of the employees working within the company. Only the administrator has the legal rights to work with system .

Employees will solely log on to the system to check their current status. Payroll system is used to:-

1. create records
- 2.delete records
- 3.save records for employees.

Existing System of Payroll Management System

*The biggest downside is that it is faced while using the system is user interface, due to complex business rules, users faces numerous difficulties while handling the prevailing system. Even they are not obtaining assistance on how to deal with errors if occurred while working with the system. Maintaining employee's records was not an straightforward task and while preparing final payroll records, every staff ought to be categorized as per their job category. Its accounting module need to take facilitate of tally package and no matter what information retrieved is employed for getting pay slip for every staff of the organization.

Drawbacks of Existing System

- Need of additional manual effort.
- It take abundant time to find any employee
- Not very much correct.

Proposed System of Payroll Management System

*The new system can facilitate the organization to set rates for every class which can facilitate in getting ledger ready, balance sheet easily and perform automatic processing without human intervention. For creating ledger, it'll takes inputs on staff operating modules like sort of work, their designation, rate per day, tax deduction on monthly basis and bonus or increment on fixed interval of days etc. A regular payment statement and payment sheet have to compelled to be ready when required thus every staff will going to be differentiated using their employee's id. Pay slip can offer the whole information that facilitate the working employees to get clear picture for their regular payment and making a fair environment for operating organization.

Advantages of proposed system

- Very quick and correct
- No need of any additional manual effort.

ARCHITECTURE OF PAYROLL MANAGEMENT SYSTEM

The design of the payroll management system is based on three tier design. This three tier architecture mainly consists of three layers namely:-

- Presentation Tier
- Business Tier
- Data Access Tier

Presentation Tier

The presentation tier converts and displays information into a human legible form. The tier displays information associated with services such as browsing the application etc. it communicates with the opposite tiers by outputting results to the browser/client tier and all the other tiers. The presentation tier is the prime most layer of the Payroll Management System Application.

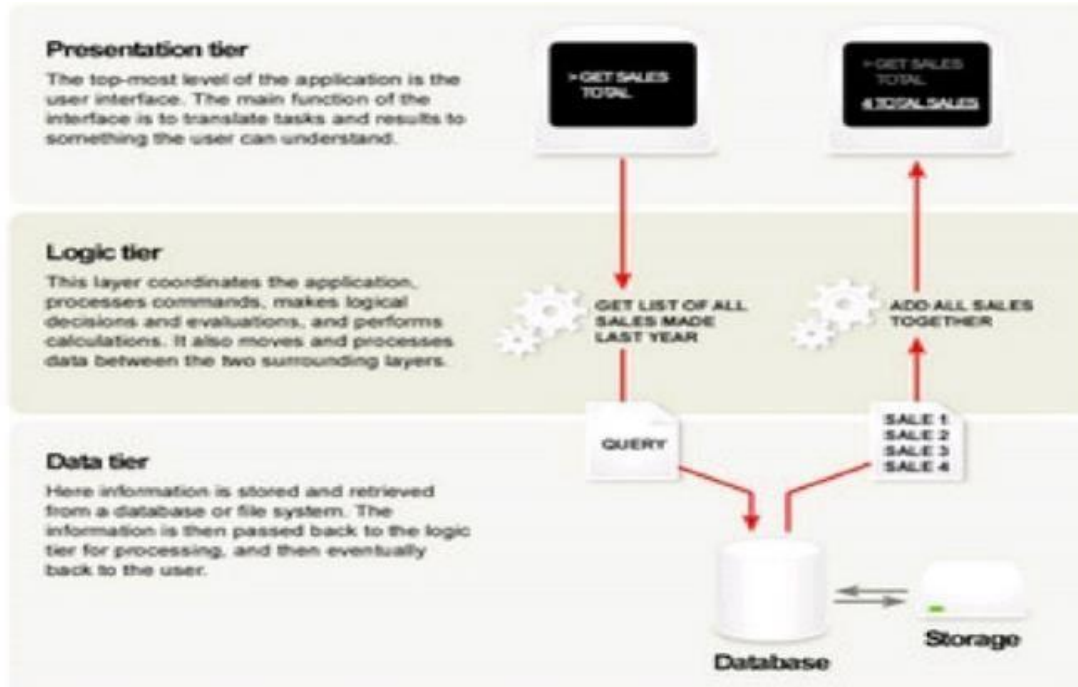
Business Logic Tier

The business logic tier is middle tier of three level design, The business logic for the payroll management system would be present here the Business Logic tier is responsible for information exchange between the computer programme and the database .

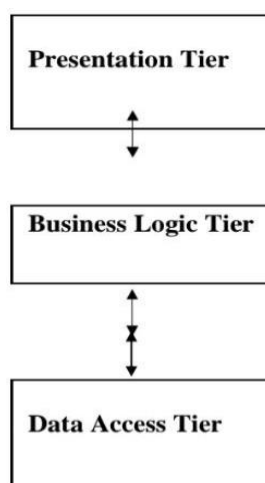
Data Access Tier

This is the last layer of the three tiered architecture in which the data access tier is mainly consists of the Database servers. The data associated with Payroll Management system is stored and retrieved from here.

A SIMPLE REPRESENTATION OF THE THREE TIER ARCHITECTURE WOULD BE AS FOLLOWS:-



THE ARCHITECTURE OF PAYROLL MANAGEMENT SYSTEM CAN BE DEPICTED AS FOLLOWS:-



FEATURES OF PAYROLL MANAGEMENT SYSTEM

Following are the options of payroll management system are as follows:-

1.High Accuracy and on time

The record of an employee is generated supported his work duration, lateness, overtime, leaves and so on. The code ought to be capable of calculating all these with at the most accuracy. Even when there is oversized variety of staff, the code ought to be ready to be able to process payroll to discharged staff on time.

2.Audit Reports

The quality of payroll will increases with the quantity of staff. When you are managing a large number of employees, it becomes critical to make accurate audits of payroll data. The payroll code ought to be build this method straightforward for the auditors by providing them enough information.

3.Income Tax | Pay as you earn

The payroll software ought to have provision to track Income tax rules of various countries in order that the Income tax processing can be fully automated. The software should automatically calculate income tax to be paid and should also prepare tax statements to be submitted to the income tax department.

4.Bank Transfer

The payroll software generates earning transfer statements which will be uploaded directly on to your banks or WPS system. The payroll software makes the method straightforward by generating salary transfer statements within the format needed by the banks.

5.User-defined Salary Structures

The payroll software ought to permit you to form payroll heads, specify your own payroll formulae and to arrange the payroll heads into multiple payroll structures. The code ought to be versatile enough to track payroll in several` payroll structures for various teams of staff in your company.

COMPONENTS OF PAYROLL MANAGEMENT SYSTEM

A)Gross pay

Gross pay, additionally called as gross income, is the total payment that an worker earns before any deductions or taxes area unit. For workers that are hourly, gross pay is calculated when the rate of hourly pay is multiplied by the total number of regular hours worked. If the employee has overtime hours, these are multiplied by the overtime rate of pay, and the two amounts are added along.

B)Deductions

There are a large array of voluntary deductions which will be taken out of an employee's gross pay, number of which are taken out before taxes and some being taken out after taxes. Pre-tax deductions are deductions and a few being taken out of an employee's gross pay quantity before it's subject to tax.

C)Taxes

Various levels of government need employers to withhold varied kinds of income tax and payroll tax. In the United States, payroll taxes are used to support Social Security and health costs whereas financial gain income taxes are used for different federal and state programs.

D)Wage garnishments

A wage garnishment is a court-ordered methodology of assembling owed debts that need employers to withhold cash from worker wages and then send it directly to the creditor. Wage garnishments are post-tax deductions, meaning that these mandatory withholdings do not lower an employee's assessable financial gain.

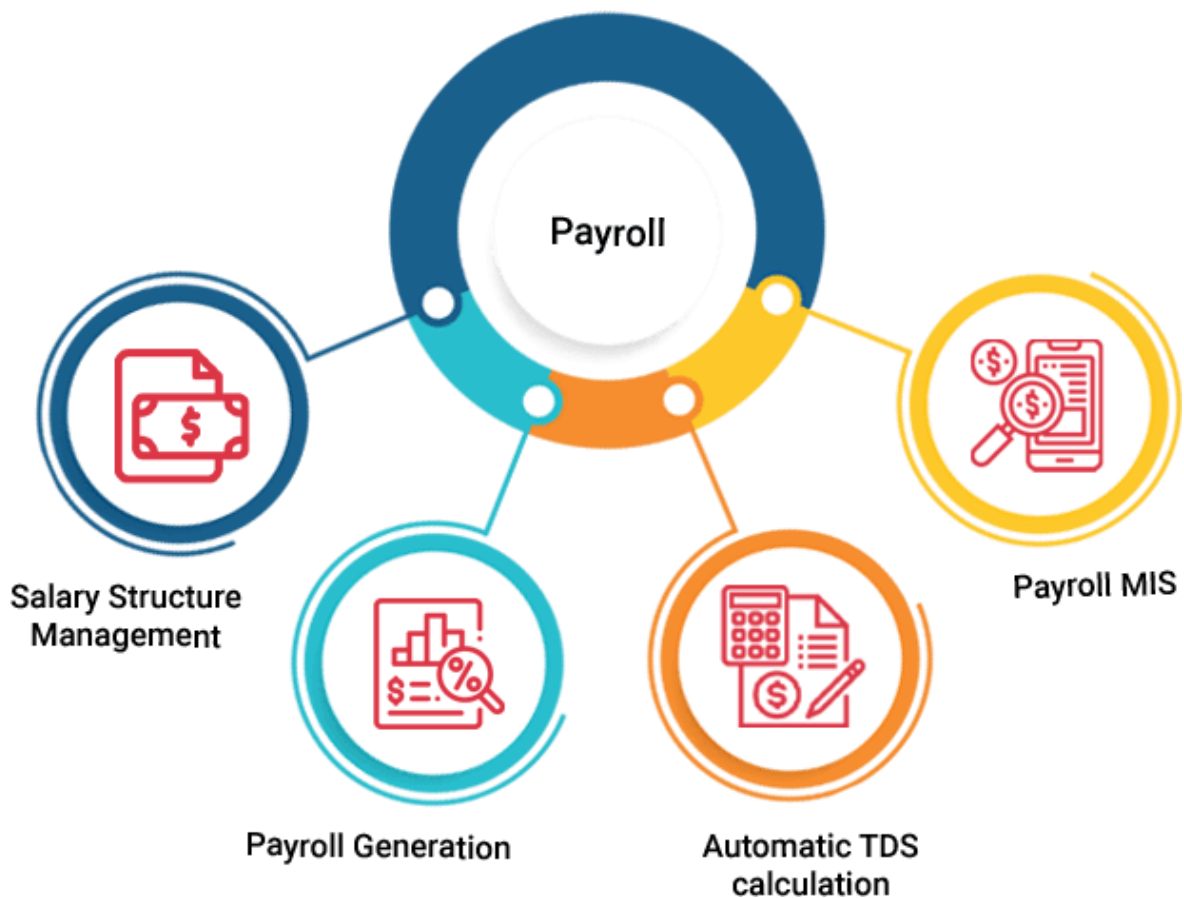
E)Net pay

Net pay is that the total quantity that an employee receives on balance needed and voluntary deductions are taken out.

