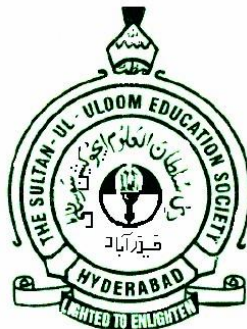


A project report on
NOM EMPLOYEE MANAGEMENT SYSTEM
Submitted for partial fulfilment of the requirements for the Mini Project
Laboratory 2017-18
Of
BACHELOR OF ENGINEERING
In
COMPUTER SCIENCE & ENGINEERING
2016-2020
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Department of Computer Science & Engineering
Muffakham Jah College of Engineering & Technology
(Affiliated to Osmania University) Hyderabad-2018.



MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY

(Estd.By Sultan -Ul –Uloom Educational Society, 1980)

(Affiliated to Osmania University, Hyderabad) (Approved by AICTE &

Accredited by NBA)

CERTIFICATE

This is to certify that the project work titled “**NOM EMPLOYEE MANAGEMENT SYSTEM**” is a bonafide work carried out by **Shaik Naquibuddin (1604-16-733-035), Mohammed Mustafa Ahmed (1604-16733-040), Mohammed Owais Khan (1604-16-733-048)** in partial fulfilment of the requirements for the Mini Project Laboratory of **BACHELOR OF ENGINEERING in COMPUTER SCIENCE AND ENGINEERING** by the **OSMANIA UNIVERSITY**, Hyderabad, under our guidance and supervision.

The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

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DECLARATION

This is to certify that the work reported in the mini project entitled “**NOM Employee Management System**” is a record of work done by us in the Department of Computer Science and Engineering, Muffakham Jah College of Engineering and Technology, Osmania University. The reports are based on the project work done entirely by us and not copied from any other source.

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1. ABSTRACT

The project title “NOM EMPLOYEE MANAGEMENT SYSTEM” is an attempt to computerize Employees record to make the processes like: Adding a new employee, managing the data base, payment of salary on the bases of designation, experience ,overtime, bonuses, etc.

This project was developed using Java Programming and Microsoft Access as the backend that gives us a friendly environment. The transaction like log in, add, search, delete are provided. The Employee payroll software stores the details like Employee Name, Address, Pin Number, Mobile No., etc.

We can also view the Database in the main window and see tables where the data is actually stored and we can also maintain a table to see all the details of the employees in a single table.

2. LITERATURE SURVEY

2.1 Object Oriented Programming

2.1.1 Introduction

Object Oriented Programming (OOP) is an approach to program organization and development that attempts to eliminate some of the pitfalls of conventional programming methods by incorporating the best of structured programming features with several powerful new concepts. It is a new way of organizing and developing programs and has nothing to do with any particular language.

However, not all languages are suitable to implement the OOP concepts easily.

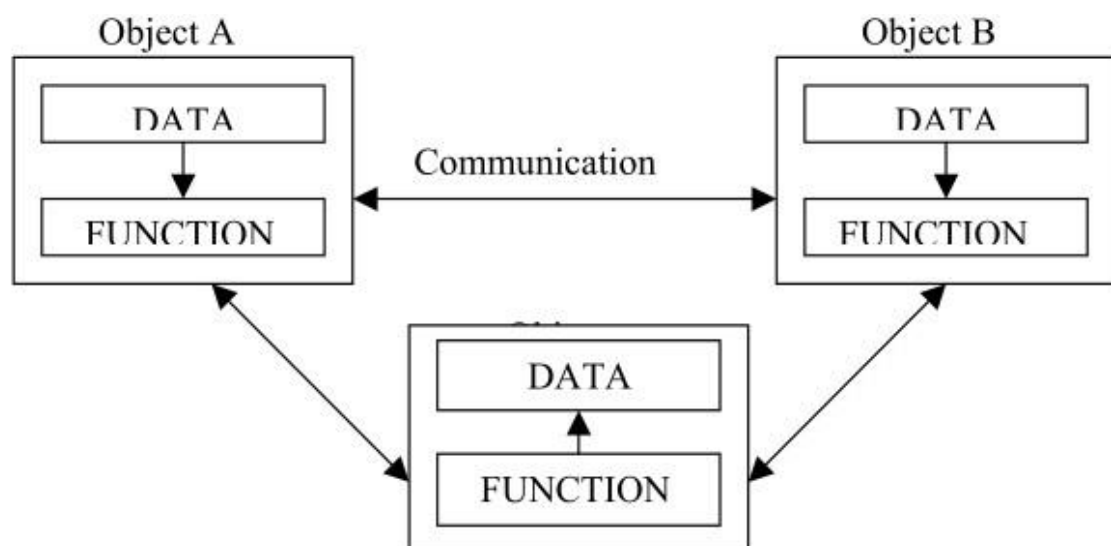


Fig 1: Organization of data and function in OOP

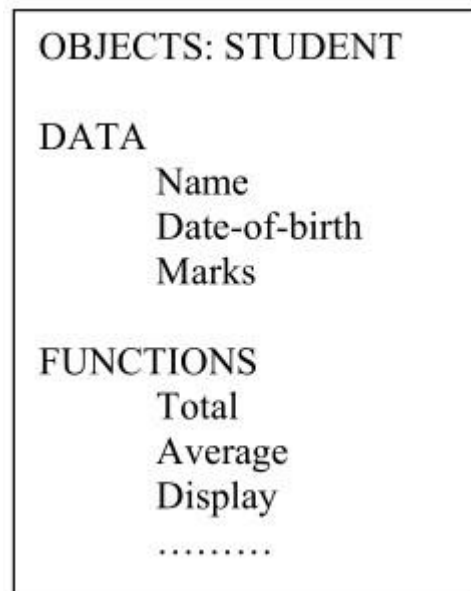
Concepts of Object Oriented Programming

It is necessary to understand some of the concepts used extensively in objectoriented programming. These include:

- Objects
- Classes

Objects

Objects are the basic run time entities in an object-oriented system. They may represent a person, a place, a bank account, a table of data or any item that the program has to handle. They may also represent user-defined data such as vectors, time and lists. Programming problem is analysed in term of objects and the nature of communication between them. Program objects should be chosen such that they match closely with the real-world objects. Objects take up space in the memory and have an associated address like a record in Pascal, or a structure in c. When a program is executed, the objects interact by sending



messages to one another.

Fig 2: Representing an object

2.1.2 Classes

We just mentioned that objects contain data, and code to manipulate that data. The entire set of data and code of an object can be made a user-defined data type with the help of class. In fact, objects are variables of the type class. Once a class has been defined, we can create any number of objects belonging to that class. Each object is associated with the data of type class with which they are created

Data Abstraction and Encapsulation

The wrapping up of data and function into a single unit (called class) is known as encapsulation. Data and encapsulation is the most striking feature of a class. The data is not accessible to the outside world, and only those functions which are wrapped in the class can access it. These functions provide the interface between the object's data and the program. This insulation of the data from direct access by the program is called data hiding or information hiding.

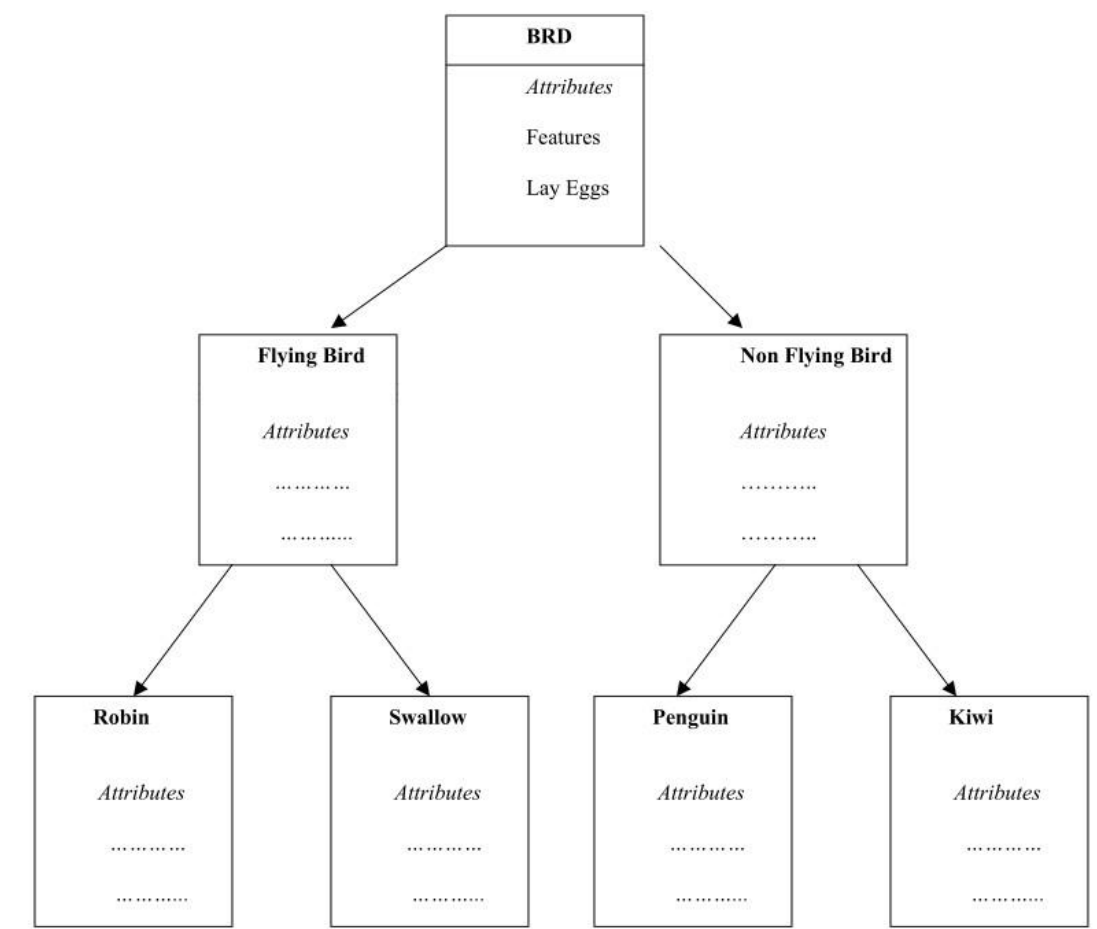


Fig 3: Represents inheritance

The real appeal and power of the inheritance mechanism is that it allows the programmer to reuse a class i.e. almost, but not exactly, what he wants, and to tailor the class in such a way that it does not introduced any undesirable sideeffects into the rest of classes.

Polymorphism

Polymorphism is another important OOP concept. Polymorphism, a Greek term, means the ability to take more than one form. An operation may exhibit different behaviour in different instances. The behaviour depends upon the types of data used in the operation. For example, consider the operation of addition. For two numbers, the operation will generate a sum. If the operands were strings, then the operation would produce a third string by concatenation. The process of making an operator to exhibit different behaviours in different instances is known as operator overloading.

