PROJECT ON

<u>Swimming pool</u> management System

SUBMITTED BY

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T.Y.BSC COMPUTER SCIENCE

B. N. BANDODKAR COLLEGE OF SCIENCE

(Affiliated to university of Mumbai)

THANE(W) - 400601

MAHARASHTRA

YEAR = 2020-2021

UNDER GUIDENCE BY

MR. ABHISHEK VARTAK

CERTIFICATE OF SWIMMING POOL MANAGEMENT OWNER



SP GMS

Respected Sir,

I hereby certify that "Mr. KARAN S. MUDLIYAR" student of B.N.Bandodkar College of Science, Thane has worked under my requirements for

"SUNSET POOLS SWIMMING POOL MANAGEMENT

SWIMMING POOL MANAGEMENT SYSTEM" and has successfully completed the project of TYBSC (Computer Science) Course as prescribed by UNIVERSITY OF MUMBAI.

The format and details used on all the pages have been entirely designed to suit the project report.

This project report is record of authentic work carried out by him, I have gone through the project and it is to my satisfaction.

Regards,

Heli

(Client Siganture)

ACKNOWLEGDEMENT

In the accomplishment of this project successfully it required a lot of guidance from experienced people and also their heart pledged support.

All that I have done is only due to the such direction and support and I am utilizing to thank all the people who have been concerned with this project.

I express my sincere thanks to the college project guide, my teacher Mr. Abhishek Vartak, whose valuable guidance has been the ones that helped me patch this project and make it full proof of success. His suggestions and his instructions have served as the major contributor towards the completion of the project.

I would also like to extend my gratitude to my teacher Mr. Abhijeet Kale, who have helped me with their valuable suggestions and guidance has been very helpful in various phases of the completion of the project. Last but not the least I would like to thank my friends who helped me a lot.

And above all I am very grateful to the "SUNSET POOLS" who gave me an opportunity to take up this project.



Mr. KARAN S. MUDLIYAR

DECLARATION

I Mr. KARAN SUBRAMAIAN MUDLIYAR the student of **B.N. Bandodkar**

College of Science, TYBSC (Computer Science) hereby declare that, I have completed the project on "SUNSET POOLS Swimming pool management System".

The information submitted is true and original to the best of knowledge.



KARAN S. MUDLIYAR

Name and Signature of the Student

SYNOPSIS OF THE PROJECT

Title of project: **Swimming pool management System**

1. About the Problem:

The manager of Swimming pool is concerned about managing the Swimming pool and also about the member satisfaction. So this system is more comfortable in the present busy life. and also, the timeliness and punctuality keep the member satisfied. Thus, the main theme behind this project is to make the daily activities in a Swimming pool efficient adding to structured logging.

The primary reason to choose this particular topic:

Fitness is the new trend of this generation. It is an essential part of most people's daily schedule. So making a project on Swimming pool management makes a lot of sense and does in a way contribute towars making people's lives better.

The main objective of the project (a clear picture of the project):

The objective of the "Swimming pool management system is to provide a system which handles the information of the people coming into the Swimming pool and maintaining their health care. It takes care of all their health information. It even maintains the data of what and all medicines used by the people who join the Swimming pool. Data will be stored in the database. It also maintains the people's attendance, Swimming pool records.

Working Methodology (the summary of the project must also be incorporated):

Modules of the software:

• Login:

User enters User Name and password to login this software application. There are two types of users using this software i.e., admin and user.

Master:

This module has software configuration only admin can access this module.

Here admin adds new employee details, designation, admin details, etc. In this admin assigns tasks to employee. Admin also provides unique username and password to the employee.

Entry:

Receptionist can add the details of a person who wish to join the Swimming pool. Their personal information including weight, height and phone number are collected. The receptionist also provides timings for that person, when he can come to the Swimming pool.

Swimming pool equipment:

Admin has the authority to add the Swimming pool equipments to the software. He can also modify it.

Attendance:

As soon as that particular person arrives, his day of attendance will be marked by the receptionist. The receptionist can also note down the Swimming pool equipment he wishes to join.

Defector:

Finally when that person wishes to leave the Swimming pool, his/ her present weight and height will be compared to his old height and weight stored in the database.

• Medicines:

The admin can even store the details of the medicine information which are in the Swimming pool warehouse. He buys it from other medical shop and can store in the database so that any information needed can be retrieved easily.

Scope of the Project:

This project is helpful in the Automation of Swimming pool record including Swimming pool weights, medicines, healthy drinks and Swimming pool management system.

Details about the Hardware & Software to be used

Hardware Interface:

Processor:

Intel dual core or above

- Processor Speed:
- 1.0GHZ or above
- RAM:
- 1 GB RAM or above
- Hard Disk:

20 GB hard disk or above

Software:

- Application: Netbeans IDE 8.2
- Language: Java Application
- Database: My SQL

Listing out the Testing Technologies:

"ITERATIVE MODEL"

Limitations of the system proposed:

- 1. No automatic backup facilities available.
- 2. To run the application Internet Explorer 5.0 and above is required.
- 3. High bandwidth is required for as the transaction rate is high and Third-party gateway

1

Developer's Signature

4-0

Client's Signature

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1.INTRODUCTION

The Swimming pool management "SP" is located at Kanhaiya Nagar Thane(E)-400603, The Owner of the Swimming pool management "SP" is Mr. Prince Pillai. The Aim of the SMS is to manage the Member records and keep the records of executed transactions.