OBJECTIVE OF PAYROLL MANAGEMENT SYSTEM

The main objective of payroll management system are as follows:-

- 1.To improve efficiency of company's administration
- 2.To store up to this point information of the employees.
- 3.To form the employees understand the principles of the company.
- 4.Generate Accurate Year-to-Date Reports for Employee Income.
- 5.Generate Paychecks and Pay Stubs.
- 6.Help Owners Comply with Labor Laws.
- 7.To reduce extra value for the safety of the database.
8. A high level of skill and an inherent ability for maths and accountancy are necessary traits for all payroll workers, can got to deliver accurate net-pay to employees, make statutory deductions, and submit correct tax reports to government income authorities like HMRC.
- 9.Once the payroll management system is about up, several components may be machine driven, to reduce errors and delays.



BENEFITS OF PAYROLL MANAGEMENT SYSTEM

- Interact with the software package with menu driven program with user friendly interface.
- Manage worker data with efficiency.
- Maintain Allowances Conveyances, Deductions, Allowances details for the workers.
- Manage Increment of the workers mechanically.
- Efficiently manage the advance payment taken by the workers.
- Prepare the elaborated Salary card of all the workers within the Organization.
- Generate record for all the workers.
- Generate Reports according to the Requirement of the management.

APPLICATIONS OF PAYROLL MANAGEMENT SYSTEM

Most businesses across the world have integrated payroll management software package, streamlining payroll processes, for compliance, and improving tax filing as well as securing the payroll system.

Payroll applications permit several tiny and medium-sized firms to handle their payroll management needs without having to outsource to a third-party. Here are the leading payroll management solutions vendors in the US.

ADP

ADP could be a cloud-based platform that simplifies payroll and HR management in one scalable, compliant solution. It's accessible from any device. Straightforward to implement and cost efficient, now there is a single system to manage your company's payroll and worker time, training, talent and enlisting management.

Gusto

Gusto is a strong platform that mixes payroll software package, compliance, and advantages administration options. It is designed for little businesses in the US to assist them grow. Also, it permits these firms to simply manage their staff members' HR needs.

Paychex

Paychex, Inc. is an American supplier of human resource, payroll, and advantages outsourcing services for small- to medium-sized businesses.

Sage 50cloud

Sage 50cloud could be a set of line of work of accountancy and payroll merchandise developed by Sage Group aimed at small and medium enterprises. Sage supply completely different products under the Sage 50 name in numerous regions. The product name originally derives from the UK and Ireland version

Paycor

Paycor optimizes practically each aspect of HR, from managing labor costs, time, and performance reviews to recruiting, retention and worker communication. Quickly and with confidence pay workers from where you're and need not to worry about tax compliance again.

CHAPTER 2

LITERATURE SURVEY

Payroll processing system is an organization aimed toward automating the calculations of allowances, deductions and taxes including updating the ledger entries that are directly linked to generating financial statements. Payroll process system could reduce incidence of error and risk of information. Payroll processing system is so important in an organization because it involves the payment of the organization's workforces and protection of its reputation by ensuring that the organization complies with the government authorities .In payroll processing an company may face many challenges in payroll process such as to pay employees accurately on time. Payroll processing is tedious, time consuming and also increase effort to the process particularly in large organizations with huge number of employees .It also leads to increasing needs for computerized or automated payroll processing system. Payroll System is a flexible compensation administration solution. It is designed to help human resource professionals as well as finance and accounting personnel to manage employee compensation, deductions, allowances, and benefits in an organization.

Various scientific researchers also study regarding payroll processing system, some of them are listed below:-

According to Chetan wain (2014), payroll being the foremost necessary part of HR generalist as a part of number of jobs to offer and make enable them to handle payroll calculation of employees independently.

According to Ajit Yadav (2014) payroll is incredibly important to its recipients employee of a company. Employee moral can be negatively affected by errors and irregularities in payroll, so an organisation must distribute payroll in an appropriate manner.

According to Charlie (2000) outlined that “Payroll strategies increases gain, maximize employee efficiencies, scale back time in transactional HR areas”.

According to Robert leach (1999) said that “Payroll function may be higher integrated into the HR function, whether any of the information held by the payroll function may usefully be shared”.

According to kyle pomerleau (2014)“Government levy payroll taxes on both the employee and the employer, though both are ultimately paid by wage earners”.

Payroll Management Process

Calculation of gross salaries and deductible amounts could be a tedious task that involves risk. A number of the organizations use the standard manual methodology of payroll process and a few choose the advanced payroll process software organization opts for any of the subsequent payroll processing strategies available:

1) Manual System

Manual payroll system is the ancient payroll system that involves pen and ink, calculating machine, spreadsheet, etc rather than computers, software and alternative computerized aids. The method was very popular when there have been no processed suggest for payroll process.

2) Accountant

Accountant could be skilled person having a degree or diploma in finance or accountancy. He /she is responsible for all activities related to payroll accounting. He/she has sound knowledge of accounting principle and globally accepted standards. The method add price and value to the organization.

3) Pay roll

Pay roll outsourcing involves a third party within the calculation of salaries and deduction. It save time and cost for the organization. If there's lot of variety of workers say more than 900-1000, in the organization, payroll outsourcing should be very beneficial.

The data is provided to the consultants/ outsourcing firms.

The various payroll functions undertaken by the outsourcing organizations are as follows:

1. Analysis of Payroll records, payroll taxes
2. Medical claim process
3. Employee Insurance & Provident fund process
4. Quality Audit procedures.

Common challenges in payroll management system

1)Administrative Issues

Several businesses, considerably smaller ones, still do their payroll method manually. A manual payroll system needs an sometimes wants an excellent deal of manual interventions. It creates an administrative burden for you and your staff.

2)Organizational Challenges

Maintaining payroll records and associated worker information in an smart and correct manner is one in every of the foremost vital structure challenges .Typically it's merely a matter of work flow – keeping files and documents in a very central location and making uniform filing processes.

3)Incompatible Software Package

Finding and finance a program that can integrate all of these functions will contour your overall technique, scale back the number of quantity spent on tracking and with data input, and even enable your entire department to become heaps of economical and cost effective.

4) Tracking Employee

Absence Manually trailing your Employees's vacation and sick days could be a cumbersome task with potential for mistakes. Paper time cards and even straightforward digital time sheets are notoriously vulnerable to misuse and unintended errors. This might need associated overall impact on payroll calculation.

5) Compliance Risks

Irrespective of the dimensions of the organization, even a little payroll error might worth heaps to your business. To avoid compliance problems and risks, firm ought to keep compliant with several federal and state labour laws.

How to Tackle and Establish Payroll Challenges?

We can establish and tackle payroll management system challenges by using big data. According to the information of Deloitte company (year 2014) the company uncovered a number of the foremost pressing challenges facing the payroll management profession. The report highlighted some big issues. Around 25% of survey respondents said that their company's international payroll solutions weren't properly setup or documented. Nearly a third of participants said that they were still fleshing out their payroll and workforce management strategy, despite the undeniable fact that several of the businesses had been established for many years.

Scope of Payroll Management System

- The proposed Payroll System will cover several aspects of time keeping and payroll process. This includes the capture of data supported the employee's work schedule, daily time worked and daily time rendered.
- The payroll method encompasses all activities necessary to report employees' time worked .
- The system can convert the present company's time keeping and payroll into Visual Basic Program.
- The system can have a file management wherever it covers the records of workers and system transaction log.
- The system conjointly covers the Payroll Processing and coverage which incorporates the pay calculation of salary slip and time off tracking.
- The worker will use biometrics to time-in and time-out for recording of activity.
- The system can have a report outline summary of time sheet, summary of Payroll Computation, Summary of Tax Refund.

Significance of Payroll Management System

To the Management

An organization can greatly profit with the exponent's study because they don't need to hire any programmers to do the work in their system.

The proponents will develop their system. So the proponents ask for the support of the company. This will lead in lessening the charges of the company which can be used in their other expenses. They will also find it easier to do task with the system like the biometrics wherein they can assure that their time keeping system is secure.

To the Workers

The workers will profit in the system. They will find it easier to distribute about their records since searching in the system is faster than tracking in the record book or log book. The biometrics will give them an easier time with their time log and they don't have to worry about losing their time cards because it is not necessary. Human Resources Personnel managing the time keeping will not be the same again as they will witnessrelieve. It would be fast and easy for them to handle deals similar as report making and monitoring time entries.

TYPES OF PAYROLL MANAGEMENT SYSTEM

Payroll management software will be classified by preparation of (cloud vs. enterprise), business size (small business vs. enterprise), and target market (general vs. industry-specific). There is another way to clearly classify payroll software, which will impact your workflows.