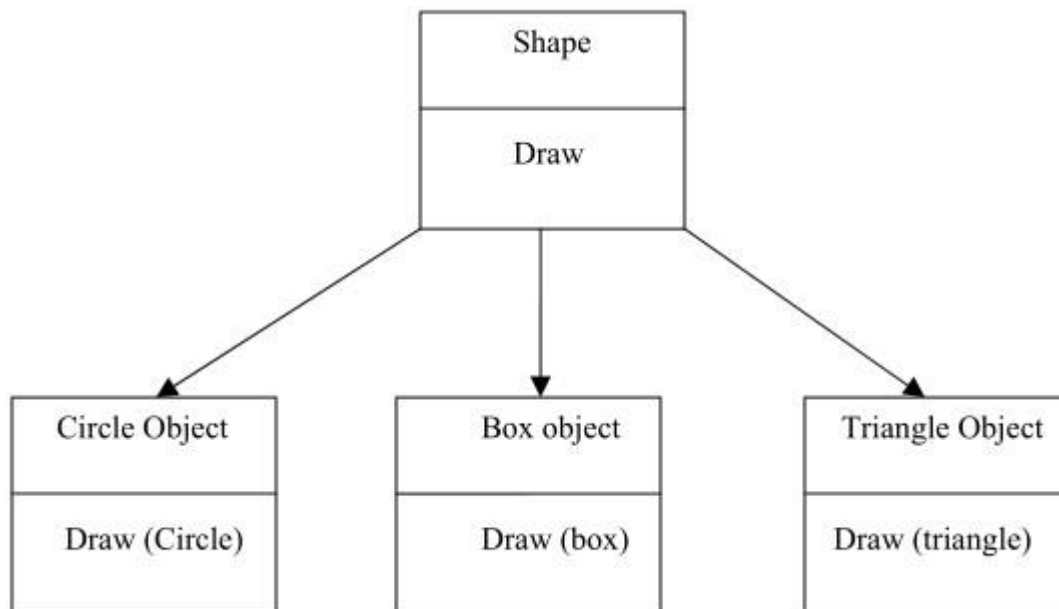
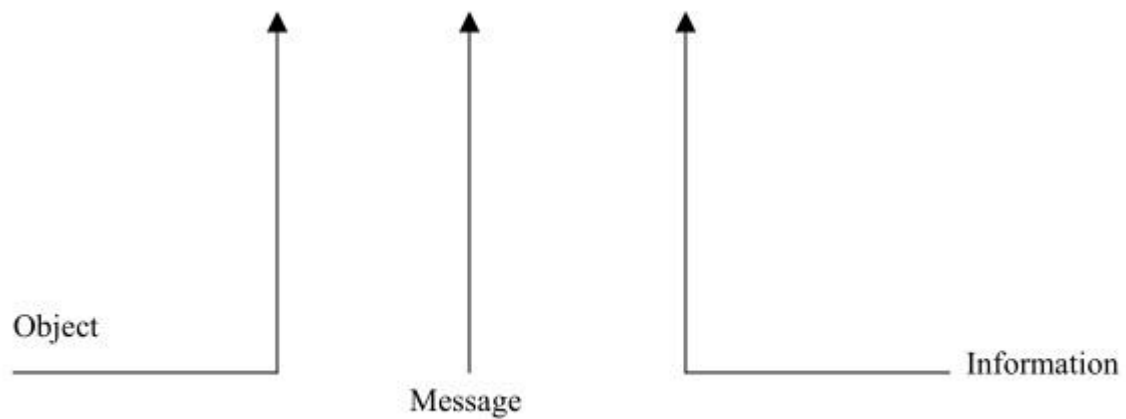


Fig 3: Represents polymorphism

Dynamic Binding



Applications of OOP

- Simulation and modelling
- Object-oriented data bases
- Hypertext, Hypermedia, and expertext
- AI and expert systems

JAVA and MS Access

2.4.1 Introduction to JAVA

Java is a simple and yet powerful object oriented programming language and it is in many respects similar to C++. Java originated at Sun Microsystems, Inc. in 1991. It was conceived by James Gosling, Patrick Naughton, Chris Warth, Ed Frank, and Mike Sheridan at Sun Microsystems, Inc. It was developed to provide a platform-independent programming language. This site gives you an **Introduction to Java Programming** accompanied with many **java examples**. It's a complete course in java programming for beginners to advanced java.

PLATFORM INDEPENDENT

Unlike many other programming languages including C and C++ when Java is compiled, it is not compiled into platform *specific machine*, rather into platform

independent byte code. This byte code is distributed over the web and interpreted by virtual Machine (JVM) on whichever platform it is being run.

\JAVA SOURCE CODE

A Java program is a collection of one or more java classes. A Java source file can contain more than one class definition and has a .java extension. Each class definition in a source file is compiled into a separate class file. The name of this compiled file is comprised of the name of the class with .class as an extension. Before we proceed further in this section, I would recommend you to go through the „Basic Language Elements“.

```
public class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("Hello World");  
    }//End of main  
}//End of HelloWorld Class
```

Output

Hello World

COMPILING AND RUNNING AN APPLICATION

To compile and run the program you need the JDK distributed by Sun Microsystems. The JDK contains documentation, examples, installation instructions, class libraries and packages, and tools. Download an editor like

Text pad/Edit Plus to type your code. You must save your source code with a .java extension. The name of the file must be the name of the public class contained in the file.

Steps for saving, compiling and Running a Java

Step1: Save the program with. Java Extension.

Step2: Compile the file from DOS prompt by typing javac <filename>.

Step3: Successful Compilation, results in creation of .class containing byte code

Step4: Execute the file by typing java <filename without extension>

JAVA DEVELOPMENT KIT

The Java Developer's Kit is distributed by Sun Microsystems. The JDK contains documentation, examples, installation instructions, class libraries and packages, and tools

JAVADOC

The javadoc tool provided by Sun is used to produce documentation for an application or program,

JAR FILES

A jar file is used to group together related class files into a single file for more compact storage, distribution, and transmission.

PATH AND CLASSPATH

The following are the general programming errors, which I think every beginning java programmer would come across. Here is a solution on how to solve the problems when running on a Microsoft Windows Machine.

1. „javac“ is not recognized as an internal or external command, operable program or batch file

When you get this error, you should conclude that your operating system cannot find the compiler (javac). To solve this error you need to set the PATH variable.

How to set the PATH Variable?

Firstly the PATH variable is set so that we can compile and execute programs from any directory without having to type the full path of the command. To set the PATH of jdk on your system (Windows XP), add the full path of the jdk<version>\bin directory to the PATH variable. Set the PATH as follows on a Windows machine:

- a. Click Start > Right Click “My Computer” and click on “Properties”
- b. Click Advanced > Environment Variables.
- c. Add the location of bin folder of JDK installation for PATH in User Variables and System Variables. A typical value for PATH is:

C:\jdk<version>\bin (jdk<version> is nothing but the name of the directory where jdk is installed)

2. Exception in thread “main”

java.lang.NoClassDefFoundError: HelloWorld

If you receive this error, java cannot find your compiled byte code file, HelloWorld.class. If both your class files and source code are in the same working directory and if you try running your program from the current working directory then, your program must get executed without any problems as, java tries to find your .class file in your current directory. If your class files are present in some other directory other than that of the java files we must set the CLASSPATH pointing to the directory that contains your compiled class files. CLASSPATH can be set as follows on a Windows machine:

- a. Click Start > Right Click “My Computer” and click on “Properties”

b. Click Advanced > Environment Variables.

If there are already some entries in the CLASSPATH variable then you must add a semicolon and then add the new value. The new class path takes effect in each new command prompt window you open after setting the CLASSPATH variable.

INTRODUCTION TO MS ACCESS: -

Introduction to Access:

Microsoft Access is windows based relational database management system developed by Microsoft Corporation. Access offers many features and enhancements that help you manage your data more efficiently. Like any other windows based application Access is to use and yet offer you the power you need to handle complex data. Though there are good number of database programs available for PC's most of them run under DOS, which has certain limitations when it comes to sharing data. It is much easier up impressive looking reports create custom screen forms and print mailing labels accurately with

DATABASE:

A database is an organized collection of related data you can easily retrieve and use. A database management system is a program, like access that enables you to create, organize and manage your data stored in database

Definitions:

- Tables: A table is a collection of data about a specific topic, such as a mailing list.
- Field: A field is the basic unit of a database; it stores a particular piece of data.
- Fields corresponds to the columns in a table.
- Record: A record in a database contains several fields of information.

A database consists of objects such as tables, forms, queries and reports. Thus a database is a container for tables and other database objects like queries, reports, forms and macros.

UNDERSTANDING ACCESS DATABASE OBJECTS

The primary function of access is to store information in database. However, Access makes it easy for you to manage or use the data by providing several types of objects, of which let you work with your data in a different way. Database objects are the fundamental elements of an access database. Access has seven types of objects in database.

<u>Database</u>	<u>Object: Purpose:</u>
Tables	Store and display data
Queries	Retrieve or perform an action on specified data
Forms Entering or	Display data in customized layout for viewing editing data.
Reports	Organize data in a printed Format.
Pages	Allow you to make data available on the internet For interactive reporting, data entry, or data analysis
Macros	Save your time by automating repetitive actions to perform specified tasks.

.
Modules Programs written in Java, a powerful
Programming language with which you canAutomate
any database task.
You will use four main objects in Access: Tables, Queries, Forms and Reports

Tables:

Tables are the objects Access uses to store data. Each table consists of fields, which store specific piece of information (like a person's name), and records .Arecord complete set of information about a specific entity .You can open table inis a set of two views:

Datasheet and Design:

Opening a table in a Datasheet View displays the data in your table in a spreadsheet like .Each column in the datasheet represents a field, while each row represents record.

Opening a table in a design view allows you to change the structure of your table you can add fields, including comments about each field, or change the type of information stored in each field.

Queries:

Queries allow you to find specific information in your database .You use a queryto extract information from a database .You specific criteria in a query to tell Accesswhat information you want to find.

Reports:

Reports are professional looking document that summarize data from the database. Unlike forms, you can't use reports to enter data into your tables, but you canuse the report wizards to create mailing labels or charts based on your table and querydata You can perform calculations .such as average or totals in a

report to summarize the information. For example you can create a report that displays the total sales for each product. You can view reports in two views Design view in which you can change the layout of your report. Print preview, which displays how your report will look like when it's printed.

PLANNING A DATABASE

Before turning on your computer you can ensure that your database is well defined if

you take a bit of time to design it properly, you face yourself many problems in the long run. When planning your database, you must decide what information you want the database to store and how you will use the information. If other people will be using your database you should also determine their needs.

Determine the fields that you need in each table

Identify Unique Field Values that allows you Access to connect information stored in the separate tables for example, to connect a customer with all the customers' orders. Each table in your database must include a field set of fields that uniquely identifies each record in the table. In most cases, this field is the primary key field for the table.

.

CREATING A DATABASE

Before you create a table, you must create a database to hold it. You can create a database in two ways.

Create a blank database and then create the tables and other objects you need.

Use the database Wizard to create a database based on a template distributed with Access. When you use the Database Wizard to create a database based on a design the Wizard creates the database objects that you need. This includes, tables, reports, forms, switchboards and other database objects.

Creating a Blank Database

The Database Wizard can save you time, but you must have a good grasp of Access to know exactly which tables and other objects you need. It is best to work with a blank database when you are learning Access.

If you want to design your own database you can create a blank database. Creating a blank database gives you the most flexibility and control.

You can have only one database open at a time. Access will close a database displayed on your screen when you create a new database.