1.1 INTRODUCTION TO THE PROJECT

O Objective and Scope of Project

- The main objective of the Swimming pool management System is to provide a qualified software to help manage the Members and their records.
- Here, the admin manages and maintains various data, records.
- The Software has been designed to provide a entire system to control, manage and collect the data of the members who has been admitted at swimming pool management simplest way possible.
- The aim of the project is to automate the current manual process. The product could be implemented in an average sized, which are not able to spend lots of money for such systems.

1.2 Existing System:

• The existing system currently functional in Swimming pool management is based on the traditional way of maintaining records and details in a

book, which has the probability of getting misplaced and even they may get ragged over a period of time making it the most unreliable way of maintaining records.

• Manual paper written method is used in order to record the execution of events, transactions, information.

1.3 Proposed System:

- Tracing the details of Members, available and unavailable Swimming pool etc.
- Provides the searching facilities based on various attributes.
- Displaying the Admitted Members in the Swimming pool management.
- **O** Fees Management.

2. Feasibility Study:

Preliminary investigation examines project feasibility, the likelihood the system will be useful to the proprietor. The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new modules and debugging old running system. All system is feasible if they are unlimited resources and infinite time. There are aspects in the feasibility study portion of the preliminary investigation:

- O Technical Feasibility
- Operational Feasibility
- O Economic Feasibility

TECHNICAL FEASIBILITY

Earlier no system existed to cater the needs of 'Secure Infrastructure Implementation System'. It is essential that the process of analysis and definition be conducted in parallel with an assessment to technical feasibility. The current system developed is technically feasible. It is an application-based user interface. Thus, it provides an easy access to the school's owner. The database's purpose is to create, establish and maintain a workflow among various entities. Therefore, it provides the technical guarantee of accuracy, reliability and security. The work for the project is done with the current equipment and existing software technology.

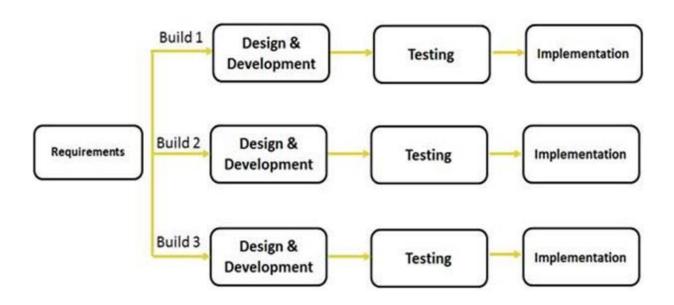
ECONOMIC FEASIBILITY

Economic feasibility is determined by the means of cost benefit analysis. The proposed system is economically feasible as the cost involved in purchasing the hardware and software falls within the budget. It is worth to invest within the proposed system as it offers many such functionalities that falls under the budget and would make the tangled work, flow in a smooth manner. The recovery of the cost incurred in the project would consume a minimal span of time. The proposed system will give the minute information, as a result the performance is improved which in turn may be expected to provide increased profits.

OPERATIONAL FEASIBILITY

With the proposed system, the user can login into their zone where the sorted form of information would be available for him to take into use. For the implementation of this proposed system, the user should know about the computer basics, information about working with windows platform, login, logout, profiles, sorting knowledge between the required things. These skills are required to be known by the user and if the user is unaware of such tactics, he can easily learn it which requires hardly any time to invest into it. All over the proposed system is operationally feasible as it is very easy for the end users to handle it.

3. ITERATIVE MODEL DIAGRAM



3.1 Model Implementation

Iterative Model is used to develop this project. The Reasons for choosing Iterative Model is that the requirements of complete system are clearly defined and understood. The major requirements are defined, while some functionalities and requested enhancements evolve with the process of the development process. The model is easy to understand and use. Generates working software quickly and early during the software life cycle. More flexible, less costly to change scope and requirements. Each phase characterized in Iterative Model has a specific deliverable.

Different Phases of Iterative Model

Stage	Deliverable
Requirements Stage	The system related information is gathered and analyzed.
Design Stage	The software solution is prepared to meet the necessities for the design. The system design may be a new one or extension of previous build one.
Test Stage	The system is developed by coding and building the user interface and modules which is then incorporated and tested.
Implementation Stage	This stage is same as Test Stage in which system is developed by coding and building the user interface.

4. DATABASE DESIGN WITH RECORDS

• Member

Column Name	Data Type		
ID	int		

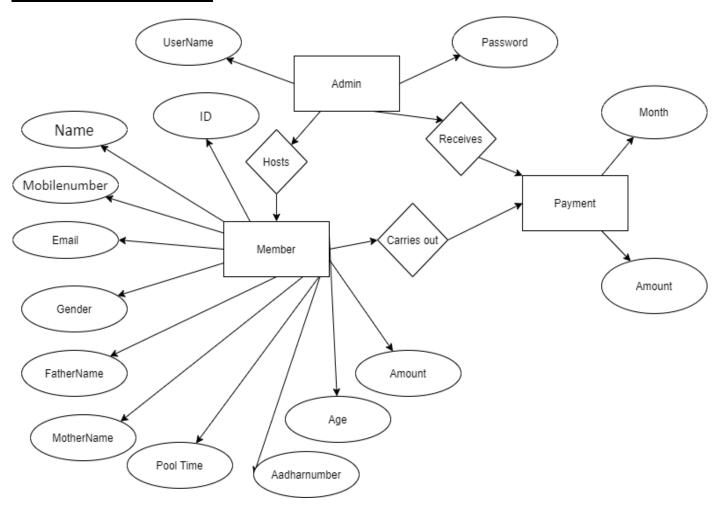
name	varchar(200)
Mobile number	bigint
Email	varchar(200)
Gender	varchar(50)
Father name	varchar(200)
Mother name	varchar(200)
Pool time	varchar(50)
Aadhar number	Big int
Age	int
Amount	int