1. Integrated payroll management. Payroll, accounting, and HRM have overlapping processes. Thus, often, payroll management is integrated as a module in accounting software, HRM, or an organization-wide business system like ERP. It will be a regular feature or separately charged as an add-on. Integrated payroll management covers core tasks like payroll process, taxation calculations, and paycheck printing.

Examples: BambooHR, Xero, Wave, UltiPro

2. Dedicated payroll management. These square measure standalone apps that go beyond core options with specialized functions as time-tracking and attendance, customized reporting, edges administration, and even a tax planner. A good dedicated payroll should easily integrate with other HRM and accounting systems. This sort of payroll system is well liked among payroll services and small businesses.

Examples: Gusto, Intuit Payroll, SurePayroll

ELEMENTS OF INTERNAL CONTROLS OVER PAYROLL MANAGEMENT

Elements of internal controls over payroll management are described below:-



Manual Payroll System VS Computerized Payroll System

MANUAL PAYROLL SYSTEM

A manual payroll system wants a whole skillful team to manage the payroll technique

1. It depends entirely on human effort with none system obtaining used.
2. The complete method is finished by hand which would even include monitoring attendance, data and calculations.
3. It's awfully time intense and a drawn out technique.
4. This method is require to boot at a risk of inconsistencies and can involve error as it is totally done by people.
5. It's a less secure methodology as a result of it involves plenty of paperwork.
6. Backing up data and information here isn't simple as paper records can get misplaced.

COMPUTERIZED PAYROLL SYSTEM

An processed payroll system uses specialized payroll software system.

- 1) This software package automates the total process of payroll including monitoring attendance, calculating tax and information check.
- 2) It wants bottom human intervention.
- 3) It could be a shorter technique because the strategy is machine driven.
- 4) This system doesn't leave extra for inconsistencies as is error free because of the total method being processed.
- 5) This may be safer methodology as a result of the information is encrypted and password protected.
- 6) Backing up information and data here is straightforward because of the electronically save information in the computer. Some of the best payroll system providers in current market are Skuad, Papaya global, Deel etc.

What are the potential problems of payroll management?

1. **Incompatibility with alternate systems.** This may be the stickiest issue and can sow chaos to your automation plans. Not all payroll systems are designed to figure out with alternative systems like HRM, ERP, and accounting software system. Imagine your frustration to seek out your payroll system can't manage employee records you've keep in another application. Always check for integration—how the system works with the apps you're using—once searching for the best payroll management solution.
2. **Non-compliant options.** Payroll management processes like in accounting are tightly regulated by native, state, and federal laws. The system must comply with regulations in an accurate and timely manner, which include correct withholding taxes, deductions, and coverage to relevant agencies. Likewise, the system has to be regularly updated for tax law changes or new regulations. Non-compliance prices you heaps in penalties and surcharges.
3. **Sensitive information in third-party hands.** Alternate cloud solutions, the problem of storing sensitive information like worker data and payroll details on vendor servers always rears its ugly head in cloud vs. on-premise debates. However if the seller is reputable, then established security shouldn't be in difficulty considering the alternative.
4. **Incomplete options.** Some payroll management system focus solely on core functions as payroll administration and attendance. They skip non-core tools which will be key to your workflows. For example , you will got to check printing, real-time reporting, advantages designing and biometrics integration.
5. **Too several options.** Conversely, a little business with basic payroll wants could find yourself paying for a totally integrated system. Payroll is commonly a feature in larger systems like accounting, HRM, and ERP.

Factors to Consider When Selecting Payroll Software are as follows:-

Support and customer service

Payroll software system ought to be capable of meeting the customers' expectations make sure that the software system has the correct client service system to serve every client efficiently.

Integration

The software system ought to be able to handle tasks like importing and exporting information via surpass sheet, enterprise resource designing, human resource management, and biometric devices for time and attendance.

Cost

Businesses want software system that's each reasonable and may will get the work done quickly. Check for hidden charges associated with the software before buying.

Convenience

Payroll software system saves on time and money ensuring workers are paid on time and business run smoothly.

Web-based application

The software need to be web-based to permit for easier collaboration between management and staff and to speed up business processes.

User-friendly

User-friendly software system permits employers, staffs to easily access completely different options from handheld devices. This makes it simple method to do payment and receive it on time.

Free of cost trial

There need to be a free demo or trial of the software system before judgement a final decision to buy it. This will modify you to understand whether the software system will meet the long term expectations of the comporate.

What are the latest payroll trends?

1. **Hybrid solution.** This trend is evident in vendors like Quickbooks Payroll, which offers a free app and relies on payroll services for revenues. Startups are attracted to this setup to gain control over their data while freeing them up from the headaches of day-to-day administration.
2. **Mobile and self-service payroll.** Mobile payroll apps let employees access their pay details and relevant information like holidays, increased leaves, and attendance. Employees can also print payslip or keep a digital file of it.
3. **Data-driven.** Payroll management is turning into an instrument for data-driven strategic selections because it involves major costs and critical resources (talents), companies are turning to the immense volumes of knowledge payroll management systems generate to find patterns and insights that facilitate shape strategies and drive the company's overall competitiveness. For example, the system can churn out employee turnover rate or overall company mood using leaves and absences as metrics, even if the system is not designed for business intelligence tasks.
4. **Machine learning.** The technology is creeping its way into consumer gadgets (IoT) and, now, business solutions, payroll management systems notwithstanding. It's a self-learning algorithm that studies your daily actions in the system and use these to refine procedures, navigation, and UI.

What are the six steps in managing a payroll system?

Maintaining or creating a payroll management system for the first time may consist of these steps:

1. Apply for an employer identification number (EIN)

- An EIN, which can be obtained from the IRS, is necessary to file payroll taxes. Employers may also need to apply for state or local identification numbers.

2. Gather employee tax documents

- Form W-4 and state withholding certificates are required to help employers calculate employee payroll tax deductions.

3. Determine a payroll schedule

- Common pay periods are weekly, bi-weekly and semi-monthly. Some states may have pay frequency requirements.

4. Document terms of compensation

- Have clearly written policies explaining company requirements and laws for hours worked, overtime, paid time off, etc. In addition, it's necessary to obtain each employee's written consent for benefit contributions and other voluntary payroll deductions, as well as certain wage payment methods, like direct deposit and pay cards.

5. Choose a method for processing payroll

- Businesses can manage payroll in-house or choose to outsource the process to a payroll service provider for optimal time savings and compliance support.

6. Open a bank account for payroll

- Separate payroll accounts often lead to better management of funds, easier reconciliation and more accurate payroll transaction records.

SYSTEM DESIGN

System design is the process or art of defining the architecture, components, modules, interfaces and data for system to satisfy specify requirements.one could see it as the application s of system theory to product development.

Design is the first phase in development phase for any engineer's product's system. Design is the creative process. It deals with the creating ability of the programmer. A good design is the key to effective system.

INPUT DESIGN

The user interface design is very important for any application. The interface design describes how the software communicated within itself, to system that interpreted with it. The interface is a packing computer software if the interface is easy to learn, simple to use. If the interface design is very good then the user will fall into an attractive software application.

The input design is the process of converting the user oriented inputs into the computer based format. Errors entered by data entry operations can be controlled by input design. The data is fed into the system by making simple interactive pages. The data is validated wherever it requires in the project. This ensures that only the correct data have been incorporated into the system.

The objectives of input design are :

1. To produce a cost effective method of input.
2. To make the input forms understandable to the user.
3. To ensure the validation of data input.
4. To achieve the highest position level of accuracy.

In the proposed system the user is provided with respective forms to input the required data. The input screen in this project are as follows:

- Signup form
- Login form
- Payroll management system

OUTPUT DESIGN

The system output is that the most vital and direct supply of data to the user. Outputs from the computer system are needed primarily to speak the results of process to users. Two phases of output design are as follows.

- Output definition.
- Output specification.

The objectives of output design are as follows:-

1. Design output to serve the indented purpose.
2. Provide output on time.
3. Assume that output is where it is needed.
4. Design output to fit the user.

The output screens in this project are as follows:-

- Signup page
- Login page
- Payroll Management system
- New worker
- Display worker
- List of worker
- Salary slip

DATABASE DESIGN

A database design could be a assortment of data. A Primary objective of a database management system is to produce a convenient setting to retrieve and store database information. The foremost well liked and flexible database system is relational database management system.

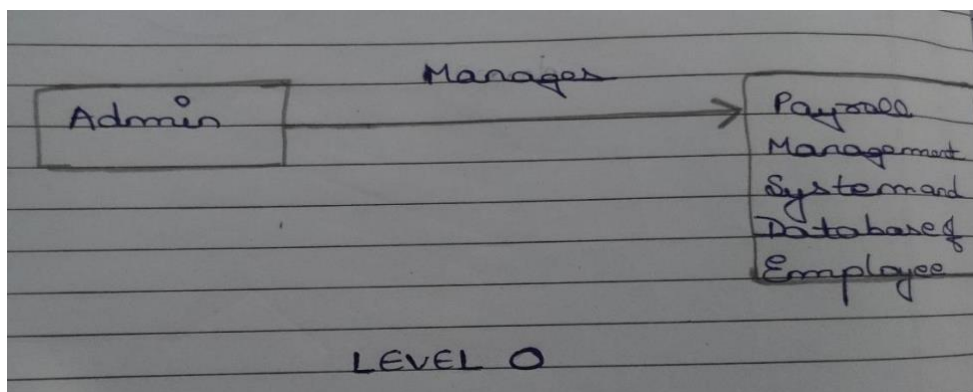
Data flow diagram

A data flow diagram (or DFD) could be a graphical illustration of the flow of data through an information system. It shows information is input to and output from the system, information sources and destinations, and wherever it's keep.