List displays only the names of folders and files

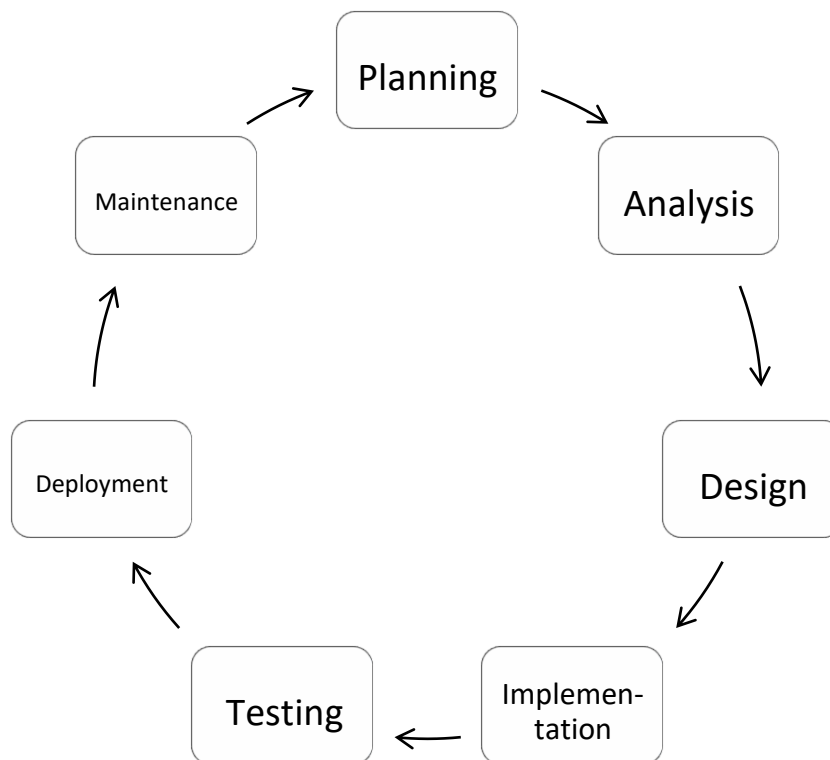
- Details displays the name and type of folders and files and the size and last modification data for files.
- Properties displays a list of files and folders in the left half of the box and the properties of the selected file to the right. Preview displays a list of files and folders in the left half of the box and a preview of the selected file to

SOFTWARE DEVELOPMENT LIFE CYCLE

Software Development Life Cycle (SLDC) is a systematic approach to develop software. It creates a structure for the developer to design, create and deliver high quality software according to the requirements of customer or end user. It also provides a methodology for improving the quality of the desired product. The

purpose of SDLC process is to provide help in producing a product that is cost efficient and of high quality.

Different stages of SDLC



Stage 1: Planning

This includes making reasonable estimates of the cost and size of the software product as compared to the resources at hand.

Stage 2: Analysis & Requirement Gathering

This step includes collecting maximum information from the client about the desired product. All details and specifications of the product must be discussed with the customer. The development team analyses the requirements keeping in view the design and coding of the software.

Stage 3: Design

Stage 4: Development or Implementation It means translating the design into a computer readable language. Development team does the actual coding based on designed software and writes unit tests for each component to test the new codes written by them. The developer may show the work done to the business analysts and the modification or enhancements may be required. This is the longest phase of SDLC.

Stage 5: Testing

This is the last phase of SDLC before the software is delivered to the customer. The job of test team is to test the system against the requirements. The aim of tester is to find out the gaps or defects within the system and also to verify that the software works as expected according to the requirements. It includes Unit testing, Integration testing and System testing.

Stage 6: Maintenance

When the customers start using the developed system, the actual problems comes up and needs to be solved from time to time. This process where the care is taken for the developed product is known as Maintenance. The software is maintained timely by updating the code according to the changes taking place in user end environment or technology.

SYSTEM ANALYSIS

2.2 System Analysis:

System analysis was the third stage of our work, we know and wrote everything about the correlation between the different organizational units, the employee management mechanism inside the organizational and structure of the various

units. Also we make an analysis for every unit tasks, and the details will be as follows:

2.3 Existing System:

The company uses the Sanchez application which is a single user system to find the employee information.

The important and the most significant drawback is that the system is manual. There are errors due to carelessness or oversight that may result in loss to the data and as to the organization. For an organization, time is very important factor.

Proposed System

The proposed system is designed to eliminate all the drawbacks of the existing system. The system is an employee payroll management system and shall be responsible for maintaining information about employees.

- Designation,
- Taxes,
- Departments,
- new employees,
- employee bonuses,
- allowances,
- education & training,

Feasibility Analysis

Every project is feasible for given unlimited resources and infinitive time. Feasibility study is an evaluation of the proposed system regarding its

workability, impact on the organization, ability to meet the user needs and effective use of resources. Thus when a new application is proposed it normally goes through a feasibility study before it is approved for development. Feasibility and risk analysis are related in many ways. If a project risk is great and feasibility of producing software is reduced. During the feasibility analysis in this project has been discussed below in the abovementioned topics.

For feasibility analysis, some understanding of the major requirements for the system is essential.

Three key considerations involved in the feasibility analysis are:

4.3.1 Economic Feasibility

An evaluation of development cost is weighted against the ultimate income or benefits derived from the developed system. There was no need of extra hardware and software for development of this project.

4.3.2 Technical Feasibility

Technical feasibility is frequently the most difficult area to ensure this stage. It is essential that the process of analysis and definition to be conducted parallel to an assessment of the technical feasibility. The consideration that is normally associated with technical feasibility includes the resources availability of the Organization where the project is to be developed and implemented. As very limited resources are required for this project hence this project is considered feasible for development.

4.3.3 Social Feasibility

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it. His level of confidence must be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

Cost Estimation

Cost estimation is an important tool that can affect the planning and budgeting of a project. Because there are a finite number of resources for a project, all of the features of a requirements document can often not all be included in the final product.

2.3.1 Inputs

The inputs given by the user for completion of the task include:

- **Details:** Employee ID, Name, Date Of Birth, Gender, Email –
Id, Designation, Mobile Number, Address , Department, Qualification ,
Salary, Experience, Status of the Employee.

2.3.2 Outputs

The output will be GUI based and the input given will be calculated and stored in a database here MS-Access is used.

Software & Hardware Requirements

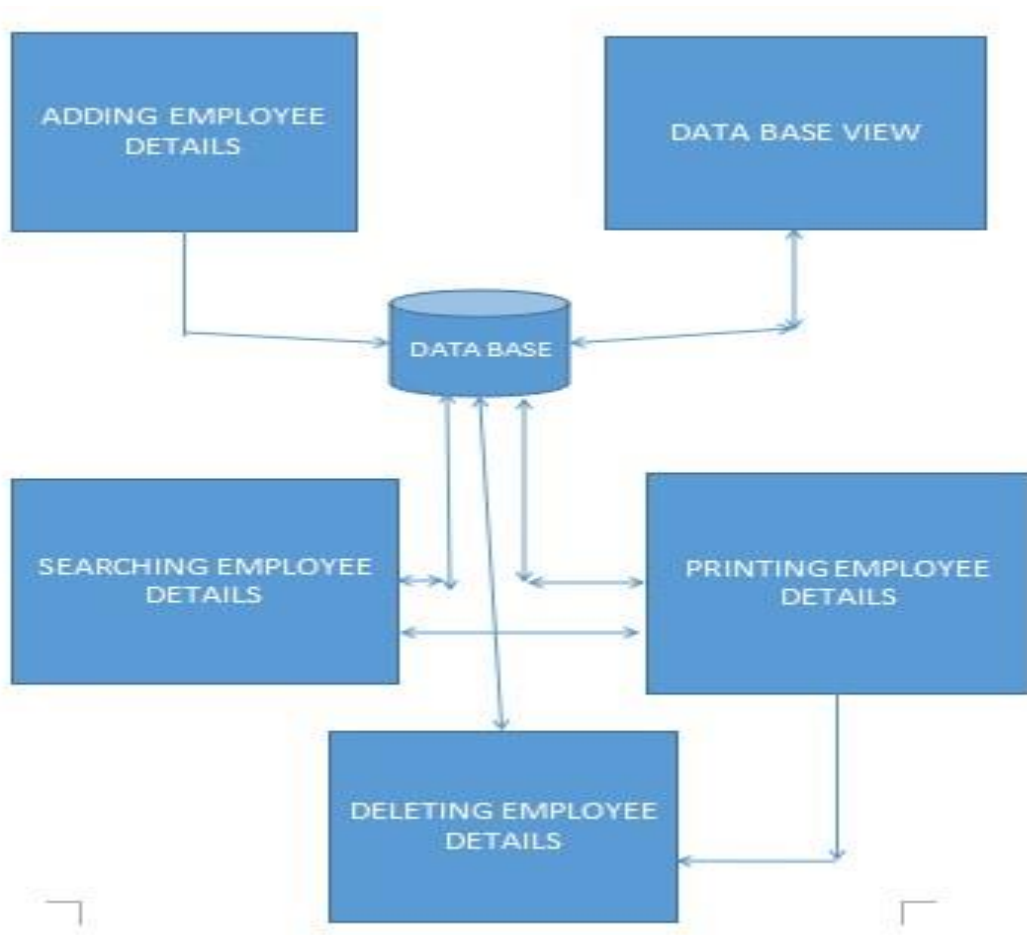
- **OS:** Windows 7, 8, 10
- **RAM:** More than 1 GB
- **Processor:** Dual Core to i7
- **I/O Devices:** Keyboard, Mouse
- **Memory:** 15 to 50 MB

SYSTEM DESIGN

2.4 System Architecture

The project contains database that hold information on various fields that are used by the program for its functioning. There are fields like Employee ID, Employee Name, Basic Salary, House Rent Allowance, Dearness Allowance, Professional Tax, Income Tax, over time etc.

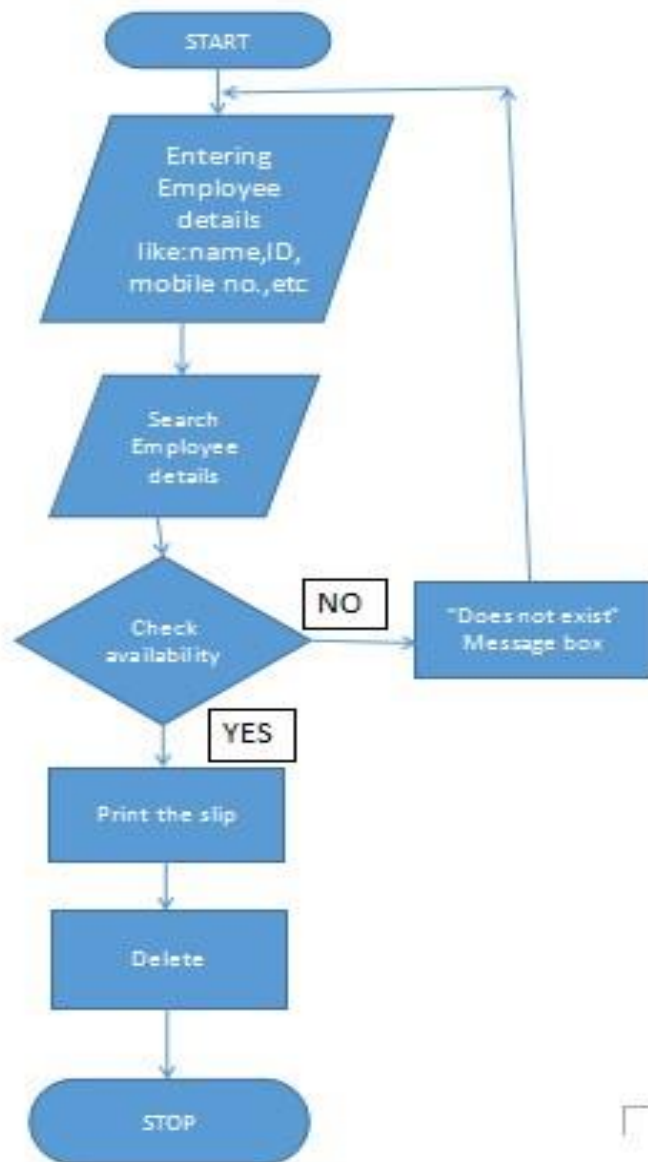
These all fields are stored in a table present in MS-Access. This database don't over write data.



