ChocAn Data Center

PROJECT 1

COMP 370

Software Engineering

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Group 2

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11.24 (Term Project) Perform the requirements workflow for the Chocoholics Anonymous project in Appendix A.

12.20 (Term Project) Using the technique specified by your instructor, draw up a specification document for the Chocoholics Anonymous product described in Appendix A.

12.21 (Term Project) Draw up a software project management plan for the Chocoholics Anonymous product described in Appendix A.

13.22 (Term Project) Perform the analysis workflow of the Chocoholics Anonymous product described in Appendix A.

14.16 (Term Project) Starting with your specifications of Problem 12.20 or 13.22, design the Chocoholics Anonymous product (Appendix A). Use the design technique specified by your instructor. (using Object-Oriented design technique)

15.33 (Term Project) Draw up black-box test cases for the product you specified in Problem 12.20 or 13.22. For each test case, state what is being tested and the expected outcome of that test case.

15.34 (Term Project) Implement and integrate the Chocoholics Anonymous product (Appendix A). Use the programming language specified by your instructor. Your instructor will tell you whether to build a Web-based user interface, a graphical user interface, or a text-based user interface. Remember to utilize the black-box test cases you developed in Problem 15.33 for testing your code.

11.24 (Term Project) Perform the requirements workflow for the Chocoholics Anonymous project in Appendix A.

The starting phases of the Requirements Workflow incorporates gathering introductory data from the client. Later, the initial data will be utilized as contribution for the Unified Process. At that point we follow the Unified Process to figure out what that customer actually needs. The measurements used to track the correctness of the prerequisites work process are changes that are made by developers and changes that are made by the customer. An excessive number of changes from developers could mean our requirements analysis work flow is defective, an excessive number of changes from the customer could demonstrate that the Moving Target Problem exists, and a conversation might be important to figure it out.

Step 1: Understanding the Application Domain

Glossary: We will create a complete list of terms that our clients will be using in the application domain, and ensure we comprehend the definition of every one of them. This will help us to maintain a strategic distance and avoid any mistakes.

Admin	A Chocoholics Anonymous worker accountable for overseeing provider and members.
Dietitian	An expert having a proper knowledge on diet and nutrition
Manager	A Chocoholics Anonymous director who can ask for reports
Member	A registered individual from Chocoholics Anonymous
Member ID	A 9-digit ID used to uniquely identify the member
Provider	An individual giving the support to the members
Provider ID	A 9-digit ID used to uniquely identify the provider
Service	An administration offered by the Providers to the Members

Service ID	A 6-digit ID assigned to the service provided to a member
Status	Will perform a check and provide information regarding validity status of a member
Trainer	A person providing medical assistance to the members.
Yoga trainer	A person creating safe space for others to practice and facilitate the yogic process and exercises

We will also create a requirement document in which:

1. We will give Chocoholics Anonymous an expected finish date. On the off chance that it is different from the clients required date we will inquire as to whether they can push their actual due date.

2. Even if them is any demand for the website by the client, we will get some information about the conditions and specifications of the website.