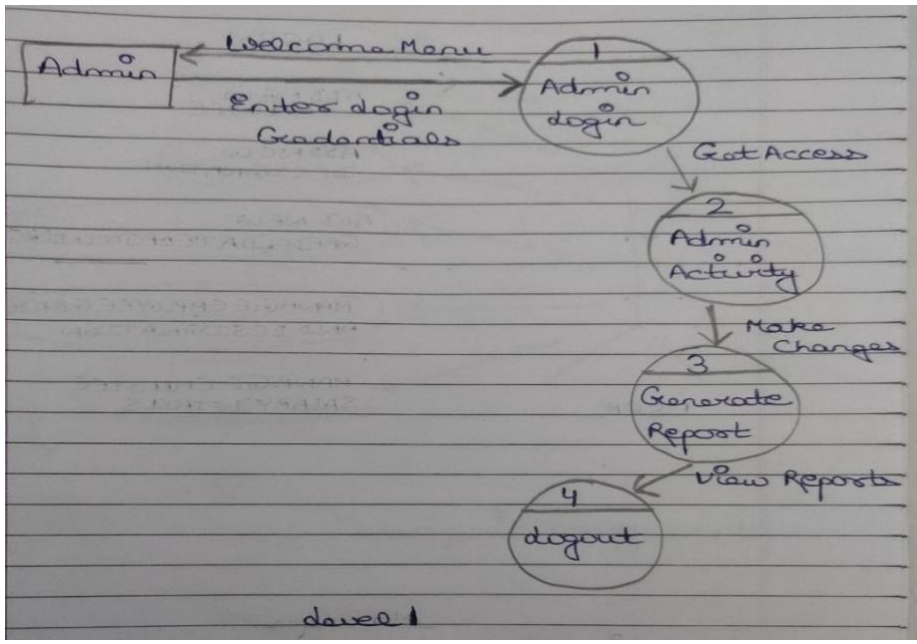
Components of DFD

The Data Flow Diagram has four components:

- Process
- Data flow
- Warehouse
- Terminator

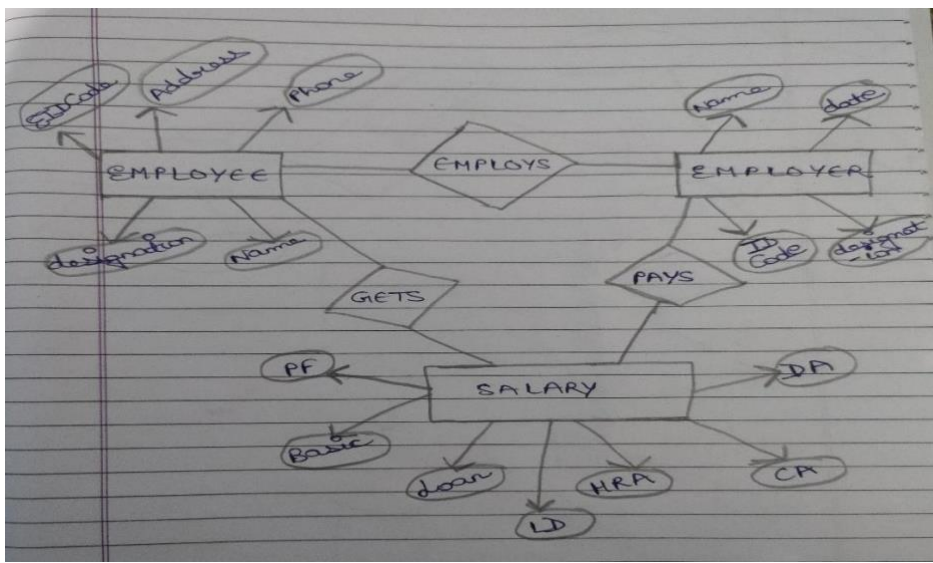


Level 1 Data Flow Diagram



Er Diagram of Payroll Management System:

An entity-relationship diagram (ERD) represents the relationships among entity sets kept in a database. An entity in this context is a component of data. We can say that ER diagrams illustrate the logical structure of databases. We are an entity-relationship diagram that looks similar to a flowchart. It is the different symbols, and the meanings of these symbols, that make it unique.



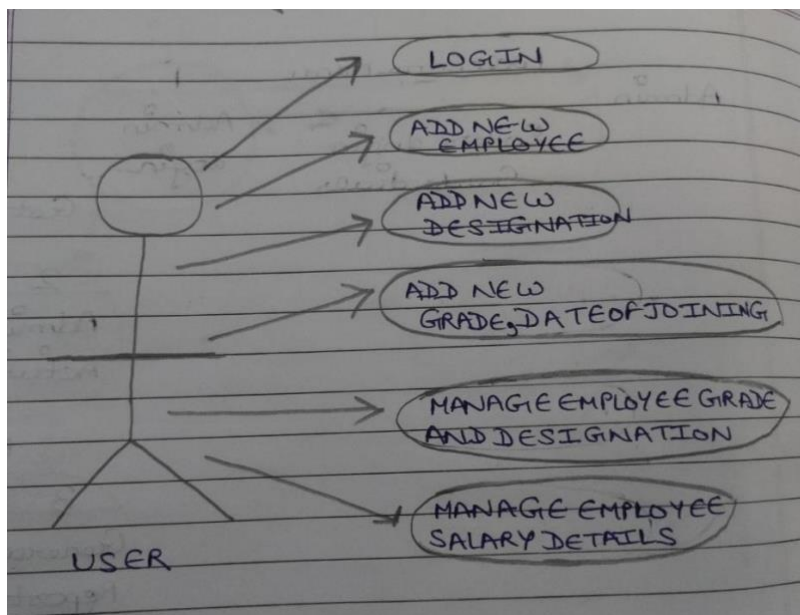
USE CASE DIAGRAM

A use case diagram is employed to represent the dynamic behavior of a system. It encapsulates the system's practically by incorporating use cases, actors, and their relationships. It models the tasks, services, associated degree functions needed by a system/subsystem of an application. It depicts the high-level functionality of a system and additionally tells however the user handles a system.

Purpose of a Use Case Diagram

Following are the purposes of a use case diagram given below:

1. It gathers the system's wants.
2. It depicts the external view of the system.
3. It acknowledges the internal as well as external factors that influence the system.
4. It represents the interaction between the actors.



HEADER FILES USED IN THE PROJECT ARE AS FOLLOWS:-

1. #include <iostream.h>

- It is used as a stream of Input and Output using cin and cout.

2. #include <fstream.h>

- It is used to control the data to read from a file as an input and data to write into the file as an output.

3. #include <process.h>

- process.h is a **C header file** which contains function declarations and macros used in working with threads and processes.

4.#include <string.h>

- It is used to perform various functionalities related to string manipulation like strlen(), strcmp(), strcpy(), size(), etc.

5.#include <stdlib.h>

- **stdlib.h** is the header of the **general purpose standard library** of C programming language which includes functions involving memory allocation, process control, conversions and others

6.#include <stdio.h>

- It is used to perform input and output operations using functions **scanf()** and **printf()**.

7.#include <ctype.h>

- It contains function prototypes for functions that test characters for certain properties , and also function prototypes for functions that can be used to convert uppercase letters to lowercase letters and vice versa.

8.#include <conio.h>

- **conio.h** is a header file used for functions related to console input/output. **conio.h** has many inbuilt library functions that are used to perform input and output from a c program.

9.#include <dos.h>

- **dos.h** is a header file of C Language. This library has functions that are used for handling interrupts, producing sound, date and time functions, etc.

10.#include <graphics.h>

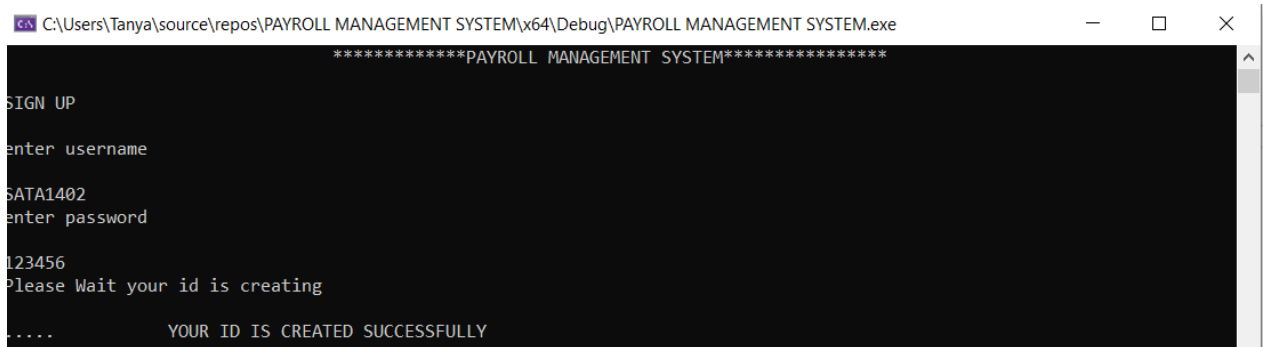
- Graphics programming in C used to drawing various geometrical shapes(rectangle, circle eclipse etc), use of mathematical function in drawing curves, coloring an object with different colors and patterns.