The above diagram represents the structure in which various functions have been classified and stored.

2.5 Flow Diagram

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information, modelling its process aspects.



3. IMPLEMENTATION

This section of the report will explain how the proposed system is being implemented. This includes discussion of various important functions and source code.

3.1 Functions Description

3.1.1 AdminLogin()

```
Username = ju.getText();
Password = jp.getText();
Connection c =null;
PreparedStatement pst =null;
ResultSet rs =null;
try
{
Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
c
DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
NAQUIBUDDIN\\Documents\\Adminlogin.accdb");
String sql = "select * from adminlogin where AdminID='"+ Username
+ "' and Password='"+ Password + "'";
pst = c.prepareStatement(sql); rs =
pst.executeQuery();
if(rs.next())
{
JOptionPane.showMessageDialog(null,"ADMIN LOGIN SUCCESS");
setVisible(false);
adminframe mm = new adminframe();
mm.setVisible(true);
}
else
{
JOptionPane.showMessageDialog(null,"INVALID DETAILS");
}

}
catch(Exception e)
{
JOptionPane.showMessageDialog(null,e);
}
```

The above function *Login()* is used to enter the **AdminFrameMenu** but only by the authorized person who knows the user name and password.

3.1.2 Employee Login()

```
user = euser.getText(); pass
= epass.getText();
Connection c =null;
```

```

        PreparedStatement pst =null;
ResultSet rs =null; try
    {
Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        c = DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
NAQUIBUDDIN\\Documents\\login.accdb");
        String sql = "select * from Login where username='"+ user + "' and
password='"+ pass + "'"; pst = c.prepareStatement(sql); rs = pst.executeQuery();
if(rs.next())
    {
JOptionPane.showMessageDialog(null,"EMPLOYEE LOGIN SUCCESS");
setVisible(false);
employeeframemenu ef = new employeeframemenu(); ef.setVisible(true);
    }
else
    {
JOptionPane.showMessageDialog(null,"INVALID DETAILS");
    }

    }
catch(Exception e)
    {
JOptionPane.showMessageDialog(null,e);
    }

```

The above function *EmployeeLogin()* is used to enter the **EmployeeFrameMenu** but only by the authorized person who knows the user name and password

3.1.3 AddEmployee()

```

Stringemp,nam,dobi,mobile,emailid,desig,quali,gend,addr,dep,sala,expe,semt,workt,stat
us;

emp = empid.getText();
nam=name.getText();

```

```

gend=gen.getText();
dobi=dob.getText();
emailid=email.getText()
; mobile=num.getText();
addr=add.getText();
desig=design.getText();
quali=qua.getText();
sala=sal.getText();
expe=exp.getText();
dep=dept.getText();
user=empid.getText();
pass=dob.getText();
sta=status.getText(); try
{
    Connection conn =
DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
NAQUIBUDDIN\\Documents\\database.accdb");
    Statement s =
conn.createStatement();      String
sqlQuery;      sqlQuery = "insert into
mytable(Employeeid,Name,DOB,Gender,Email,Designation,MobileNumber,Address,De
partment,Qualification,Salary,Experience,Status"+"") values("'" + emp + "','" + nam
+ "','" + dobi + "','" + gend + "','" + emailid + "','" + desig + "','" + mobile + "','" + addr
+ "','" + dep + "','" + quali + "','" + sala + "','" + expe + "','" + sta + "')";
s.executeUpdate(sqlQuery);
JOptionPane.showMessageDialog(null, "DATA SAVED SUCCESSFULLY");
}
catch(SQLException e)
{
JOptionPane.showMessageDialog(null,e.getMessage());
}

```

The above function adds employee details and stores it in the database named “database”.

3.1.4 DeleteEmployee()

```
String del = key.getText(); try{
    Connection conn =
    DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
    NAQUIBUDDIN\\Documents\\database.accdb");
    Statement s = conn.createStatement();
    String sql = "delete from mytable where Employeeid='"+del+"'";
    s.executeUpdate(sql);
    JOptionPane.showMessageDialog(null,"DATA OF THE EMPLOYEE ID :-
    "+del+" IS SUCCESSFULLY DELETED !!!!");

}
catch (SQLException ex)
{
    JOptionPane.showMessageDialog(null,ex.getMessage());
}
```

This function deletes the record of the particular specified employee record.

3.1.5 UpdateEmployeeInfo()

```
String var = empid1.getText().trim();
String var2 = name1.getText();
String var3 = dob1.getText();
String var4 = gen1.getText();
String var5 = email1.getText();
String var6 = design1.getText();
String var7 = num1.getText();
String var8= add1.getText();
String var9= dept1.getText();
String var10 = qua1.getText();
String var11 = sal1.getText();
String var12 = exp1.getText();
String var13 = status1.getText();

if(empid1.getText().equals("")) {
    JOptionPane.showMessageDialog(null, "Search key not Found !");
}
else { try
{
    Connection con =
```

```

DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
NAQUIBUDDIN\\Documents\\database.accdb");
        ResultSet rs;
        Statement st = con.createStatement();
        String sql = "update mytable set Name='"+var2+"' ,
DOB='"+var3+"' , Gender='"+var4+"' ,Email='"+var5+"' ,
Designation='"+var6+"' , MobileNumber='"+var7+"' ,Address='"+var8+"' ,
Department='"+var9+"' , Qualification='"+var10+"' ,Salary='"+var11+"' ,
Experience='"+var12+"' , Status='"+var13+"' where Employeeid='"+var+"'";
st.executeUpdate(sql);
JOptionPane.showMessageDialog(null,"Update Complete");
    }
catch(Exception e)
    {
        System.out.println(e.getMessage());
    }
}

```

The above function update's the particular employee's record.

3.1.6 SearchEmployee()

```

DefaultTableModel model = (DefaultTableModel) jt.getModel();

        String var = key.getText(); try
        {
            Connection con =
DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
NAQUIBUDDIN\\Documents\\database.accdb");
            Statement st = con.createStatement();
            String sqlQuery = "select * from mytable where Employeeid='"+var+"'";
            ResultSet rs = st.executeQuery(sqlQuery);
            while(rs.next()) {
                String empid = rs.getString("Employeeid");
                String ename = rs.getString("Name");
                String dob = rs.getString("DOB");
                String mobile = rs.getString("MobileNumber");
                String email = rs.getString("Email");
                String gender = rs.getString("Gender");
                String addr = rs.getString("Address");
                String exp = rs.getString("Experience");
                String desig = rs.getString("Designation");
                String sala = rs.getString("Salary");
            }
        }
    }
}

```



```

        String qua=rs.getString("Qualification");
        String dep = rs.getString("Department");
        String sta=rs.getString("Status");
        model.addRow(new Object[]
        {empid,ename,dob,gender,email,desig,mobile,addr,dep,qua,sala,exp,sta});

    }
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null,e);
    }
}

```

The above function search's the particular employee's record.

3.2 Source Code

1:Login Frame

```

package newpackage; import
java.sql.Connection; import
java.sql.DriverManager; import
java.sql.PreparedStatement;
import java.sql.ResultSet;
import javax.swing.*;
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates * and open the template in the editor.
 */

/**
 *

```

```

* @author SHAIK NAQUIBUDDIN
*/

public class login extends javax.swing.JFrame {

String Username;

String Password;

/**
 * Creates new form login
 */
public login() { initComponents();

}

/**
 * This method is called from within the constructor to initialize the form.    * WARNING: Do
NOT modify this code. The content of this method is always    * regenerated by the Form
Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> private
void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jLabel2 = new javax.swing.JLabel(); ju =
new javax.swing.JTextField();    jLabel3
= new javax.swing.JLabel();    jButton1
= new javax.swing.JButton(); jp = new
javax.swing.JPasswordField();
    jButton2 = new javax.swing.JButton();
    jLabel4 = new javax.swing.JLabel();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    jPanel1.setLayout(null);

```

```

jLabel2.setText("Username :-");
jPanel1.add(jLabel2);
jLabel2.setBounds(10, 80, 70, 30);
jPanel1.add(ju); ju.setBounds(100,
80, 210, 40);

jLabel3.setText("Password :-");
jPanel1.add(jLabel3); jLabel3.setBounds(10,
160, 70, 14);

jButton1.setText("Login");
jButton1.addActionListener(new java.awt.event.ActionListener() { public
void actionPerformed(java.awt.event.ActionEvent evt) {
jButton1ActionPerformed(evt);
    }
});
jPanel1.add(jButton1); jButton1.setBounds(230,
210, 80, 40); jPanel1.add(jp);
jp.setBounds(100, 150, 210, 40);

jButton2.setText("BACK"); jButton2.addActionListener(new
java.awt.event.ActionListener() { public void
actionPerformed(java.awt.event.ActionEvent evt) {
jButton2ActionPerformed(evt);
    }
});
jPanel1.add(jButton2); jButton2.setBounds(150,
210, 60, 40);

jLabel4.setFont(new java.awt.Font("Times New Roman", 1, 18)); // NOI18N
jLabel4.setText("ADMIN LOGIN"); jPanel1.add(jLabel4);
jLabel4.setBounds(10, 10, 190, 40);

```

```

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout); layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE, 397,
Short.MAX_VALUE)
    );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
264, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(0, 0, Short.MAX_VALUE))
    );

pack(); setLocationRelativeTo(null);
} // </editor-fold>

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
    Username = ju.getText();
    Password = jp.getText();
    Connection c =null;
    PreparedStatement pst =null;
    ResultSet rs =null; try
    {
    Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        c = DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
NAQUIBUDDIN\\Documents\\Adminlogin.accdb");
        String sql = "select * from adminlogin where AdminID='"+ Username +" and
Password='"+ Password + "'";
        pst = c.prepareStatement(sql); rs

```

```

= pst.executeQuery();
if(rs.next())
    {
OptionPane.showMessageDialog(null,"ADMIN LOGIN SUCCESS");
setVisible(false); adminframe mm = new adminframe();
mm.setVisible(true);
    } else
    {
OptionPane.showMessageDialog(null,"INVALID DETAILS");
    }

    }
catch(Exception e)
    {
OptionPane.showMessageDialog(null,e);
    }
}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here: setVisible(false); home h = new
home(); h.setVisible(true);
}

/**
 * @param args the command line arguments
 */

public static void main(String args[]) {
/* Set the Nimbus look and feel */

    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.