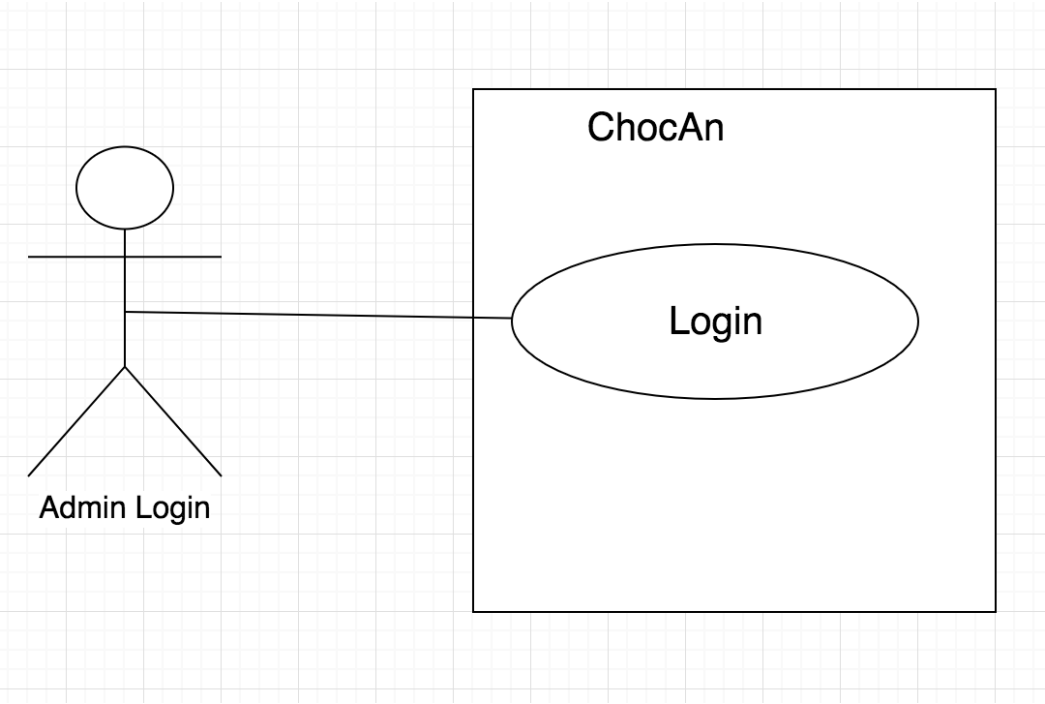
3. We will make inquiries and clear our doubts regarding the report of the requirements which we will receive by the client.

Step 2: Building the Business Model

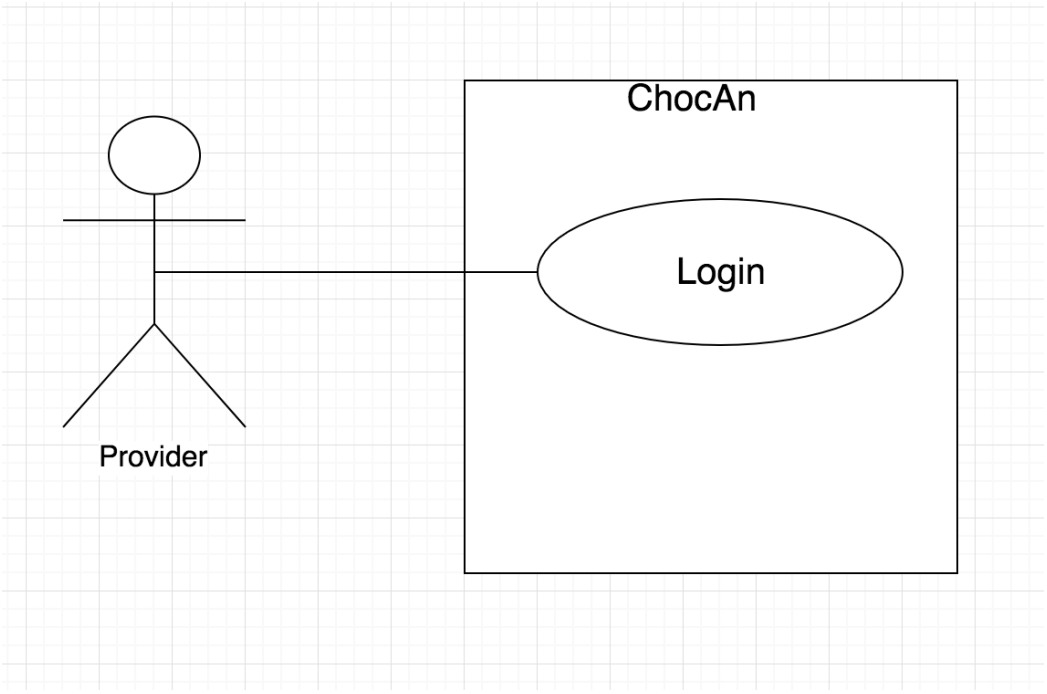
Clients will pay a month to month charge for limitless access to Chocoholics Anonymous' services. This will give them access to services that will enable them to control their chocolate addiction, for example, dietitians, trainers, and yoga specialists. Every member is given a card which has a unique ID that goes about as an identifier for that member. The member will give the card to a Chocoholics Anonymous representative, and if the card is legitimate they will be signed in the system and they will be offered access to all the services which they opt for. In the event that their membership with Chocoholics Anonymous has expired, they will be approached to make a payment for the current month. On the off chance if there is an invalid card error, the IT division will be called to help.