EXECUTION OF PROJECT

FRONT END TECHNOLOGY(C++)

SIGNUP FORM

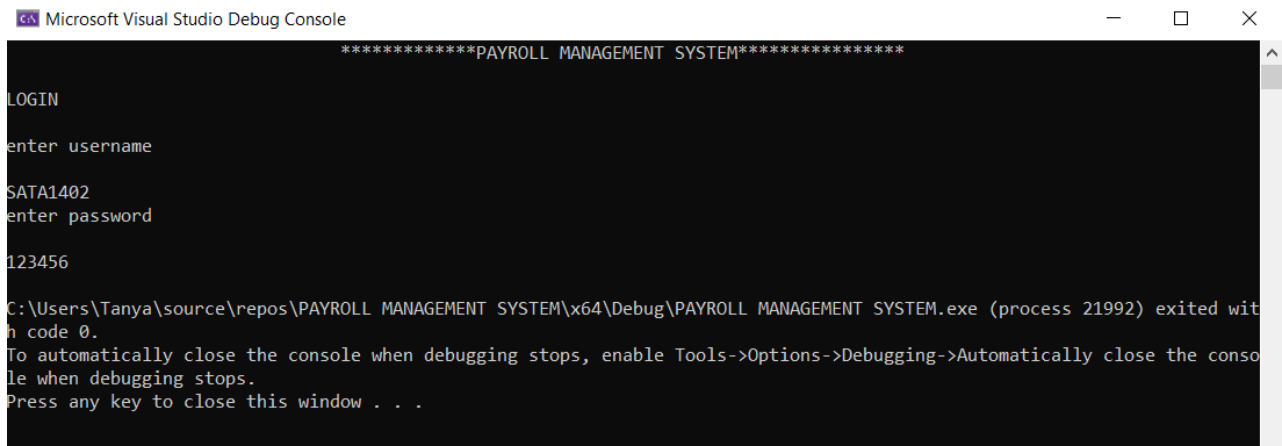
Below is the signup form in which you have to enter username and password then your id is created.



```
C:\Users\Tanya\source\repos\PAYROLL MANAGEMENT SYSTEM\x64\Debug\PAYROLL MANAGEMENT SYSTEM.exe
*****PAYROLL MANAGEMENT SYSTEM*****
SIGN UP
enter username
SATA1402
enter password
123456
Please Wait your id is creating
.....
YOUR ID IS CREATED SUCCESSFULLY
```

LOGIN FORM

Below is the Login form in which you have to enter your username and password then press enter you login to the system.



```
Microsoft Visual Studio Debug Console
*****PAYROLL MANAGEMENT SYSTEM*****
LOGIN
enter username
SATA1402
enter password
123456
C:\Users\Tanya\source\repos\PAYROLL MANAGEMENT SYSTEM\x64\Debug\PAYROLL MANAGEMENT SYSTEM.exe (process 21992) exited with
n code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
le when debugging stops.
Press any key to close this window . . .
```

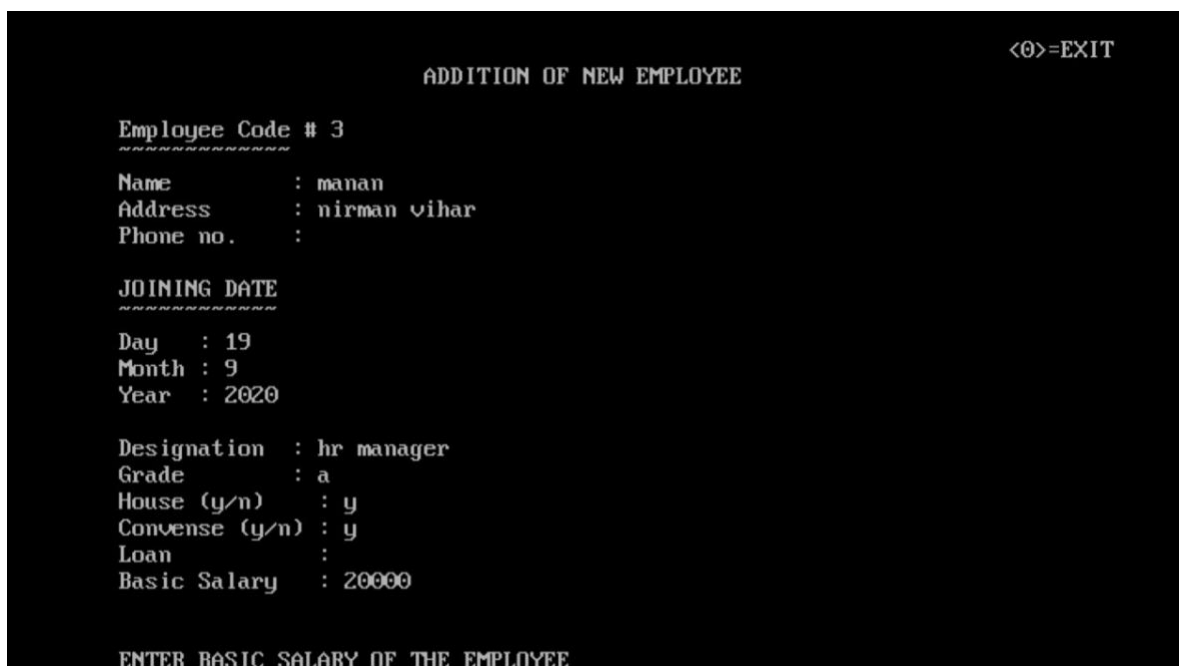
PAYROLL MANAGEMENT SYSTEM

Below is the design of the payroll management system which display all the menu you can choose any out of the following options.



1. NEW EMPLOYEE

This helps in adding the record of the new employee in the table.



2.DISPLAY EMPLOYEE

This helps in displaying the information of entered employee code.

```
Employee Code # 2
*****
Name       : MUSKAN
Address    : PREET VIHAR
Phone no.  : -

JOINING DATE
*****
Day       : 16
Month     : 3
Year      : 2020

Designation : MANAGER
Grade      : B
House (y/n) : Y
Convense (y/n) : Y
Loan       : 0
Basic Salary : 18000

Press any key to continue...
```

3.LIST OF EMPLOYEES

Below is the list of Employee's details which you add previously.

```
LIST OF EMPLOYEES
*****
CODE NAME      PHONE   DOJ      DESIGNATION  GRADE  SALARY
*****
1  TANYA        -       12/4/2020  MANAGER      A      0
2  MUSKAN       -       16/3/2020  MANAGER      B      18000
3  MANAN        -       19/9/2020  HR MANAGER   A      20000

Press any key to continue...
```


5.SALARY SLIP

Below is the salary slip of the employee which shows employee name,basic salary,net salary and other taxes.

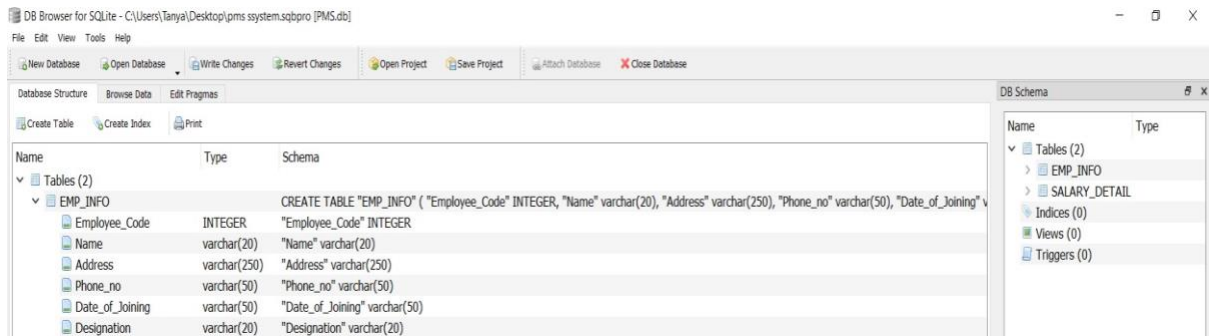
ANKIT, PGDBA - 20079809																									
Salary slip April, 2022	Date: 18/4/2022																								
Employee Name : MANAN Designation : HR MANAGER	Grade : A																								
<table border="1"><tbody><tr><td>Basic Salary</td><td>: Rs.20000</td></tr><tr><td colspan="2">ALLOWANCE</td></tr><tr><td>HRA</td><td>: Rs.1000</td></tr><tr><td>CA</td><td>: Rs.400</td></tr><tr><td>DA</td><td>: Rs.1000</td></tr><tr><td></td><td>Rs.2400</td></tr><tr><td colspan="2">DEDUCTIONS</td></tr><tr><td>LD</td><td>: Rs.0</td></tr><tr><td>PF</td><td>: Rs.400</td></tr><tr><td></td><td>Rs.400</td></tr><tr><td colspan="2">NET SALARY</td></tr><tr><td></td><td>: Rs.22000</td></tr></tbody></table>		Basic Salary	: Rs.20000	ALLOWANCE		HRA	: Rs.1000	CA	: Rs.400	DA	: Rs.1000		Rs.2400	DEDUCTIONS		LD	: Rs.0	PF	: Rs.400		Rs.400	NET SALARY			: Rs.22000
Basic Salary	: Rs.20000																								
ALLOWANCE																									
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CA	: Rs.400																								
DA	: Rs.1000																								
	Rs.2400																								
DEDUCTIONS																									
LD	: Rs.0																								
PF	: Rs.400																								
	Rs.400																								
NET SALARY																									
	: Rs.22000																								
CASHIER	EMPLOYEE																								

BACKENED TECHNOLOGY (MYSQL)

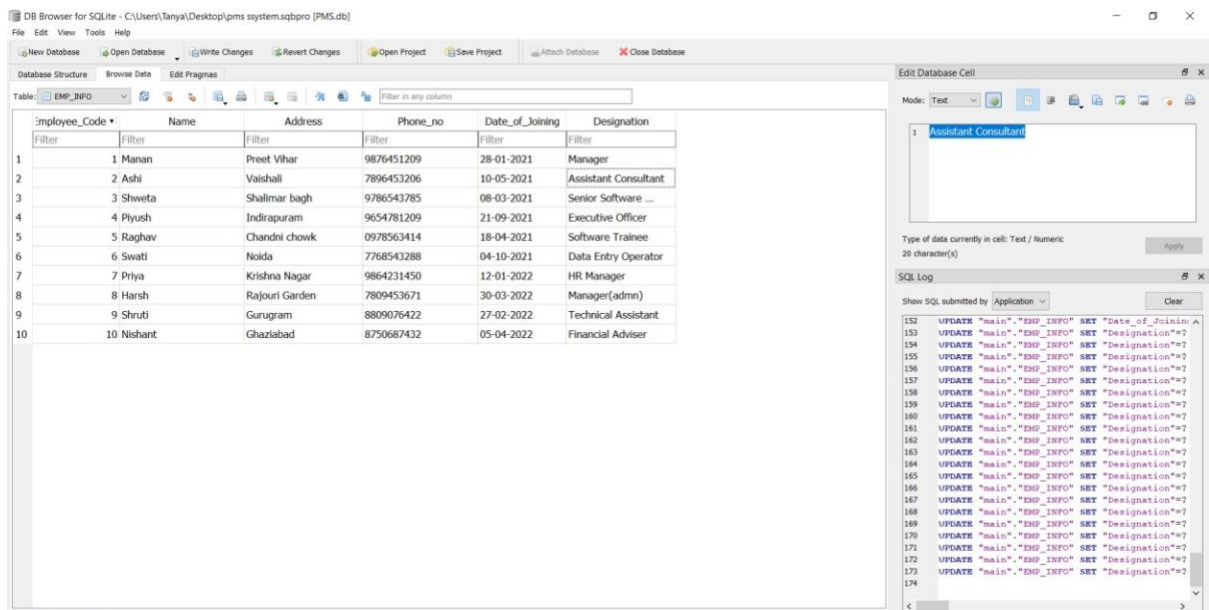
Step 1:-First we will create first table which is EMP_INFO which store all information about employee.