```

```

        *                                For                                details                                see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

        */ try
    {
        for (javax.swing.UIManager.LookAndFeelInfo info :
            javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName()); break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
}

//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() { new login().setVisible(true);
    }
});
}

// Variables declaration - do not modify
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;

```

```

private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JPanel jPanel1; private
javax.swing.JPasswordField jp; private
javax.swing.JTextField ju;
    // End of variables declaration
}

```

2:Add Frame package

```

newpackage; import
java.io.InputStream
; import
java.sql.*; import
java.util.*; import
javax.swing.*;
/*
 * To change this license header, choose License Headers in Project
    Properties.
 * To change this template file, choose Tools | Templates * and open
    the template in the editor.
 */
/**
 *
 * @author SHAIK NAQUIBUDDIN
 */
public class mainmenu extends javax.swing.JFrame {

    /**
     * Creates new form mainmenu
     */
    String

```

```

emp,nam,dobi,mobile,emailid,desig,quali,gend,addr,dep,sala,expe,semt
,workt;

    String user,pass;
String sta; public
mainmenu() {
initComponents();

    }

    /**
 * This method is called from within the constructor to initialize
 the form.
 * WARNING: Do NOT modify this code. The content of this method is
 always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();          jLabel3 =
new javax.swing.JLabel();          jLabel4 = new
javax.swing.JLabel();          jLabel5 = new
javax.swing.JLabel();          jLabel6 = new
javax.swing.JLabel(); empid = new
javax.swing.JTextField(); name = new
javax.swing.JTextField(); dob = new
javax.swing.JTextField(); gen = new
javax.swing.JTextField(); email = new
javax.swing.JTextField();          jLabel7 = new
javax.swing.JLabel(); design = new
javax.swing.JTextField();          jLabel8 = new
javax.swing.JLabel(); num = new

```



```

javax.swing.JTextField();          jLabel9 = new
javax.swing.JLabel();              jScrollPane1 = new
javax.swing.JScrollPane(); add = new
javax.swing.JTextArea();          jLabel10 = new
javax.swing.JLabel(); sal = new
javax.swing.JTextField();          jLabel11 = new
javax.swing.JLabel(); exp = new
javax.swing.JTextField();          jButton1 = new
javax.swing.JButton();             jLabel12 = new
javax.swing.JLabel(); qua = new
javax.swing.JTextField();          jLabel13 = new
javax.swing.JLabel();

dept = new javax.swing.JTextField();
jButton3 = new javax.swing.JButton();
jButton6 = new javax.swing.JButton();
jButton2 = new javax.swing.JButton();
jButton5 = new javax.swing.JButton();
jLabel14 = new javax.swing.JLabel(); status =
new javax.swing.JTextField();
jButton7 = new javax.swing.JButton();
jLabel15 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jLabel1.setText("Employee Id");

jLabel2.setText("Name");

jLabel3.setText("DOB");

jLabel4.setText("Gender");

```

```
jLabel16.setText("Email Id");
```

```
name.addActionListener(new java.awt.event.ActionListener() { public  
void actionPerformed(java.awt.event.ActionEvent evt) {  
nameActionPerformed(evt);  
        }  
});
```

```
jLabel17.setText("Desgination");
```

```
design.addActionListener(new java.awt.event.ActionListener() {  
public void actionPerformed(java.awt.event.ActionEvent evt) {  
designActionPerformed(evt);  
        }  
});
```

```
jLabel18.setText("Mobile Number");
```

```
jLabel19.setText("Address");
```

```
add.setColumns(20); add.setRows(5);  
jScrollPane1.setViewportViewView(add);
```

```
jLabel110.setText("Salary");
```

```
sal.addActionListener(new java.awt.event.ActionListener() { public  
void actionPerformed(java.awt.event.ActionEvent evt) {  
salActionPerformed(evt);  
        }  
});
```

```
jLabel111.setText("Experience");
```

```
exp.addActionListener(new java.awt.event.ActionListener() { public
void actionPerformed(java.awt.event.ActionEvent evt) {
expActionPerformed(evt);
    }
});
```

```
jButton1.setText("Add Employee");
jButton1.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
jButton1ActionPerformed(evt);
    }
});
```

```
jLabel12.setText("Qualification");
```

```
qua.addActionListener(new java.awt.event.ActionListener() { public
void actionPerformed(java.awt.event.ActionEvent evt) {
quaActionPerformed(evt);
    }
});
```

```
jLabel13.setText("Department");
```

```
jButton3.setText("Update");
jButton3.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
jButton3ActionPerformed(evt);
    }
});
```

```
jButton6.setText("CLEAR");
```

```
jButton6.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton6ActionPerformed(evt);  
    }  
});
```

```
jButton2.setText("DELETE ");  
jButton2.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton2ActionPerformed(evt);  
    }  
});
```

```
jButton5.setText("Search");  
jButton5.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton5ActionPerformed(evt);  
    }  
});
```

```
jLabel14.setText("Status");
```

```
jButton7.setText("BACK");  
jButton7.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton7ActionPerformed(evt);  
    }  
});
```

```
jLabel15.setFont(new java.awt.Font("Times New Roman", 1, 18)); //  
NOI18N
```

```
jLabel15.setText("EMPLOYEE MANAGEMNET FRAME");
```

45

```
javax.swing.GroupLayout.PREFERRED_SIZE, 76,  
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addComponent(jLabel15,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))  
.addGap(182, 182, 182))  
.addGroup(layout.createSequentialGroup()  
.addComponent(jLabel13,  
javax.swing.GroupLayout.PREFERRED_SIZE, 103,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATE  
D)
```

```
.addComponent(dept))  
  
.addGroup(javax.swing.GroupLayout.Alignment.LEADING,  
layout.createSequentialGroup()  
.addComponent(jLabel12,  
javax.swing.GroupLayout.PREFERRED_SIZE, 76,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
.addGap(37, 37, 37)  
.addComponent(qua))
```

```
.addGroup(javax.swing.GroupLayout.Alignment.LEADING,  
layout.createSequentialGroup()  
.addComponent(jLabel11,  
javax.swing.GroupLayout.PREFERRED_SIZE, 76,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
.addGap(31, 31, 31)  
.addComponent(exp)))  
.addGap(128, 128, 128))  
.addGroup(layout.createSequentialGroup()  
.addGap(6, 6, 6)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme  
nt.LEADING)
```

```
.addComponent(jLabel15,  
javax.swing.GroupLayout.PREFERRED_SIZE, 416,
```

```

javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)

                                .addComponent(jLabel1,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                                .addComponent(jLabel2,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

.addGroup(layout.createSequentialGroup())

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                                .addComponent(jLabel7,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)                                70,

                                .addComponent(jLabel3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)                                57,

                                .addComponent(jLabel4,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)                                57,

                                .addComponent(jLabel6,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)                                57,

                                .addGap(47, 47, 47)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                                .addComponent(num,
javax.swing.GroupLayout.Alignment.TRAILING)

                                .addComponent(design,
javax.swing.GroupLayout.DEFAULT_SIZE, 189, Short.MAX_VALUE)

                                .addComponent(empid,
javax.swing.GroupLayout.DEFAULT_SIZE, 189, Short.MAX_VALUE)

```

```

        .addComponent(name,
javax.swing.GroupLayout.DEFAULT_SIZE, 189, Short.MAX_VALUE)

        .addComponent(dob,
javax.swing.GroupLayout.DEFAULT_SIZE, 189, Short.MAX_VALUE)

        .addComponent(gen,
javax.swing.GroupLayout.DEFAULT_SIZE, 189, Short.MAX_VALUE)

        .addComponent(email,
javax.swing.GroupLayout.DEFAULT_SIZE, 189, Short.MAX_VALUE)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING, false)

        .addComponent(status,
javax.swing.GroupLayout.Alignment.TRAILING)

        .addComponent(jScrollPane1,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, 196, Short.MAX_VALUE))))

        .addGap(18, 18, 18)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.TRAILING, false)

        .addComponent(jButton6,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, 119, Short.MAX_VALUE)

        .addComponent(jButton1,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, 119, Short.MAX_VALUE)

        .addComponent(jButton3,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(jButton2,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(jButton5,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(jButton7,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

```



```

        .addContainerGap())

    );

layout.setVerticalGroup(
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING
)

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup())

            .addGap(0, 0, 0)

            .addComponent(jLabel15,
javax.swing.GroupLayout.PREFERRED_SIZE,          30,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.BASELINE)

            .addComponent(jLabel11)

            .addComponent(empid,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE,          40,
javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)

            .addGroup(layout.createSequentialGroup())

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.BASELINE)

            .addComponent(jLabel12)

            .addComponent(jButton6,
javax.swing.GroupLayout.PREFERRED_SIZE,          40,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

            .addComponent(jLabel13))

```

```

        .addGroup(layout.createSequentialGroup())
            .addComponent(name,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(dob,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup())
            .addGap(15, 15, 15)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(gen,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel14))
            .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

            .addComponent(jLabel17)
            .addGroup(layout.createSequentialGroup())

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(email,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel16))
            .addGap(36, 36, 36)

```

```

        .addComponent(design,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGap(32, 32, 32)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.BASELINE)

        .addComponent(jLabel8)

        .addComponent(num,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)

        .addGroup(layout.createSequentialGroup()

            .addGap(49, 49, 49)

            .addComponent(jLabel9)

            .addGap(82, 82, 82))

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(46, 46, 46)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignme
nt.LEADING)

        .addComponent(jLabel14)

        .addGroup(layout.createSequentialGroup()

            .addComponent(status,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

```

```

        .addComponent(jLabel15)))
    .addGap(19, 19, 19)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

        .addComponent(jLabel13)

        .addComponent(dept,
            javax.swing.GroupLayout.PREFERRED_SIZE,                25,
            javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(18, 18, 18)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

        .addComponent(jLabel12)

        .addComponent(qua,
            javax.swing.GroupLayout.PREFERRED_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE,
            javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(23, 23, 23)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

        .addComponent(jLabel10)

        .addComponent(sal,
            javax.swing.GroupLayout.PREFERRED_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE,
            javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(27, 27, 27)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

        .addComponent(jLabel11)

        .addComponent(exp,
            javax.swing.GroupLayout.PREFERRED_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE,
            javax.swing.GroupLayout.PREFERRED_SIZE)))

        .addGroup(layout.createSequentialGroup()
            .addComponent(jButton3,

```

```

javax.swing.GroupLayout.PREFERRED_SIZE,                                44,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE,                                41,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(31, 31, 31)
        .addComponent(jButton5,
javax.swing.GroupLayout.PREFERRED_SIZE,                                42,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(26, 26, 26)
        .addComponent(jButton7,
javax.swing.GroupLayout.PREFERRED_SIZE,                                53,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
pack();
setLocationRelativeTo(null);
} // </editor-fold>

private void designActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:    }

private void salActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
    }

private void nameActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
    }

private void quaActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:

```

```

    }

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
    // TODO add your handling code here:
    emp = empid.getText();
    nam=name.getText(); gend=gen.getText();
    dobi=dob.getText();
    emailid=email.getText();
    mobile=num.getText();
    addr=add.getText();
    desig=design.getText();
    quali=qua.getText();
    sala=sal.getText(); expe=exp.getText();
    dep=dept.getText();
    user=empid.getText();
    pass=dob.getText();
    sta=status.getText(); try
    {
        Connection conn =
        DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
        NAQUIBUDDIN\\Documents\\database.accdb");
        Statement s = conn.createStatement();
        String sqlQuery;
        sqlQuery = "insert into
        mytable(Employeeid,Name,DOB,Gender,Email,Designation,MobileNumber,Ad
        dress,Department,Qualification,Salary,Experience,Status"+")
        values('" + emp + "','" + nam + "','" + dobi + "','" + gend + "','" +
        emailid + "','" + desig + "','" + mobile + "','" + addr + "','" + dep
        + "','" + quali + "','" + sala + "','" + expe + "','" + sta + "')";
        s.executeUpdate(sqlQuery);
        JOptionPane.showMessageDialog(null, "DATA SAVED SUCCESSFULLY");
    } catch(SQLException
e)
    {

```

```

JOptionPane.showMessageDialog(null,e.getMessage());
    } try
    {
        Connection conn =
DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
NAQUIBUDDIN\\Documents\\database.accdb");
        Statement s = conn.createStatement();
        String sqlQuery;
        sqlQuery = "insert into
emptable(Employeeid,Name,DOB,Email,MobileNumber,Address"+")
values('" + emp + "','"+ nam + "','"+ dobi + "','"+ emailid + "','"+
mobile + "','"+ addr + "')";
        s.executeUpdate(sqlQuery);
    } catch(SQLException e)
    {
JOptionPane.showMessageDialog(null,e.getMessage());
    }
try
    {
        Connection conn =
DriverManager.getConnection("jdbc:ucanaccess://C:\\Users\\SHAIK
NAQUIBUDDIN\\Documents\\login.accdb");
        Statement s = conn.createStatement();
        String sqlQuery;
        sqlQuery = "insert into Login(username,password"+") values('" + user
+ "','"+ pass + "')";
        s.executeUpdate(sqlQuery);
        JOptionPane.showMessageDialog(null, "EMPLOYEE USERNAME AND PASSWORD
CREATED SUCCESSFULLY");
    } catch(SQLException
e)
    {
JOptionPane.showMessageDialog(null,e.getMessage());
    }

```

```
empid.setText("");
name.setText("");
gen.setText(""); dob.setText("");
email.setText("");
num.setText(""); add.setText("");
design.setText("");
qua.setText("");
sal.setText(""); exp.setText("");
dept.setText("");
status.setText("");
```

```
}
```

```
private void jButton6ActionPerformed(java.awt.event.ActionEvent evt)
{
    // TODO add your handling code here:
    empid.setText("");
    name.setText("");
    gen.setText(""); dob.setText("");
    email.setText("");
    num.setText(""); add.setText("");
    design.setText("");
    qua.setText("");
    sal.setText(""); exp.setText("");
    dept.setText("");      }
```

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
    // TODO add your handling code here:
    dispose();
    JOptionPane.showMessageDialog(null," NEED TO LOGIN FOR RECORD DELETE
");
```



```

deletellogin dl = new deletellogin(); dl.setVisible(true);

    }

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt)
{
    // TODO add your handling code here:
    setVisible(false);
    searchframe sf = new searchframe(); sf.setVisible(true);
    }

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt)
{
    setVisible(false);
    updateframe u=new updateframe();
    u.setVisible(true);

    }

private void jButton7ActionPerformed(java.awt.event.ActionEvent evt)
{
    // TODO add your handling code here:
    setVisible(false);
    adminframe af= new adminframe(); af.setVisible(true);

    }

private void expActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    }

    /**
    * @param args the command line arguments

```

```

    */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel
setting code (optional) ">

    /* If Nimbus (introduced in Java SE 6) is not available,
stay with the default look and feel.
* For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/pla
f. html
*/ try { for
    (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) { if
("Nimbus".equals(info.getName())) {
javax.swing.UIManager.setLookAndFeel(info.getClassName()); break;

        }
    }
    } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(mainmenu.class.getName()).log(jav
a.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(mainmenu.class.getName()).log(jav
a.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(mainmenu.class.getName()).log(jav
a.util.logging.Level.SEVERE, null, ex);
    } catch
(javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(mainmenu.class.getName()).log(jav
a.util.logging.Level.SEVERE, null, ex);
    }
    //</editor-fold>

    /* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {

```

```

public void run() { new
mainmenu().setVisible(true);
        }
    });
}

```

```

    // Variables declaration - do not modify
private javax.swing.JTextArea add; private
javax.swing.JTextField dept; private
javax.swing.JTextField design; private
javax.swing.JTextField dob; private
javax.swing.JTextField email; private
javax.swing.JTextField empid; private
javax.swing.JTextField exp; private
javax.swing.JTextField gen; private
javax.swing.JButton jButton1;

private javax.swing.JButton jButton2; private
javax.swing.JButton jButton3; private
javax.swing.JButton jButton5; private
javax.swing.JButton jButton6; private
javax.swing.JButton jButton7; private
javax.swing.JLabel jLabel1; private
javax.swing.JLabel jLabel10; private
javax.swing.JLabel jLabel11; private
javax.swing.JLabel jLabel12; private
javax.swing.JLabel jLabel13; private
javax.swing.JLabel jLabel14; private
javax.swing.JLabel jLabel15; private
javax.swing.JLabel jLabel2; private
javax.swing.JLabel jLabel3; private
javax.swing.JLabel jLabel4; private
javax.swing.JLabel jLabel5; private

```

```

javax.swing.JLabel jLabel6; private
javax.swing.JLabel jLabel7; private
javax.swing.JLabel jLabel8; private
javax.swing.JLabel jLabel9; private
javax.swing.JScrollPane jScrollPane1; private
javax.swing.JTextField name; private
javax.swing.JTextField num; private
javax.swing.JTextField qua; private
javax.swing.JTextField sal; private
javax.swing.JTextField status;