Payment

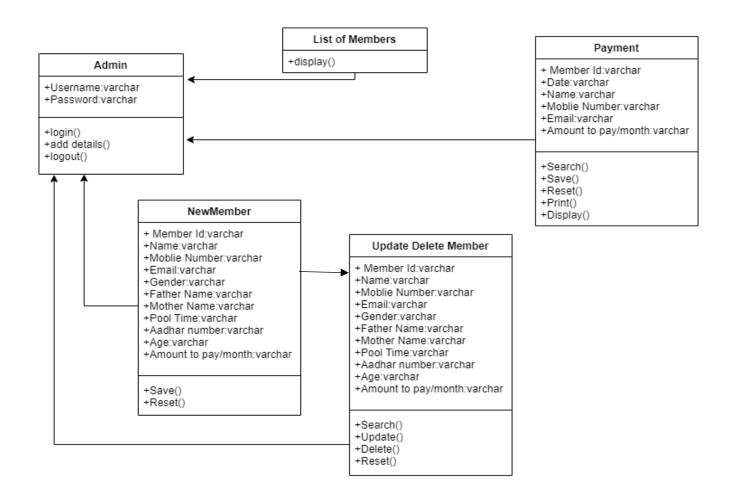
Column Name	Data Type
month	varchar(50)
amount	int