Syntax

```
CREATE TABLE "EMP_INFO" (  
    "Employee_Code" INTEGER,  
    "Name" varchar(20),  
    "Address" varchar(250),  
    "Phone_no" varchar(50),  
    "Date_of_Joining" varchar(50),  
    "Designation" varchar(20)  
)
```



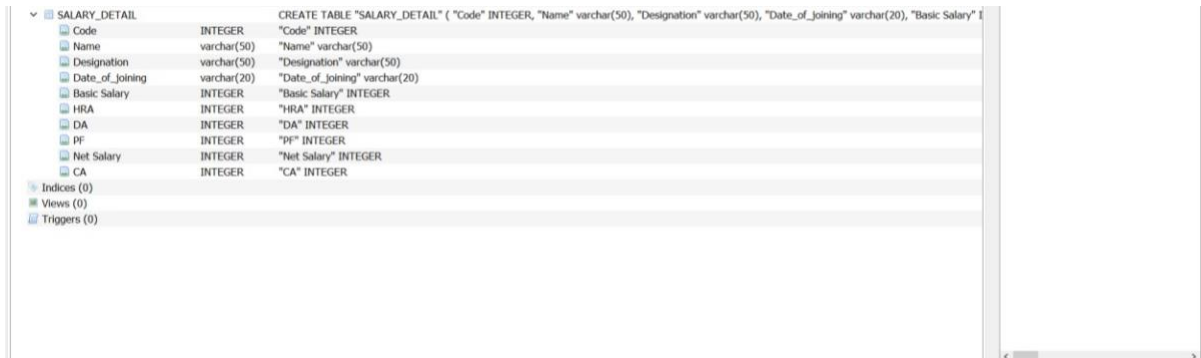
Step 2:- In EMP_INFO table now we insert data.



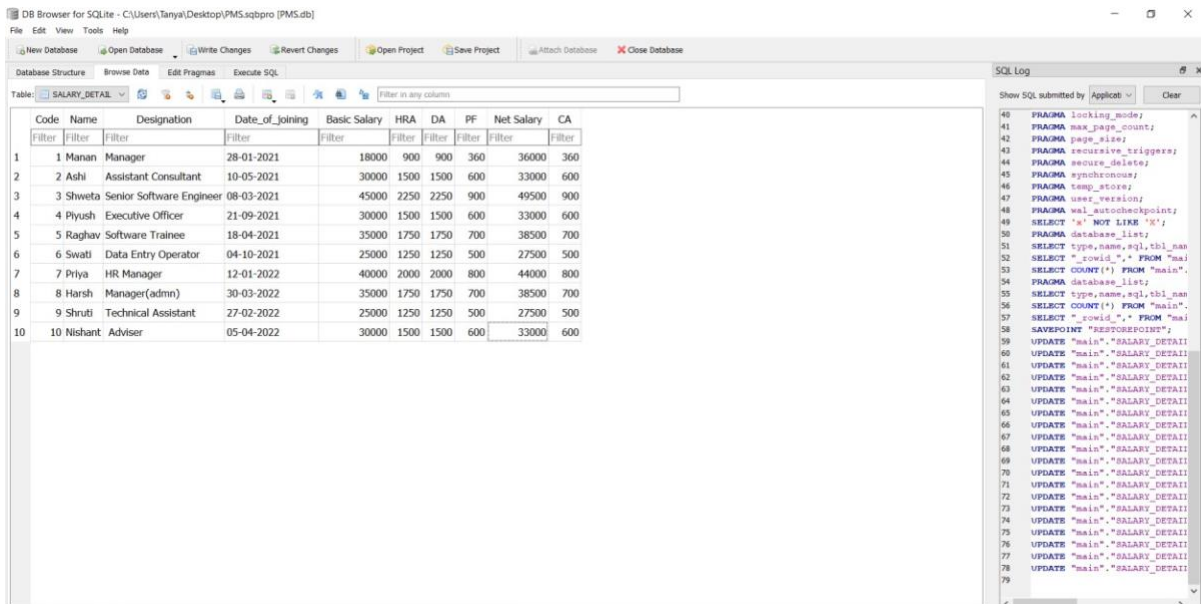
Step 3:- Now we will create another table which is SALARY_DETAIL which store all information about employee salaries .

Syntax

```
CREATE TABLE "SALARY_DETAIL"
(
  "Code" INTEGER,
  "Name"      varchar(50),
  "Designation"  varchar(50),
  "Date_of_joining" varchar(20),
  "Basic Salary"  INTEGER,
  "HRA" INTEGER,
  "DA" INTEGER,
  "PF" INTEGER,
  "Net Salary" INTEGER,
  "CA" INTEGER )
```



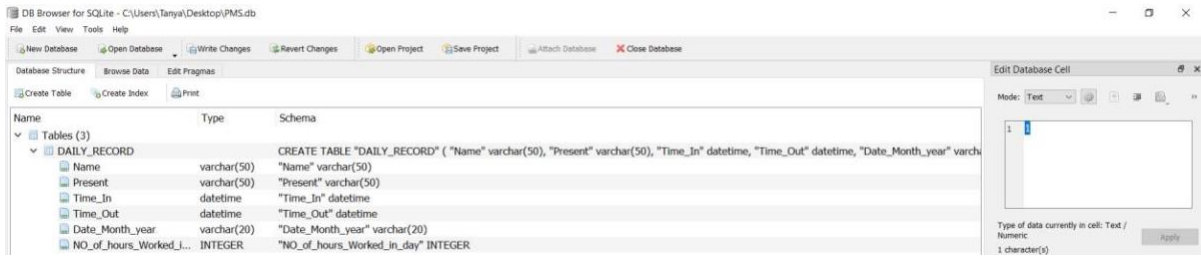
Step 4:- In SALARY_DETAIL table now we insert data.



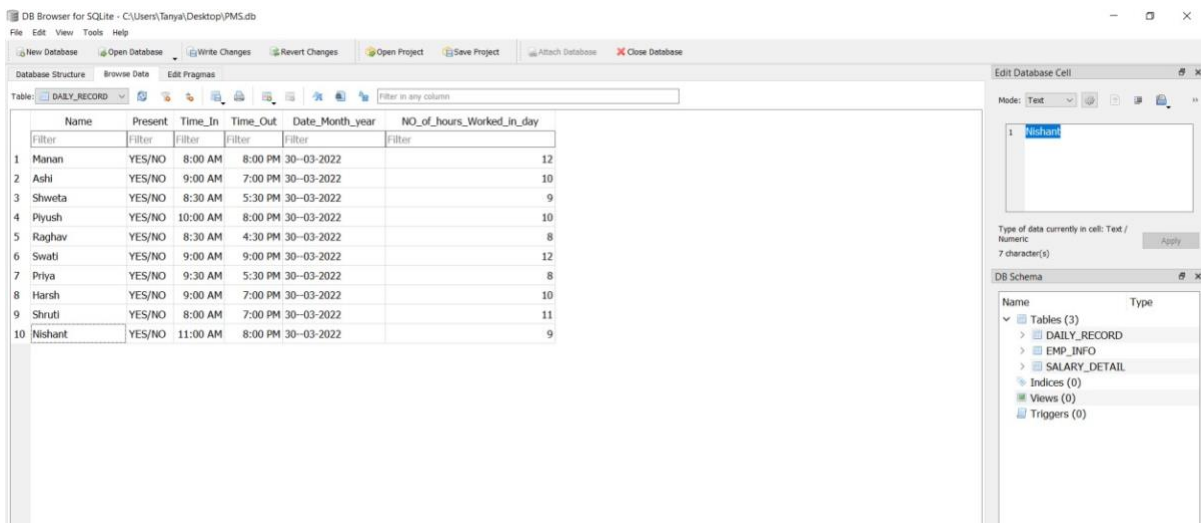
Step 5:- Now we will create another table which is DAILY_RECORD which record all information about employee present or absent,date of joining etc.