    // End of variables declaration

private Scanner Scanner(InputStream in) {
throw new UnsupportedOperationException("Not supported yet."); //To
change body of generated methods, choose Tools | Templates.
}
}

```

TESTING

3.3 System Testing

The primary purpose of testing is to detect software failures so that defects may be uncovered and corrected. This is a non-trivial pursuit. Testing cannot establish that a product functions properly under all conditions but can only establish that it does not function properly under certain conditions. The scope of software testing often includes examination of code as well as execution of that code in various environments and conditions as well as examining the aspects of the code: does it do what it needs to do. In the current culture of software development, a testing organization may be separate from the development team. There are various roles for testing team members. Information derived from software testing may be used to correct the process by which software is developed.

3.4 Types of Tests

Various tests were carried out by us to check the functioning of the program and its features.

3.4.1 Functionality Tests

The team tested the program's function, and how and when they were being called into the control of the program. All the database handling features were checked, so as to ensure that the appropriate details are stored based on the input given by the user.

3.4.2 Data Testing

The entire contents were stored in the database properly and also can store as many details required.

We also checked data duplication therefore if we try to store same data in the database an exception is popped.

3.4.3 Compatibility Testing

The program was tested in various computer systems, on different IDEs and operating systems.

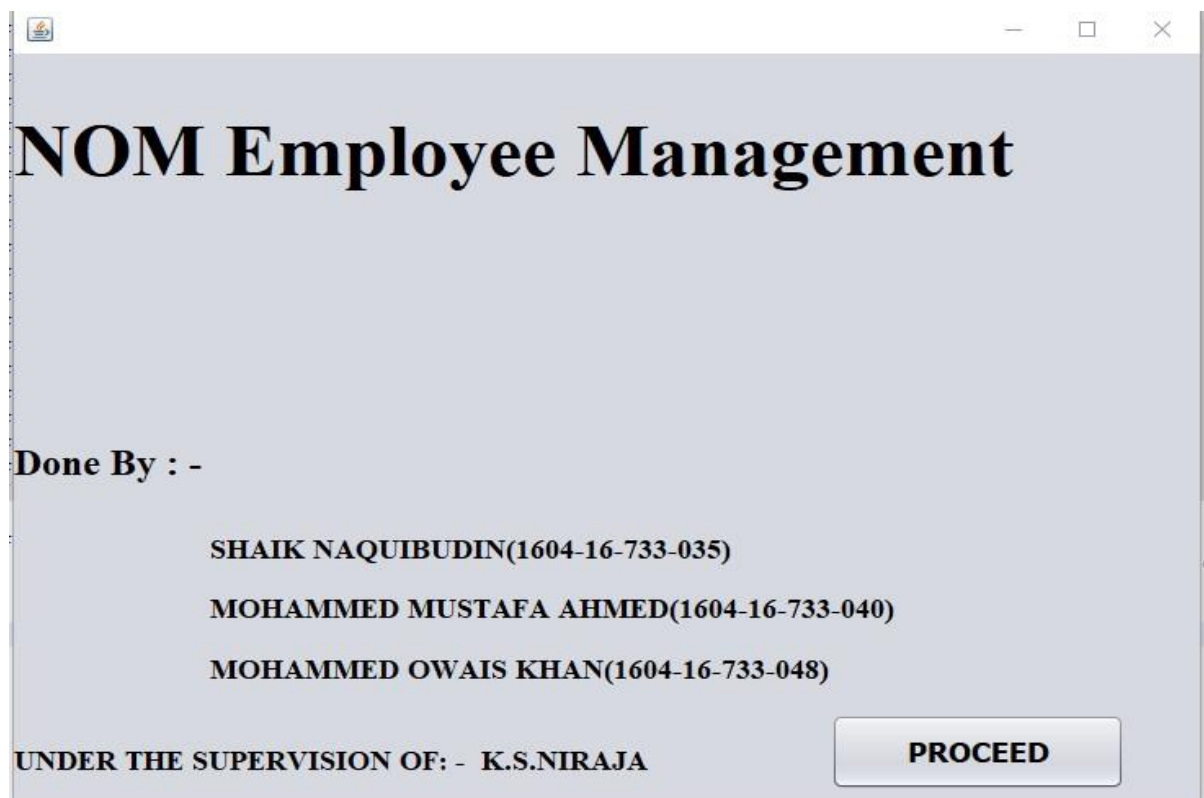
3.5 Test Cases

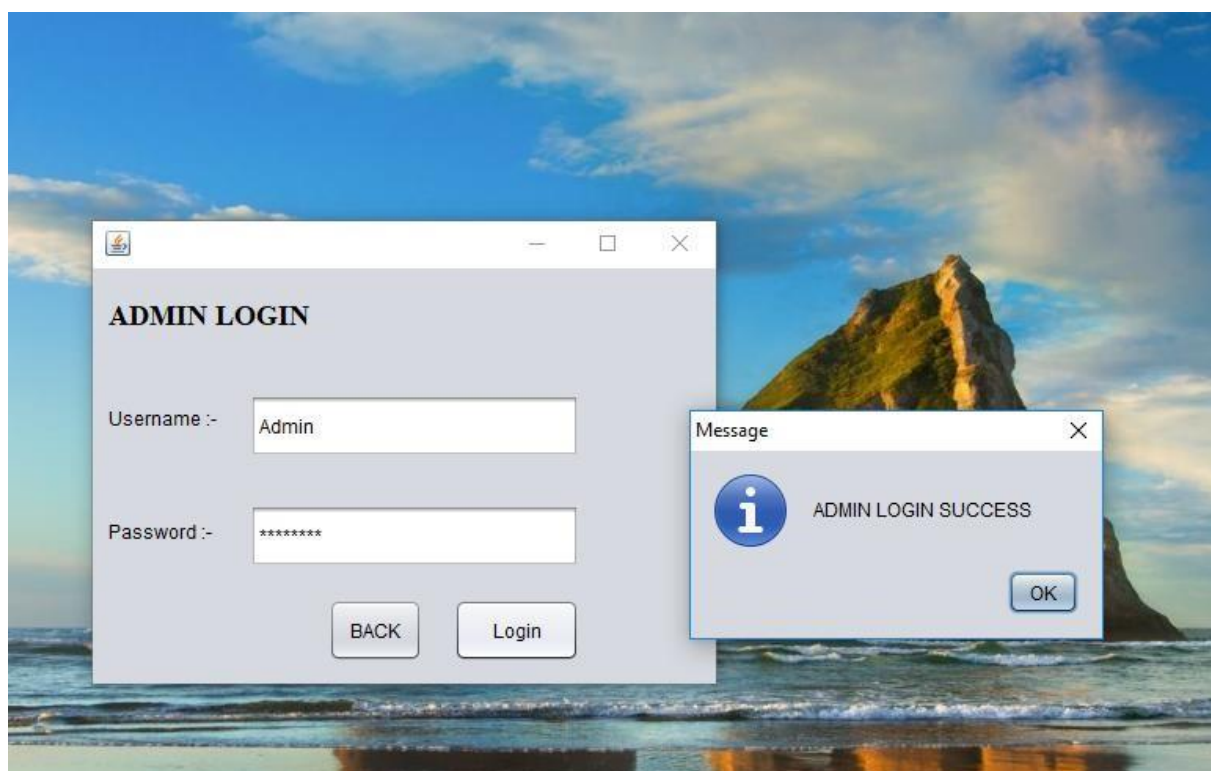
S. No	Test Input	Expected behaviour	Observed behaviour	Status
1	Enter a wrong User and Password	Display error, ask again	Error Message	Solved
2	Data duplication	Data should not be repeated	Throws an exception	Solved
3	Deletes or prints available data only	Exception occurrence	Shows an error	Solved

Fig 5 Showing test cases

Screen shots:

Below are the screenshot of the functioning of the project program.





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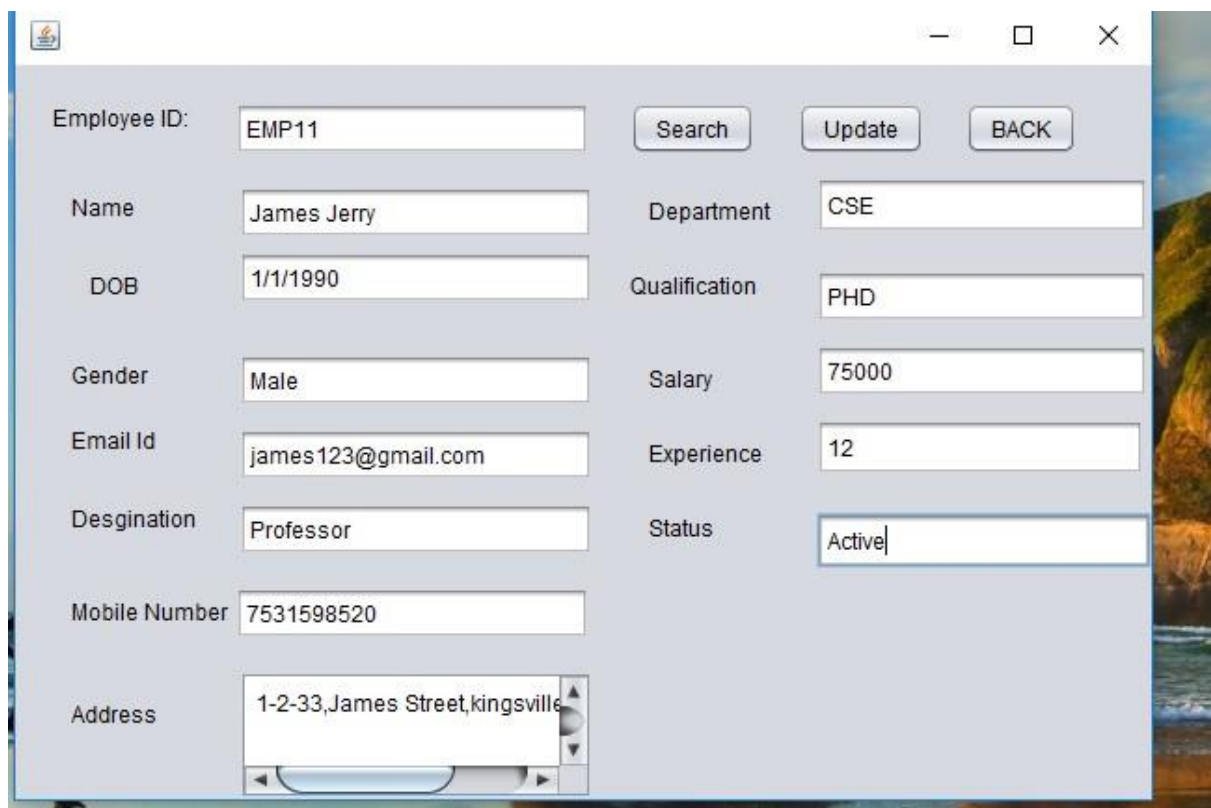


A window titled "MANAGER FRAME" with a standard Windows-style title bar (minimize, maximize, close buttons). The window has a light blue background. It contains three buttons: "Staff Management" and "Logout" in the top row, and "Leave Handling" in the bottom row. All buttons are rectangular with rounded corners and a light blue gradient.

MANAGER FRAME

Staff Management Logout

Leave Handling