5. DIAGRAMS

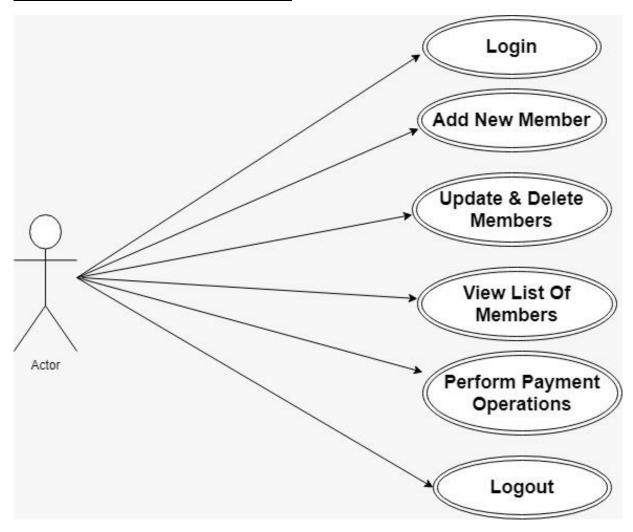
5.1 ER DIAGRAM:-



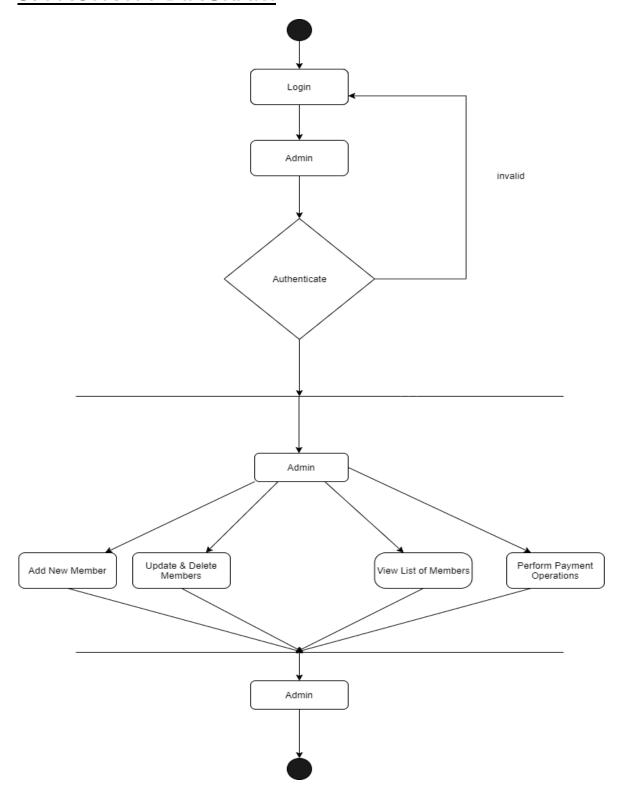
5.2 CLASS DIAGRAM:-



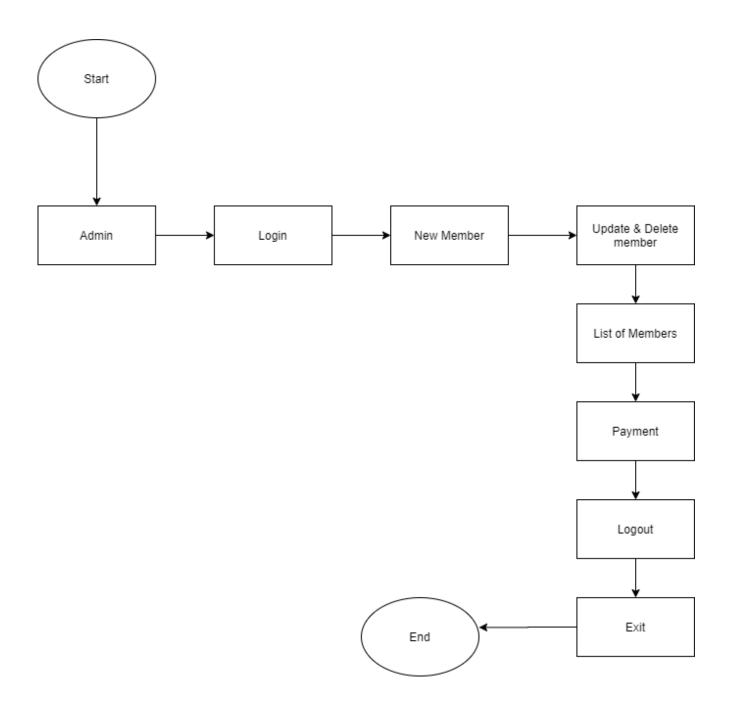
5.3 USE CASE DIAGRAM:-



5.4 ACTIVITY DIAGRAM



5.5 DATA FLOW DIAGRAM



6.GANTT CHART

Gantt chart is a horizontal bar chart developed as a production control tool. Gantt charts are useful for planning and scheduling projects. They help you assess how long a project should take, determine the resources needed, and plan the order in which you'll complete tasks. A Gantt chart is constructed with a horizontal axis representing the total time span of the project, broken down into increments (for example, days, weeks, or months) and a vertical axis representing the tasks that make up the project

SWIMMING	Week	Week	Week	Week	Week	Week	Week	Week	Week	Week	Week	Week	Week	Week	Week	Week
POOL	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Management																
System																
Requirement	101	Mar-	15M	ar												
Designing and Development					16 N	/lar –	20 N	lar								
Testing									22	Mar	- 30	Mar	}			
Documentation													2 Ap	or – 08	Apr	

7. TEST CASES

Sr No.	Action	Input	Expected Output	Actual Output	Test Result	Test Comment
1.	Launch Application	Click on software	Login page	Login page	Pass	Successful
2.	Enter correct username and password	Username : hostel Password : ****	Home page	Home page	Pass	Home page will display
3.	If username and password are incorrect	Username : Hostel Password : ****	"Login Successful"	"Login Failed"	Fail	Invalid username and password
3.	If email is not in correct format	Enter email in correct format	No error message	"Invalid Email"	Fail	Unsuccessful
4.	If email is in correct format	Enter email id	No error message	No error message	Pass	Successful
5.	If Mobile No. Having 10 digits	Enter mobile no	No error message	No error message	Pass	Successful

If Mobile No. Does not having 10 digits	Enter mobile no		Length is too long or short	Fail	Unsuccessful
	Enter Father name	message	Only characters are allowed.	Fail	Unsuccessful
	Enter Father name	No error message	No error message	Pass	Successful
	Enter Mother name	No error message	Only characters are allowed.	Fail	Unsuccessful
If Mother's Name is in correct format	Enter Mother name	No error message	No error message	Pass	Successful
If Aadhar no. is not in correct format	Enter Aadhar number	No error message	Only number is allowed.	Fail	Unsuccessful
If Aadhar no. is in correct format		No error message	No error message	Pass	Successful
If Age is not in correct format	Enter Age	No error message	Only number is allowed.	Fail	Unsuccessful

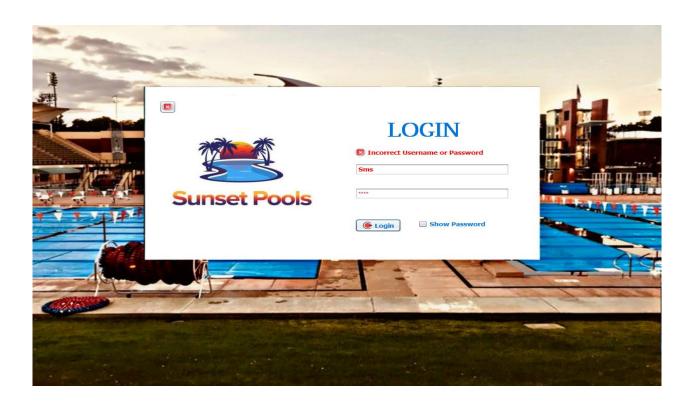
	If Age is in correct format	Enter Age	No error message	No error message	Pass	Successful
	If Amount is not in correct format	Enter Amount	No error message	Only number is allowed.	Fail	Unsuccessful
16.	If Amount is in correct format	Enter Amount	No error message	No error message	Pass	Successful

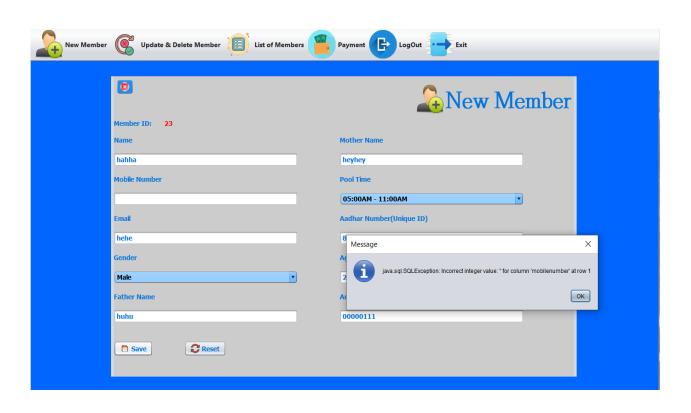
8. EVENT TABLE:

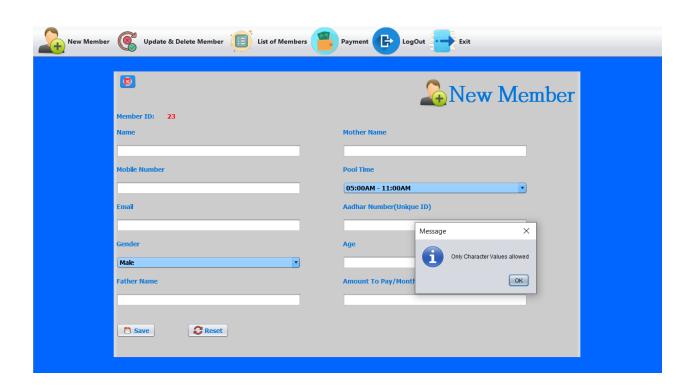
Sr. No.		Trigger	Source	Activity	Response	Destination
1	Admin Login	Login	Admin	Check valid username and password	Opens account if successful	Admin
2.	New Member	Create	Admin	Adding New Member	New Member Added	Admin

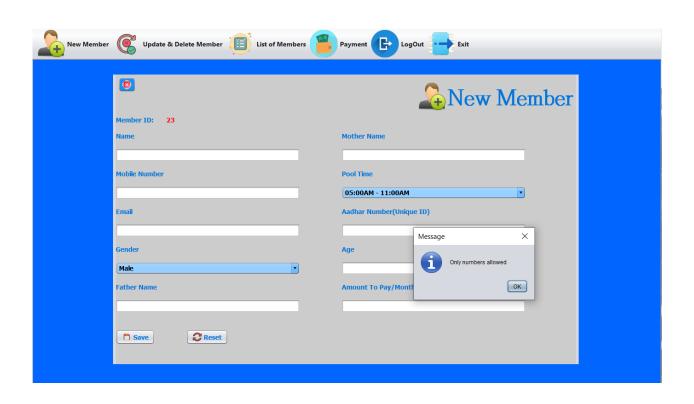
3.	Update Members	Update	Admin	Updating Members details	Member details updated	Admin
4.	Delete Members	Delete	Admin	Deleting Members	Member Deleted	Admin
5.	List of Members	Check	Admin	Checking status of Members	Confirmed Admission Of members	Admin
6.	Payment	Print	Admin	Printing receipts of members	Printed	Member

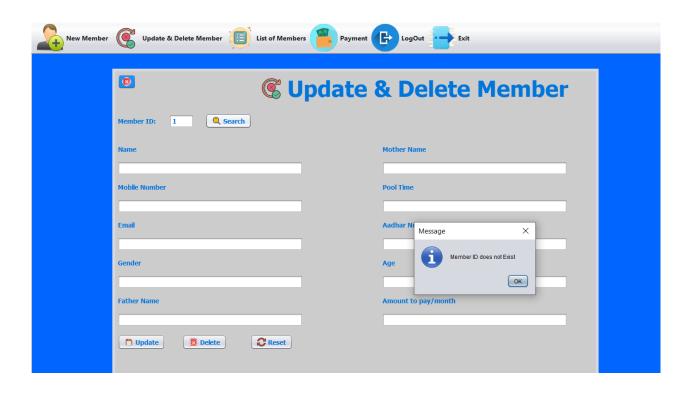
9. VALIDATIONS

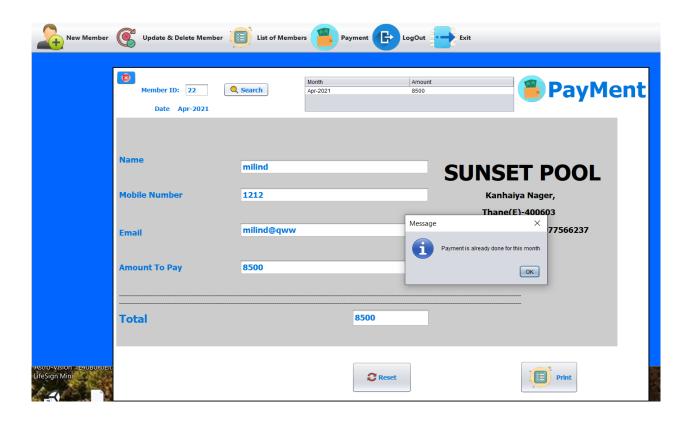












10. PROGRAM LIST

- 1) login.java
- 2) home.java
- 3) NewMember
- 4) ListofMembers
- 5) Update&DeleteMember
- 6) PayMent