Step 3: Use the Business Model to Understand the Client's Requirements

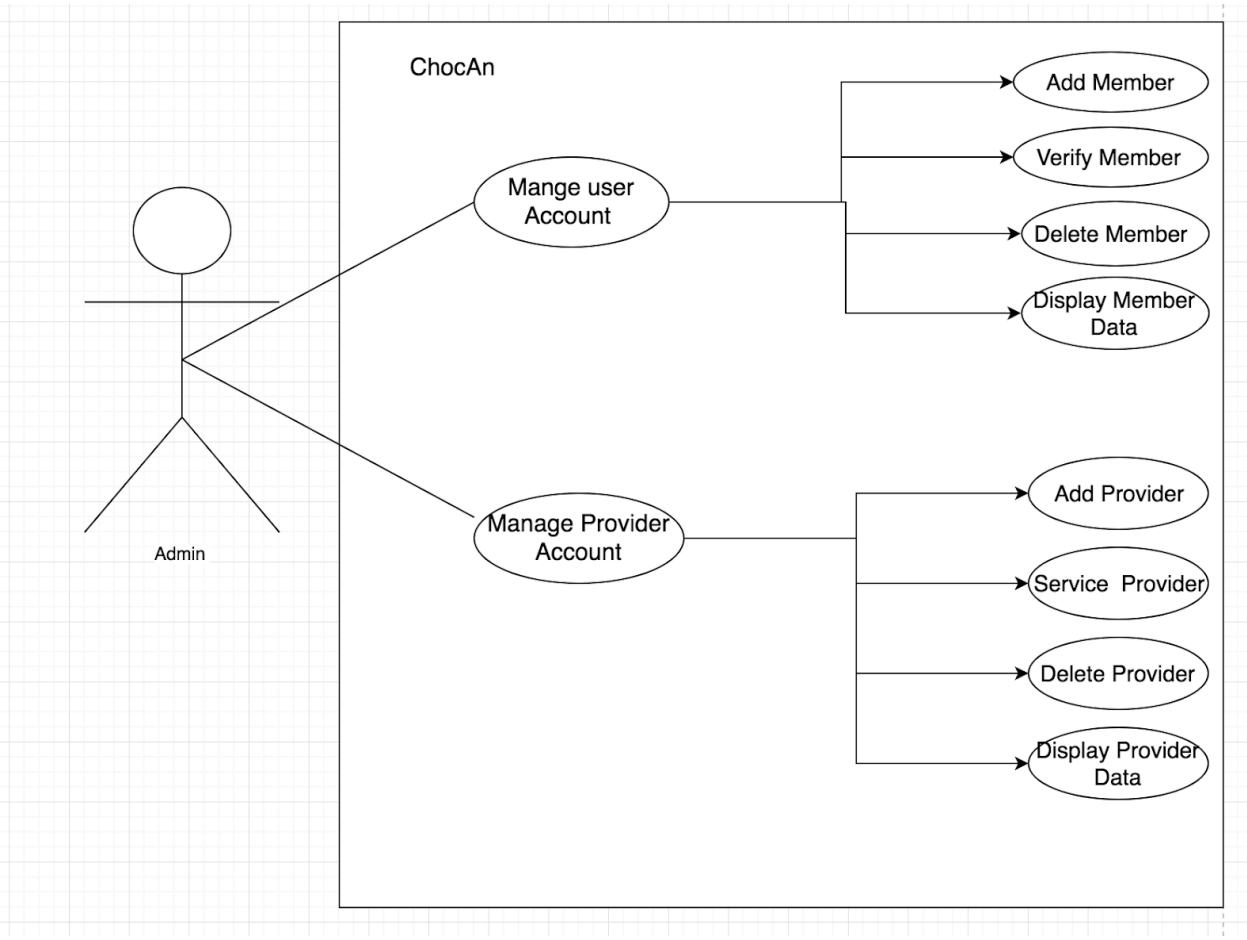
Build use case diagrams to recognize the requirements mentioned by the clients in a precise way.