A window displaying an employee's details. It has a light blue background and a standard Windows-style title bar. The form is organized into two columns. The left column contains labels and text input fields for: Employee ID (EMP11), Name (James Jerry), DOB (1/1/1990), Gender (Male), Email Id (james123@gmail.com), Designation (Professor), Mobile Number (7531598520), and Address (1-2-33,James Street,kingsville). The right column contains labels and text input fields for: Department (CSE), Qualification (PHD), Salary (75000), Experience (12), and Status (Active). At the top right of the form area are three buttons: "Search", "Update", and "BACK". The "Address" field has a scroll bar.

Employee ID: EMP11 Search Update BACK

Name James Jerry Department CSE

DOB 1/1/1990 Qualification PHD

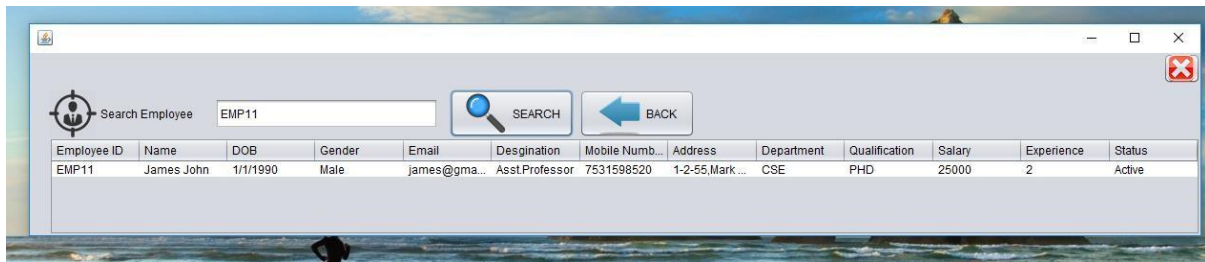
Gender Male Salary 75000

Email Id james123@gmail.com Experience 12

Designation Professor Status Active

Mobile Number 7531598520

Address 1-2-33,James Street,kingsville



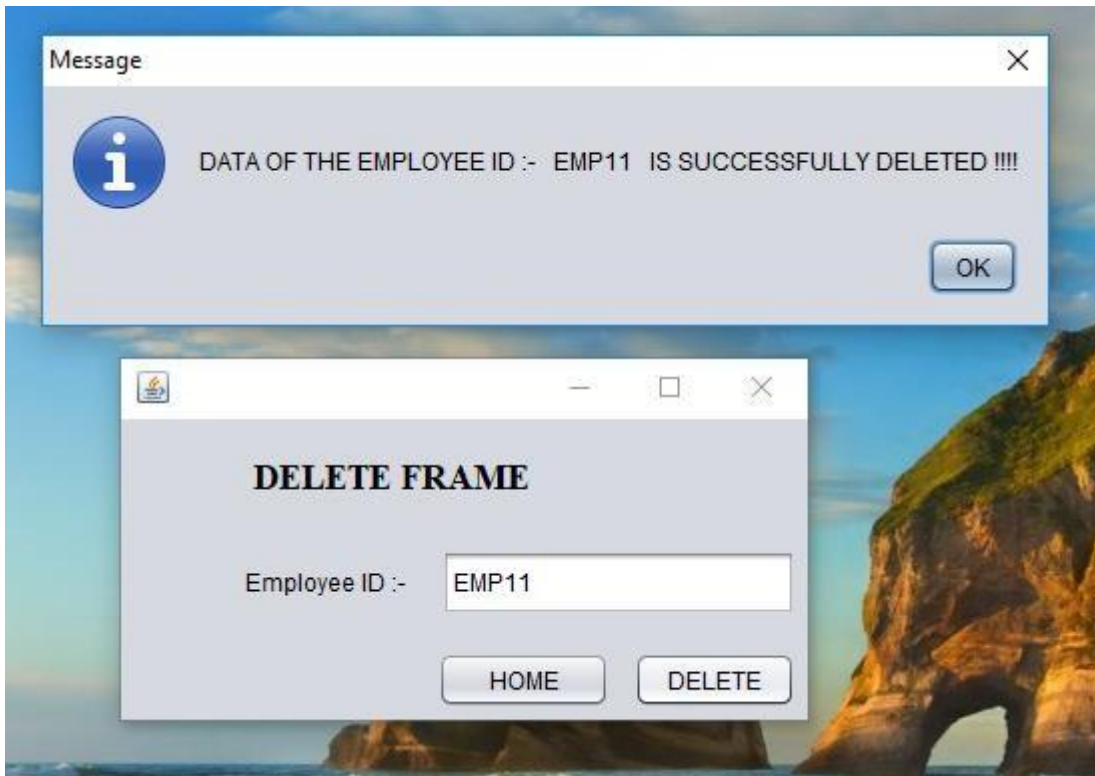
Search Employee

EMP11

SEARCH

BACK

Employee ID	Name	DOB	Gender	Email	Designation	Mobile Numb...	Address	Department	Qualification	Salary	Experience	Status
EMP11	James John	1/1/1990	Male	james@gma...	AsstProfessor	7531598520	1-2-55,Mark...	CSE	PHD	25000	2	Active



Message

i DATA OF THE EMPLOYEE ID :- EMP11 IS SUCCESSFULLY DELETED !!!!

OK

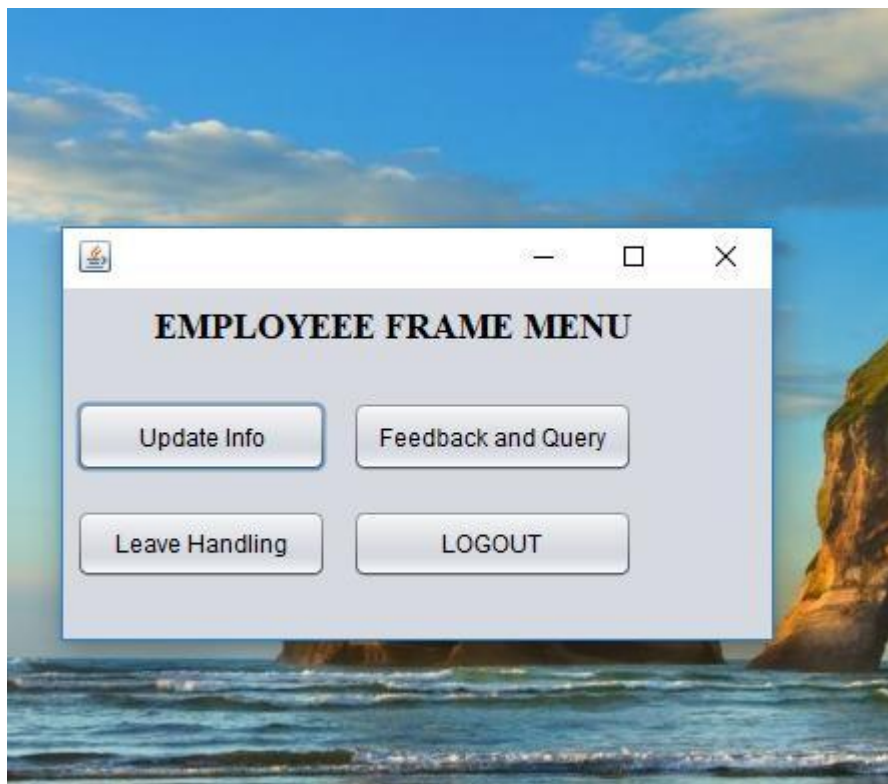
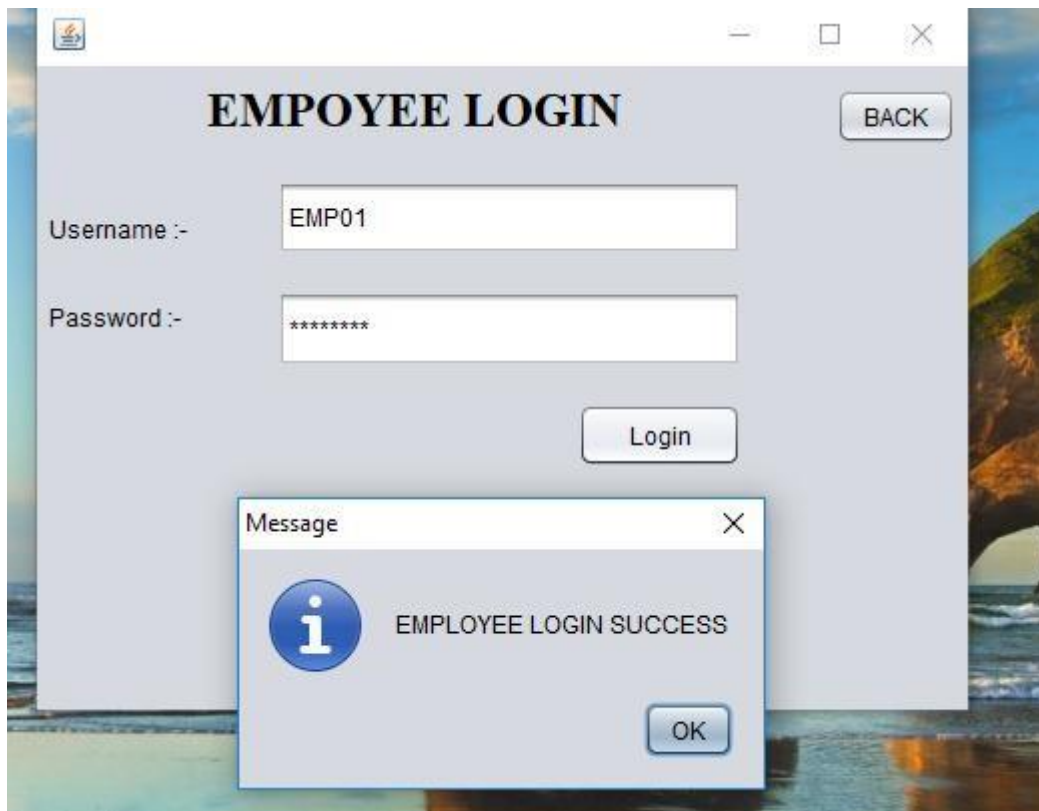
DELETE FRAME

Employee ID :-

EMP11

HOME

DELETE



EMPLOYEE DETAILS UPDATE

Employee Id: EMP01

Name: K.Manjusha

DOB: 1/1/1990

Email Id: manjushakalekuri@gmail.com

Mobile Number: 8885771333

Address: colony, Abids, Hyderabad, 500001.

Update

Message: Update Complete

OK

BACK

SEARCH

FEEDBACK & QUERY

Employee Id :- EMP11

Feedback :- HELLO

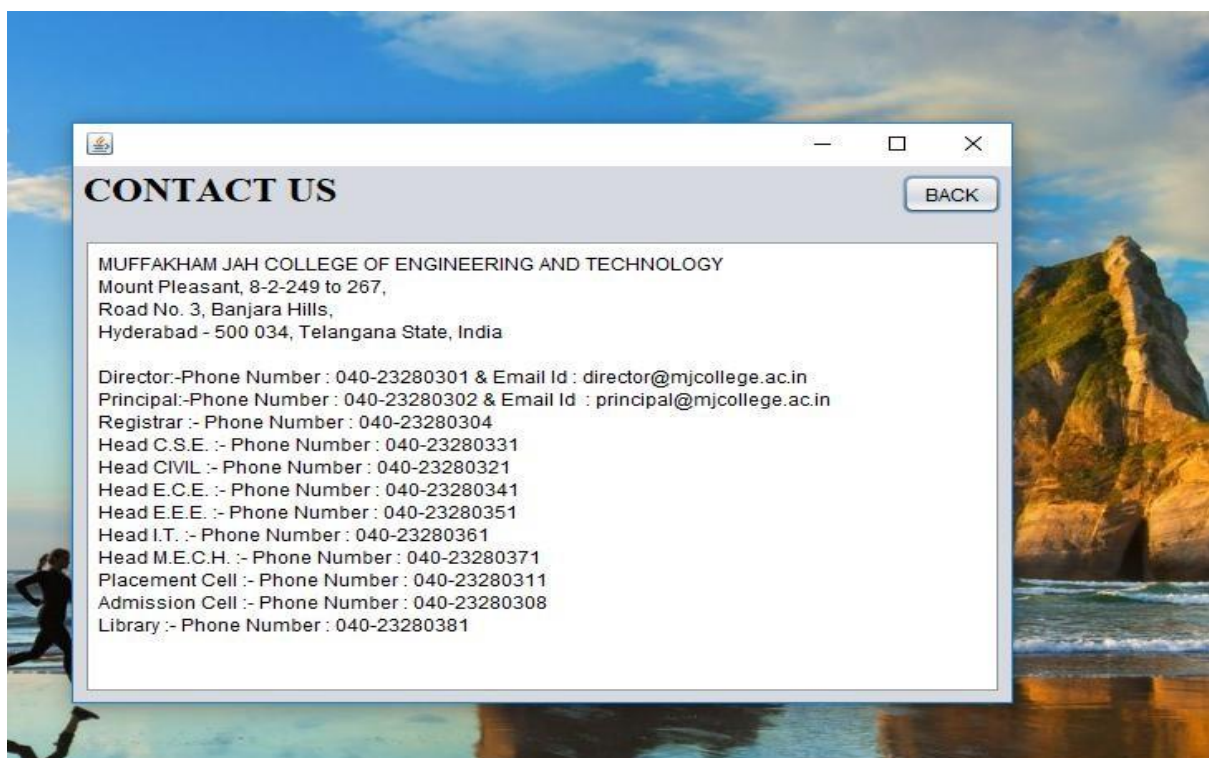
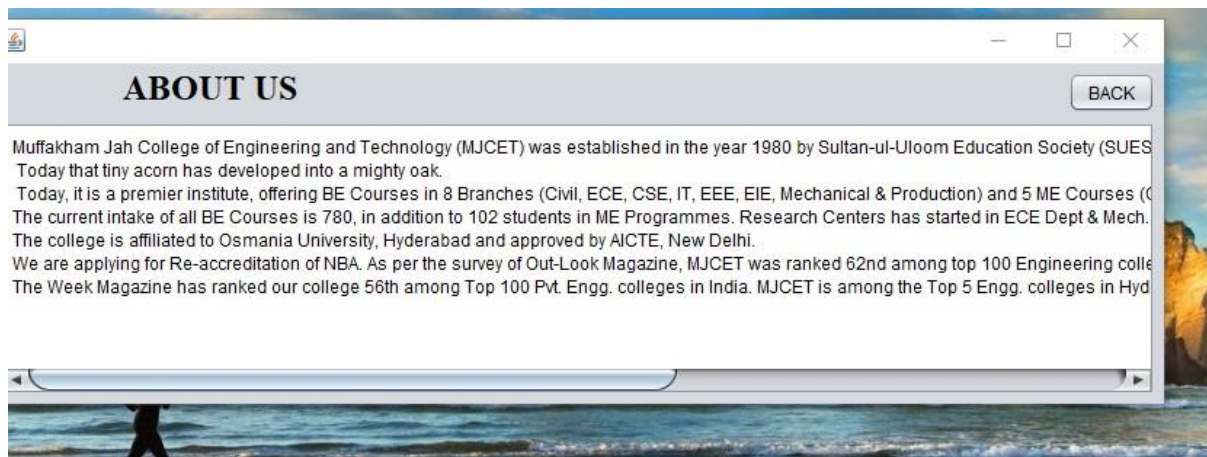
Query :- WORLD

Back

Submit

Message: DATA SAVED SUCCESSFULLY

OK



CONCLUSION

We are planning to implement new features and ideas which can be interactive and user friendly.

We will try our best to include some more features in Employee Payroll Management System project.

In future we will try to make mobile applications for this same project so that the user can able to access the data from anywhere at any time and the data will be stored on a server, rather than the local computer.

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MOHAMMED OWAIS KHAN (1604-16-733-048)

4. BIBILOGRAPHY

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□ MC Mac Millian

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- Basic Java Programming
- Advance Java Programming, Ch.Sarojni

WEBSITES:

□

- www.teknikindustries.com

SEARCH ENGINE:

- Google **SOFTWARES:**
- NetBeans IDE 8.2
- Photoshop CS6
- Java JDK 8.0

DOCUMENTARY OF JAVA:

- www.javafilms.fr
- www.codedocumentary.com