11. SOURCE CODE

• Code for Home Page:-

```
import javax.swing.JOptionPane;
/*
* 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 Mukesh
*/
public class home extends javax.swing.JFrame {
  /**
  * Creates new form home
  */
  public home() {
    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();
   jLabel1 = new javax.swing.JLabel();
   jMenuBar1 = new javax.swing.JMenuBar();
   jMenu1 = new javax.swing.JMenu();
   jMenu2 = new javax.swing.JMenu();
   jMenu3 = new javax.swing.JMenu();
   jMenu4 = new javax.swing.JMenu();
   jMenu5 = new javax.swing.JMenu();
   jMenu6 = new javax.swing.JMenu();
   setDefaultCloseOperation(javax.swing.WindowConstants.EXIT ON CLOSE);
   setUndecorated(true);
   jPanel1.setBackground(new java.awt.Color(255, 0, 51));
   jPanel1.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(153, 153,
153), 1, true));
   jLabel1.setBackground(new java.awt.Color(0, 51, 51));
```

```
jLabel1.setFont(new java.awt.Font("Arial Black", 1, 90)); // NOI18N
   jLabel1.setForeground(new java.awt.Color(51, 0, 51));
    jLabel1.setText("Welcome!");
    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    jPanel1.setLayout(jPanel1Layout);
    jPanel1Layout.setHorizontalGroup(
      jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(358, 358, 358)
        .addComponent(jLabel1)
        .addContainerGap(486, Short.MAX_VALUE))
   );
    jPanel1Layout.setVerticalGroup(
      jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(303, 303, 303)
        .addComponent(jLabel1)
        .addContainerGap(273, Short.MAX VALUE))
    );
    jMenu1.setIcon(new javax.swing.ImageIcon(getClass().getResource("/images/new
member.png"))); // NOI18N
    jMenu1.setText("New Member");
    jMenu1.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jMenu1.addMouseListener(new java.awt.event.MouseAdapter() {
      public void mouseClicked(java.awt.event.MouseEvent evt) {
```

```
jMenu1MouseClicked(evt);
      }
   });
    jMenuBar1.add(jMenu1);
    jMenu2.setIcon(new javax.swing.ImageIcon(getClass().getResource("/images/update
& delete member.png"))); // NOI18N
   jMenu2.setText("Update & Delete Member");
   jMenu2.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jMenu2.addMouseListener(new java.awt.event.MouseAdapter() {
      public void mouseClicked(java.awt.event.MouseEvent evt) {
        jMenu2MouseClicked(evt);
      }
   });
    jMenuBar1.add(jMenu2);
    jMenu3.setIcon(new javax.swing.ImageIcon(getClass().getResource("/images/list of
members.png"))); // NOI18N
    jMenu3.setText("List of Members");
    jMenu3.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jMenu3.addMouseListener(new java.awt.event.MouseAdapter() {
      public void mouseClicked(java.awt.event.MouseEvent evt) {
        jMenu3MouseClicked(evt);
      }
    });
   jMenuBar1.add(jMenu3);
```

```
jMenu4.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/images/payment.png"))); // NOI18N
    jMenu4.setText("Payment");
    jMenu4.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jMenu4.addMouseListener(new java.awt.event.MouseAdapter() {
      public void mouseClicked(java.awt.event.MouseEvent evt) {
        jMenu4MouseClicked(evt);
      }
    });
    jMenuBar1.add(jMenu4);
    jMenu5.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/images/logout.png"))); // NOI18N
    jMenu5.setText("LogOut");
    jMenu5.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jMenu5.addMouseListener(new java.awt.event.MouseAdapter() {
      public void mouseClicked(java.awt.event.MouseEvent evt) {
        jMenu5MouseClicked(evt);
      }
    });
    jMenuBar1.add(jMenu5);
    jMenu6.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/images/exit.png"))); // NOI18N
    jMenu6.setText("Exit");
   jMenu6.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    jMenu6.addMouseListener(new java.awt.event.MouseAdapter() {
      public void mouseClicked(java.awt.event.MouseEvent evt) {
```

```
jMenu6MouseClicked(evt);
      }
    });
    jMenuBar1.add(jMenu6);
    setJMenuBar(jMenuBar1);
    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,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
   );
    layout.setVerticalGroup(
      layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    pack();
  }// </editor-fold>
  private void jMenu5MouseClicked(java.awt.event.MouseEvent evt) {
   // TODO add your handling code here:
    int a=JOptionPane.showConfirmDialog(null, "Do you Really Want To
LogOut","Select",JOptionPane.YES_NO_OPTION);
    if(a==0)
```

```
{
      setVisible(false);
      new login().setVisible(true);
    }
  }
  private void jMenu6MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    int a=JOptionPane.showConfirmDialog(null, "Do you Really Want To
Exit","Select",JOptionPane.YES_NO_OPTION);
    if(a==0)
    {
      System.exit(0);
    }
  }
  private void jMenu1MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    new NewMember().setVisible(true);
  }
  private void jMenu2MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    new UpdateDeleteMember().setVisible(true);
  }
```

```
private void jMenu3MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    new ListOfMembers().setVisible(true);
  }
  private void jMenu4MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    new Payment().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(home.class.getName()).log(java.util.logging.Level.SEVER
E, null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(home.class.getName()).log(java.util.logging.Level.SEVER
E, null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(home.class.getName()).log(java.util.logging.Level.SEVER
E, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(home.class.getName()).log(java.util.logging.Level.SEVER
E, null, ex);
    }
    //</editor-fold>
    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
      public void run() {
        new home().setVisible(true);
      }
    });
  }
  // Variables declaration - do not modify
  private javax.swing.JLabel jLabel1;
```