Syntax

```
CREATE TABLE "DAILY_RECORD" (
    "Name"      varchar(50),
    "Present"   varchar(50),
    "Time_In"   datetime,
    "Time_Out"  datetime,
    "Date_Month_year"      varchar(20),
    "NO_of_hours_Worked_in_day"      INTEGER
)
```

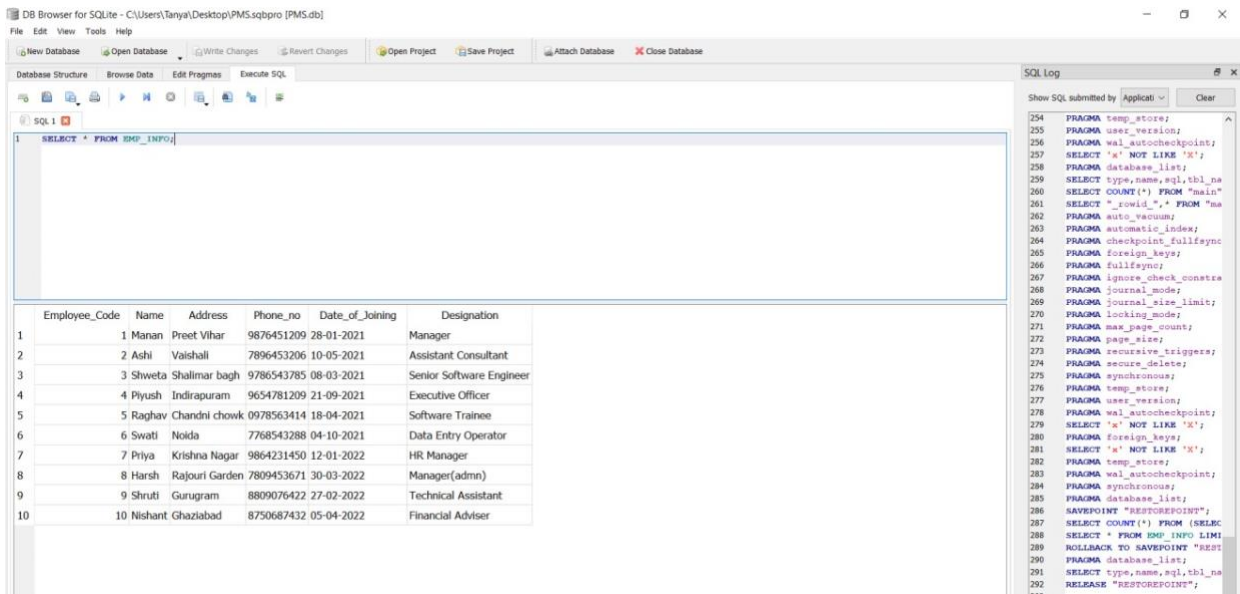


Step 6:- In DAILY_RECORD table now we insert data.



Queries

1. SELECT * FROM EMP_INFO;



2.SELECT * FROM DAILY_RECORD;

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File Edit View Tools Help

New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database

Database Structure Browse Data Edit Pragma Execute SQL

SQL 1

```
SELECT * FROM DAILY_RECORD;
```

	Name	Present	Time_In	Time_Out	Date_Month_year	NO_of_hours_Worked_in_day
1	Manan	YES/NO	8:00 AM	8:00 PM	30-03-2022	12
2	Ashi	YES/NO	9:00 AM	7:00 PM	30-03-2022	10
3	Shweta	YES/NO	8:30 AM	5:30 PM	30-03-2022	9
4	Piyush	YES/NO	10:00 AM	8:00 PM	30-03-2022	10
5	Raghav	YES/NO	8:30 AM	4:30 PM	30-03-2022	8
6	Swati	YES/NO	9:00 AM	9:00 PM	30-03-2022	12
7	Priya	YES/NO	9:30 AM	5:30 PM	30-03-2022	8
8	Harsh	YES/NO	9:00 AM	7:00 PM	30-03-2022	10
9	Shruti	YES/NO	8:00 AM	7:00 PM	30-03-2022	11
10	Nishant	YES/NO	11:00 AM	8:00 PM	30-03-2022	9

SQL Log

```
Show SQL submitted by: Apply Clear
281 SELECT * FROM DAILY_RECORD;
282 PRAGMA auto_vacuum;
283 PRAGMA automatic_index;
284 PRAGMA checkpoint_fullsync;
285 PRAGMA foreign_keys;
286 PRAGMA fullfsync;
287 PRAGMA ignore_check_constraints;
288 PRAGMA journal_mode;
289 PRAGMA journal_size_limit;
290 PRAGMA locking_mode;
291 PRAGMA max_page_count;
292 PRAGMA page_size;
293 PRAGMA recursive_triggers;
294 PRAGMA secure_delete;
295 PRAGMA synchronous;
296 PRAGMA temp_store;
297 PRAGMA user_version;
298 PRAGMA wal_autocheckpoint;
299 SELECT 'a' NOT LIKE 'x';
300 PRAGMA foreign_keys;
301 SELECT 'a' NOT LIKE 'x';
302 PRAGMA temp_store;
303 PRAGMA wal_autocheckpoint;
304 PRAGMA synchronous;
305 PRAGMA database_list;
306 SAVEPOINT "RESTOREPOINT";
307 SELECT COUNT(*) FROM (SELECT
308 SELECT * FROM EMP INFO LIMIT
309 ROLLBACK TO SAVEPOINT "REST
310 PRAGMA database_list;
311 SELECT type,name,sql,thi_na
312 RELEASE "RESTOREPOINT";
313 SAVEPOINT "RESTOREPOINT";
314 SELECT COUNT(*) FROM (SELEC
315 SELECT * FROM DAILY_RECORD
316 ROLLBACK TO SAVEPOINT "REST
317 PRAGMA database_list;
```

3.SELECT * FROM SALARY_DETAIL;

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Database Structure Browse Data Edit Pragma Execute SQL

SQL 1

```
SELECT * FROM SALARY_DETAIL;
```

	Code	Name	Designation	Date_of_joining	Basic Salary	HRA	DA	PF	Net Salary	CA
1	1	Manan	Manager	28-01-2021	18000	900	900	360	15480	360
2	2	Ashi	Assistant Consultant	10-05-2021	30000	1500	1500	600	25800	600
3	3	Shweta	Senior Software Engineer	08-03-2021	45000	2250	2250	900	38700	900
4	4	Piyush	Executive Officer	21-09-2021	30000	1500	1500	600	25800	600
5	5	Raghav	Software Trainee	18-04-2021	35000	1750	1750	700	30100	700
6	6	Swati	Data Entry Operator	04-10-2021	25000	1250	1250	500	21500	500
7	7	Priya	HR Manager	12-01-2022	40000	2000	2000	800	34400	800
8	8	Harsh	Manager(admin)	30-03-2022	35000	1750	1750	700	30100	700
9	9	Shruti	Technical Assistant	27-02-2022	25000	1250	1250	500	21500	500
10	10	Nishant	Adviser	05-04-2022	30000	1500	1500	600	25800	600

SQL Log

```
Show SQL submitted by: Apply Clear
288 PRAGMA journal_mode;
289 PRAGMA journal_size_limit;
290 PRAGMA locking_mode;
291 PRAGMA max_page_count;
292 PRAGMA page_size;
293 PRAGMA recursive_triggers;
294 PRAGMA secure_delete;
295 PRAGMA synchronous;
296 PRAGMA temp_store;
297 PRAGMA user_version;
298 PRAGMA wal_autocheckpoint;
299 SELECT 'a' NOT LIKE 'x';
300 PRAGMA foreign_keys;
301 SELECT 'a' NOT LIKE 'x';
302 PRAGMA temp_store;
303 PRAGMA wal_autocheckpoint;
304 PRAGMA synchronous;
305 PRAGMA database_list;
306 SAVEPOINT "RESTOREPOINT";
307 SELECT COUNT(*) FROM (SELECT
308 SELECT * FROM EMP INFO LIMIT
309 ROLLBACK TO SAVEPOINT "REST
310 PRAGMA database_list;
311 SELECT type,name,sql,thi_na
312 RELEASE "RESTOREPOINT";
313 SAVEPOINT "RESTOREPOINT";
314 SELECT COUNT(*) FROM (SELEC
315 SELECT * FROM DAILY_RECORD
316 ROLLBACK TO SAVEPOINT "REST
317 PRAGMA database_list;
318 SELECT type,name,sql,thi_na
319 RELEASE "RESTOREPOINT";
320 SAVEPOINT "RESTOREPOINT";
321 SELECT COUNT(*) FROM (SELEC
322 SELECT * FROM SALARY_DETAIL
```

4.SELECT * FROM SALARY_DETAIL WHERE Name='Ashi';

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Database Structure Browse Data Edit Pragma Execute SQL

SQL: 1

```
1 SELECT * FROM SALARY_DETAIL WHERE Name='Ashi';
```

Code	Name	Designation	Date_of_Joining	Basic Salary	HRA	DA	PF	Net Salary	CA
1	2 Ashi	Assistant Consultant	10-05-2021	30000	1500	1500	600	25800	600

SQL Log

```
285 PRAGMA database_list;
286 SAVEPOINT "RESTOREPOINT";
287 SELECT COUNT(*) FROM (SELEC
288 SELECT * FROM EMP_INFO LIM
289 ROLLBACK TO SAVEPOINT "REST
290 PRAGMA database_list;
291 SELECT type,name,sql,thi_na
292 RELEASE "RESTOREPOINT";
293 SAVEPOINT "RESTOREPOINT";
294 SELECT COUNT(*) FROM (SELEC
295 SELECT * FROM SALARY_DETAIL
296 ROLLBACK TO SAVEPOINT "REST
297 PRAGMA database_list;
298 SELECT type,name,sql,thi_na
299 RELEASE "RESTOREPOINT";
300 SAVEPOINT "RESTOREPOINT";
301 SELECT COUNT(*) FROM (SELEC
302 SELECT * FROM SALARY_DETAIL
303 ROLLBACK TO SAVEPOINT "REST
304 PRAGMA database_list;
305 SELECT type,name,sql,thi_na
306 RELEASE "RESTOREPOINT";
307 SAVEPOINT "RESTOREPOINT";
308 ROLLBACK TO SAVEPOINT "REST
309 PRAGMA database_list;
310 SELECT type,name,sql,thi_na
311 RELEASE "RESTOREPOINT";
312 SAVEPOINT "RESTOREPOINT";
313 ROLLBACK TO SAVEPOINT "REST
314 PRAGMA database_list;
315 SELECT type,name,sql,thi_na
316 RELEASE "RESTOREPOINT";
317 SAVEPOINT "RESTOREPOINT";
318 SELECT COUNT(*) FROM (SELEC
319 SELECT * FROM SALARY_DETAIL
320 ROLLBACK TO SAVEPOINT "REST
321 PRAGMA database_list;
322 SELECT type,name,sql,thi_na
323 RELEASE "RESTOREPOINT";
```

5.SELECT * FROM EMP_INFO WHERE Employee_Code='5';

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New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database

Database Structure Browse Data Edit Pragma Execute SQL

SQL: 1

```
1 SELECT * FROM EMP_INFO WHERE Employee_Code = 5;
```

Employee_Code	Name	Address	Phone_no	Date_of_Joining	Designation
1	5 Raghav Chandni chowk		0978563414	18-04-2021	Software Trainee

SQL Log

```
307 SAVEPOINT "RESTOREPOINT";
308 ROLLBACK TO SAVEPOINT "REST
309 PRAGMA database_list;
310 SELECT type,name,sql,thi_na
311 RELEASE "RESTOREPOINT";
312 SAVEPOINT "RESTOREPOINT";
313 ROLLBACK TO SAVEPOINT "REST
314 PRAGMA database_list;
315 SELECT type,name,sql,thi_na
316 RELEASE "RESTOREPOINT";
317 SAVEPOINT "RESTOREPOINT";
318 SELECT COUNT(*) FROM (SELEC
319 SELECT * FROM SALARY_DETAIL
320 ROLLBACK TO SAVEPOINT "REST
321 PRAGMA database_list;
322 SELECT type,name,sql,thi_na
323 RELEASE "RESTOREPOINT";
324 SAVEPOINT "RESTOREPOINT";
325 ROLLBACK TO SAVEPOINT "REST
326 PRAGMA database_list;
327 SELECT type,name,sql,thi_na
328 RELEASE "RESTOREPOINT";
329 SAVEPOINT "RESTOREPOINT";
330 ROLLBACK TO SAVEPOINT "REST
331 PRAGMA database_list;
332 SELECT type,name,sql,thi_na
333 RELEASE "RESTOREPOINT";
334 SAVEPOINT "RESTOREPOINT";
335 ROLLBACK TO SAVEPOINT "REST
336 PRAGMA database_list;
337 SELECT type,name,sql,thi_na
338 RELEASE "RESTOREPOINT";
339 SAVEPOINT "RESTOREPOINT";
340 SELECT COUNT(*) FROM (SELEC
```

6.SELECT * FROM SALARY_DETAIL WHERE NOT Designation='Manager';

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File Edit View Tools Help

New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database

Database Structure Browse Data Edit Pragma Execute SQL

SQL 1

```
SELECT * FROM SALARY_DETAIL WHERE NOT Designation='Manager';
```

Code	Name	Designation	Date_of_joining	Basic Salary	HRA	DA	PF	Net Salary	CA
1	2 Ashi	Assistant Consultant	10-05-2021	30000	1500	1500	600	25800	600
2	3 Shweta	Senior Software Engineer	08-03-2021	45000	2250	2250	900	38700	900
3	4 Piyush	Executive Officer	21-09-2021	30000	1500	1500	600	25800	600
4	5 Raghav	Software Trainee	18-04-2021	35000	1750	1750	700	30100	700
5	6 Swati	Data Entry Operator	04-10-2021	25000	1250	1250	500	21500	500
6	7 Priya	HR Manager	12-01-2022	40000	2000	2000	800	34400	800
7	8 Harsh	Manager(admin)	30-03-2022	35000	1750	1750	700	30100	700
8	9 Shruti	Technical Assistant	27-02-2022	25000	1250	1250	500	21500	500
9	10 Nishant	Adviser	05-04-2022	30000	1500	1500	600	25800	600

SQL Log

```
324 SAVEPOINT "RESTOREPOINT";
325 ROLLBACK TO SAVEPOINT "REST
326 PRAGMA database_list;
327 SELECT type,name,sql_thb_na
328 RELEASE "RESTOREPOINT";
329 SAVEPOINT "RESTOREPOINT";
330 ROLLBACK TO SAVEPOINT "REST
331 PRAGMA database_list;
332 SELECT type,name,sql_thb_na
333 RELEASE "RESTOREPOINT";
334 SAVEPOINT "RESTOREPOINT";
335 ROLLBACK TO SAVEPOINT "REST
336 PRAGMA database_list;
337 SELECT type,name,sql_thb_na
338 RELEASE "RESTOREPOINT";
339 SAVEPOINT "RESTOREPOINT";
340 SELECT COUNT(*) FROM (SELEC
341 SELECT * FROM EMP_INFO WHERE
342 ROLLBACK TO SAVEPOINT "REST
343 PRAGMA database_list;
344 SELECT type,name,sql_thb_na
345 RELEASE "RESTOREPOINT";
346 SAVEPOINT "RESTOREPOINT";
347 ROLLBACK TO SAVEPOINT "REST
348 PRAGMA database_list;
349 SELECT type,name,sql_thb_na
350 RELEASE "RESTOREPOINT";
351 SAVEPOINT "RESTOREPOINT";
352 ROLLBACK TO SAVEPOINT "REST
353 PRAGMA database_list;
354 SELECT type,name,sql_thb_na
355 RELEASE "RESTOREPOINT";
356 SAVEPOINT "RESTOREPOINT";
357 SELECT COUNT(*) FROM (SELEC
358 SELECT * FROM SALARY_DETAIL)
359 ROLLBACK TO SAVEPOINT "REST
360 PRAGMA database_list;
361 SELECT type,name,sql_thb_na
362 RELEASE "RESTOREPOINT";
363
```

SQL Log Remote

41°C Haze 15:17 18-04-2022

7. SELECT * FROM EMP_INFO WHERE Address='Preet Vihar';

DB Browser for SQLite - C:\Users\Tanya\Desktop\PMS.sqbbro [PMS.db]

File Edit View Tools Help

New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database

Database Structure Browse Data Edit Pragma Execute SQL

SQL 1

```
SELECT * FROM EMP_INFO WHERE Address='Preet Vihar';
```

Employee_Code	Name	Address	Phone_no	Date_of_joining	Designation
1	1 Manan	Preet Vihar	9876451209	28-01-2021	Manager

SQL Log

```
44 PRAGMA secure_delete;
45 PRAGMA synchronous;
46 PRAGMA temp_store;
47 PRAGMA user_version;
48 PRAGMA wal_autocheckpoint;
49 SELECT 'x' NOT LIKE 'x';
50 PRAGMA database_list;
51 SELECT type,name,sql_thb_na
52 SELECT "_rowid_",* FROM "ma
53 SELECT COUNT(*) FROM "main".
54 PRAGMA database_list;
55 SELECT type,name,sql_thb_na
56 SELECT COUNT(*) FROM "main".
57 SELECT "_rowid_",* FROM "ma
58 SAVEPOINT "RESTOREPOINT";
59 UPDATE "main"."SALARY_DETAIL
60 UPDATE "main"."SALARY_DETAIL
61 UPDATE "main"."SALARY_DETAIL
62 UPDATE "main"."SALARY_DETAIL
63 UPDATE "main"."SALARY_DETAIL
64 UPDATE "main"."SALARY_DETAIL
65 UPDATE "main"."SALARY_DETAIL
66 UPDATE "main"."SALARY_DETAIL
67 UPDATE "main"."SALARY_DETAIL
68 UPDATE "main"."SALARY_DETAIL
69 UPDATE "main"."SALARY_DETAIL
70 UPDATE "main"."SALARY_DETAIL
71 UPDATE "main"."SALARY_DETAIL
72 UPDATE "main"."SALARY_DETAIL
73 UPDATE "main"."SALARY_DETAIL
74 UPDATE "main"."SALARY_DETAIL
75 UPDATE "main"."SALARY_DETAIL
76 UPDATE "main"."SALARY_DETAIL
77 UPDATE "main"."SALARY_DETAIL
78 UPDATE "main"."SALARY_DETAIL
79 RELEASE "RESTOREPOINT";
80 SAVEPOINT "RESTOREPOINT";
81 SELECT * FROM EMP_INFO WHERE
82 SELECT COUNT(*) FROM (SELEC
83
```

VARIOUS MODULES THAT ARE USED IN PAYROLL MANAGEMENT SYSTEM.

1)Add-Employee module:

This module lets us to create a replacement employee record by providing details like worker code, designation, first name, last name, address and contact number.

2)Edit-Employee module: This module has been designed to help inside the writing of the record of a particular employee.

3)Delete-Employee module:

To delete the record of any employee, this module was designed.

4)Employee-Settings module:

This module provide the essential settings significantly the sort of allowances like DA, HRA, WA and type of deductions like GPF, LT, GIS, PF, LIC that the employee is entitled to.

5)Employee Payslip module:

This module displays the record of the worker including basic details, allowances and deductions the employee is entitled to and the basic pay as well as net salary.

CONCLUSION

From the above analysis we tend to conclude that payroll management system is incredibly necessary in each side like to record business worker record, financial records etc. In future payroll management system additionally helps to maintained federal requirements. We have a tendency to additionally see from the above study that in recent days there are varied automatic software package that are offered to take care the payroll management system which helps to reduce manual work. To form the software package a lot more efficient and economical, the company need to provide the Importance to the employee's suggestion related to improvement of software used in payroll system and thereby makes their software package easier and adequate. To form Awareness among staff and it shall taken into consideration variety of the ways that suggest by the employees like addition of parameters like short cut for calculation PF, ESI, TAX etc. Reliability and conducting regular programme on the software system usage for the employee in an organization .

FUTURE SCOPE

There is perpetually some technique for improvement, and also the software package we have got a tendency to form and it may also be improved. This could be significantly as a result we had to create it within a restricted time. With longer time, the software package can be improved to incorporate security and different types of users. This may be the first step in creating the software network-enabled, and eventually web-enabled. This was our original afterthought to programming the software, and we had chosen application software. In addition, the software package will also be improved among the the calculations it will do and a lot of flexibility inside the rates utilized in calculations per employee.

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