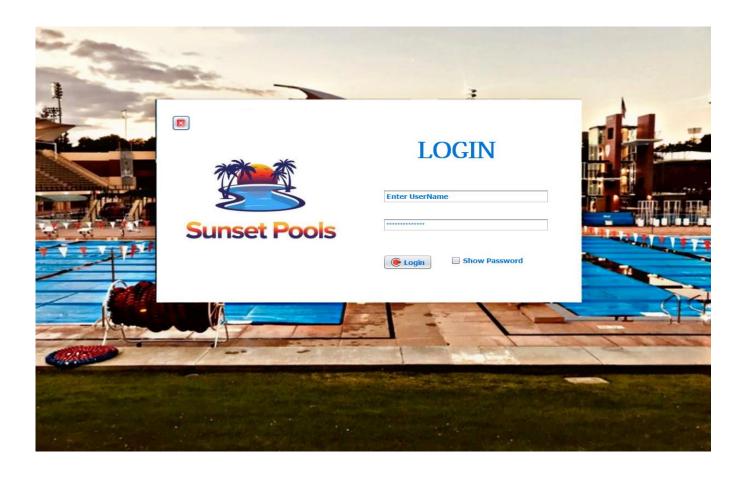
```
private javax.swing.JMenu jMenu1;
private javax.swing.JMenu jMenu2;
private javax.swing.JMenu jMenu3;
private javax.swing.JMenu jMenu4;
private javax.swing.JMenu jMenu5;
private javax.swing.JMenu jMenu6;
private javax.swing.JMenuBar jMenuBar1;
private javax.swing.JPanel jPanel1;
// End of variables declaration
}
```

FOR FURTHER CODE:

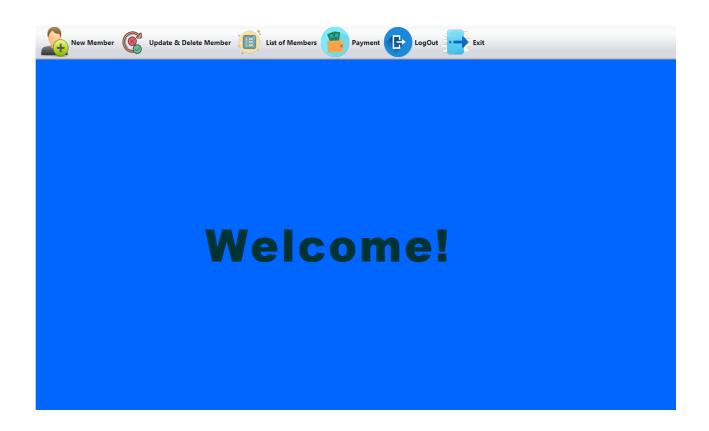
https://drive.google.com/file/d/1Ug7UlFfj9fzxsaqpZc0jv SF6ulHCUKJ/view?usp=sharing

12. RESULTS

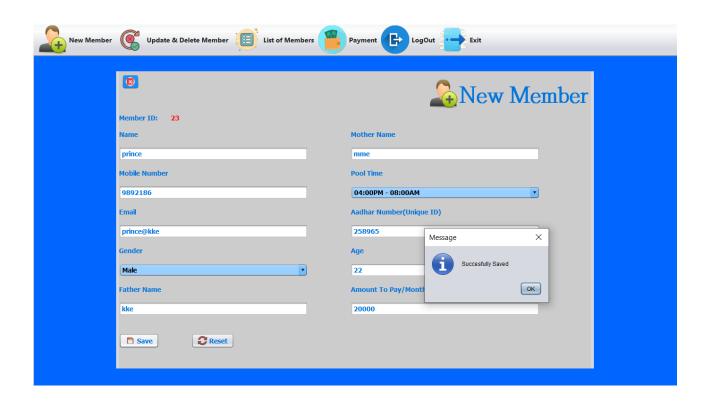
Launch the application and this window will appear:



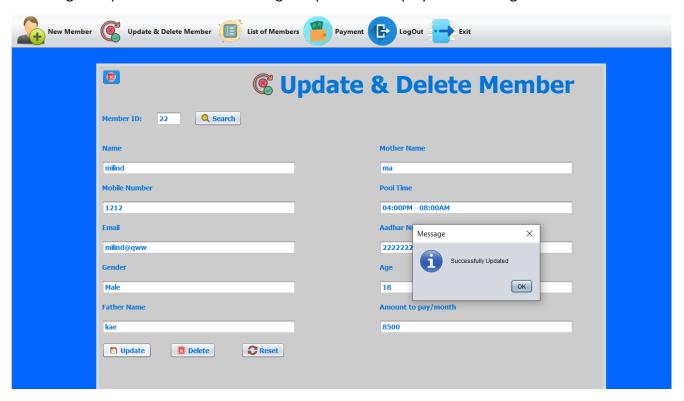
If the Username and Password is correct:



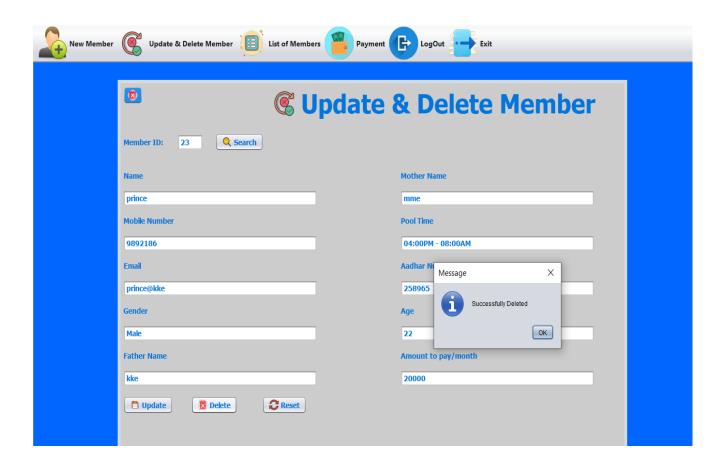
Entering The Costumer Details:



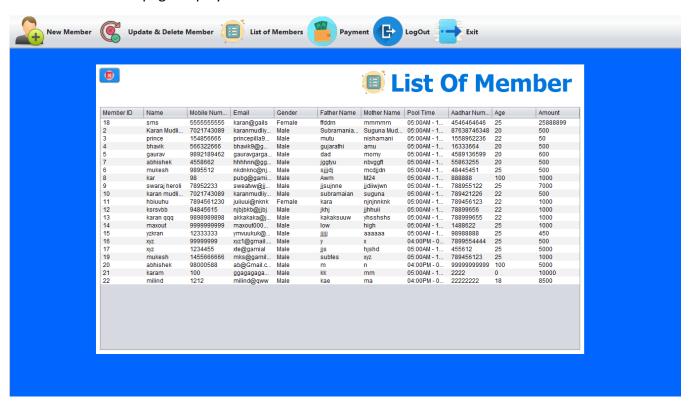
Entering the updated details and clicking on update will display the following:



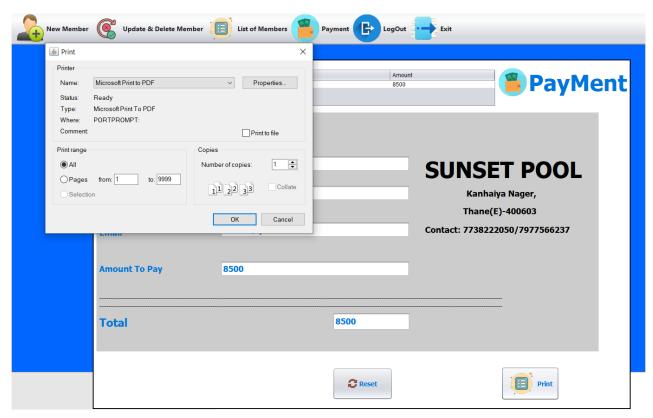
Entering the id of a certain member will display the details of the customer and pressing the delete button will display the following message:



The list of members page displays:



Pressing the print button will display:



15. TOOLS USED FOR DEVELOPING SWIMMING POOL MANAGEMENT SYSTEM

15.1 NetBeans



NetBeans IDE is the official IDE for Java 8. With its editors, code analyzers, and converters, you can quickly and smoothly upgrade your applications to use new Java 8 language constructs, such as lambdas, functional operations, and method references. Batch analyzers and converters are provided to search through multiple applications at the same time, matching patterns for conversion to new Java 8 language constructs.

Keeping a clear overview of large applications, with thousands of folders and files, and millions of lines of code, is a daunting task. NetBeans IDE provides different views of your data, from multiple project windows to helpful tools for setting up your applications and managing them efficiently.

15.2 MySQL



MySQL is an open source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually

all platforms, including Linux, UNIX, and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with webbased applications and online publishing.

It is an important component of an open source enterprise stack called LAMP. MySQL creates a database for storing and manipulating data, defining the relationship of each table. Clients can make requests by typing specific SQL statements on MySQL.

15.3 Wamp Server



WAMP Stands for "Windows, Apache, MySQL, and **PHP**." WAMP is a variation of LAMP for Windows systems and is often installed as a software bundle (Apache, MySQL, and **PHP**). It is often used for web development and internal testing, but may also be used to serve live websites.

The most important part of the WAMP package is Apache(or "Apache HTTP Server") which is used run the Web Server within Windows. By running a local Apache web server on a Windows machine, a web developer can test webpages in a web browser without publishing them live on the Internet.

14. MAINTENANCE AND

FUTURE ENHANCEMENTS

14.1 Advantages over Current System : -

In the Existing system the work are done only manually but in proposed system we can do our with computerized system using this application. Existing system includes following points:-

- Time consuming.
- More man power.
- Security of Data
- Consumes large volume of pare work.
- Needs manual calculations.
- No direct role for hostel owner.

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work.

- · Security of data.
- Ensure data accuracy.
- Minimize manual data entry.
- Minimum time needed for the various processing.
- Greater efficiency.
- User friendliness and interactive.
- Minimum time required.

At the end it is concluded that we have made effort on following points:-

- The description of Purpose, Scope, and applicability.
- We define the problem on which we are working in the project.
- We describe the requirement Specifications of the system and the actions that can be done on these things.

- We understand the problem domain and produce a model of the system, which describes operations that can be performed on the system by only some clicks.
- Finally, the system is implemented and tested according to test cases.

14.2 Future Enhancement: -

Future enhancement of the software will have the following points:-

- Maintain attendance details of employee.
- · Providing more enhanced functions in future.
- Implement the backup mechanism for taking backup of codebase and database on regular basis on different servers.
- Other possibilities

14.3 System Maintenance:-

System Maintenance of the software will have the following points:-

- Fixing bugs if at all anything found during actual working.
- Periodic checking of software at regular intervals.
- Make better use of existing tools and techniques.

15. REFERENCES

Reference Website:

- 1) https://www.google.com
- 2) https://www.youtube.com
- 3) https://www.stackoverflow.com
- 4) https://www.w3school.com