Description: The Admin logs into the terminal
Step by Step: • When a Admin's terminal is switched on, the admin is asked to enter his or her admin number.



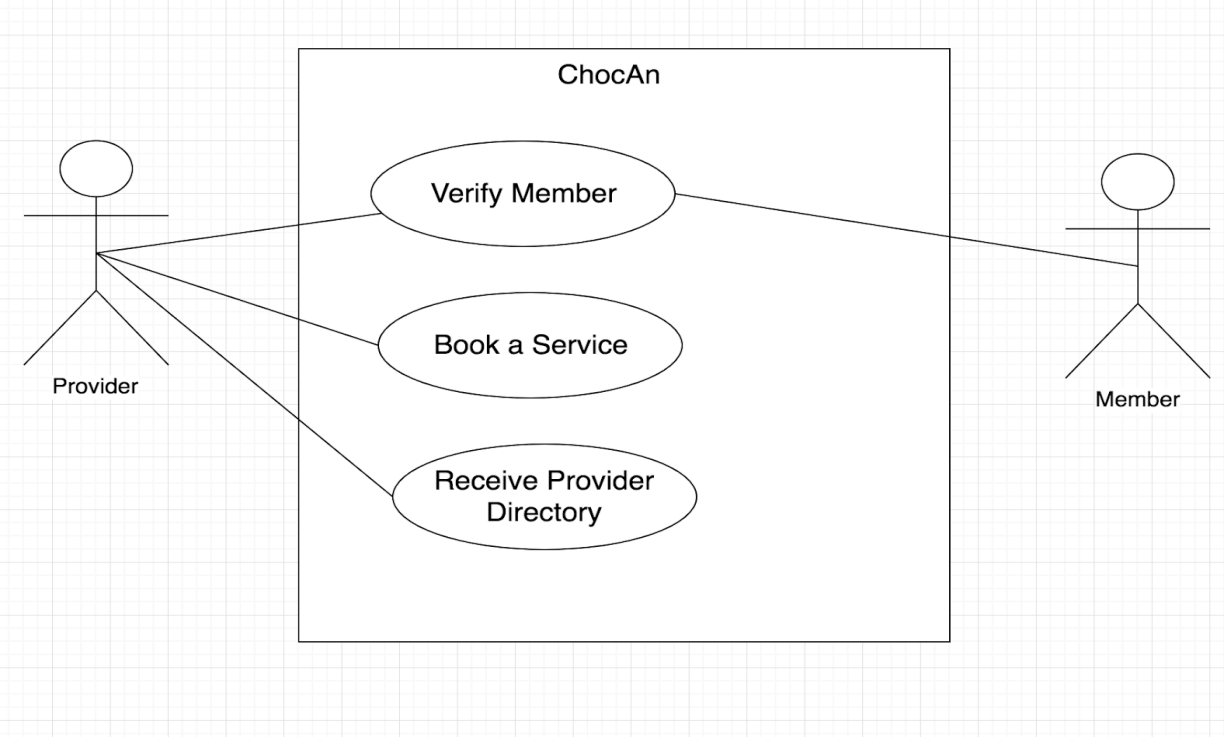
Description: The Provider logs into the terminal
Step by Step: • When a provider's terminal is switched on, the provider is asked to enter his or her provider number.



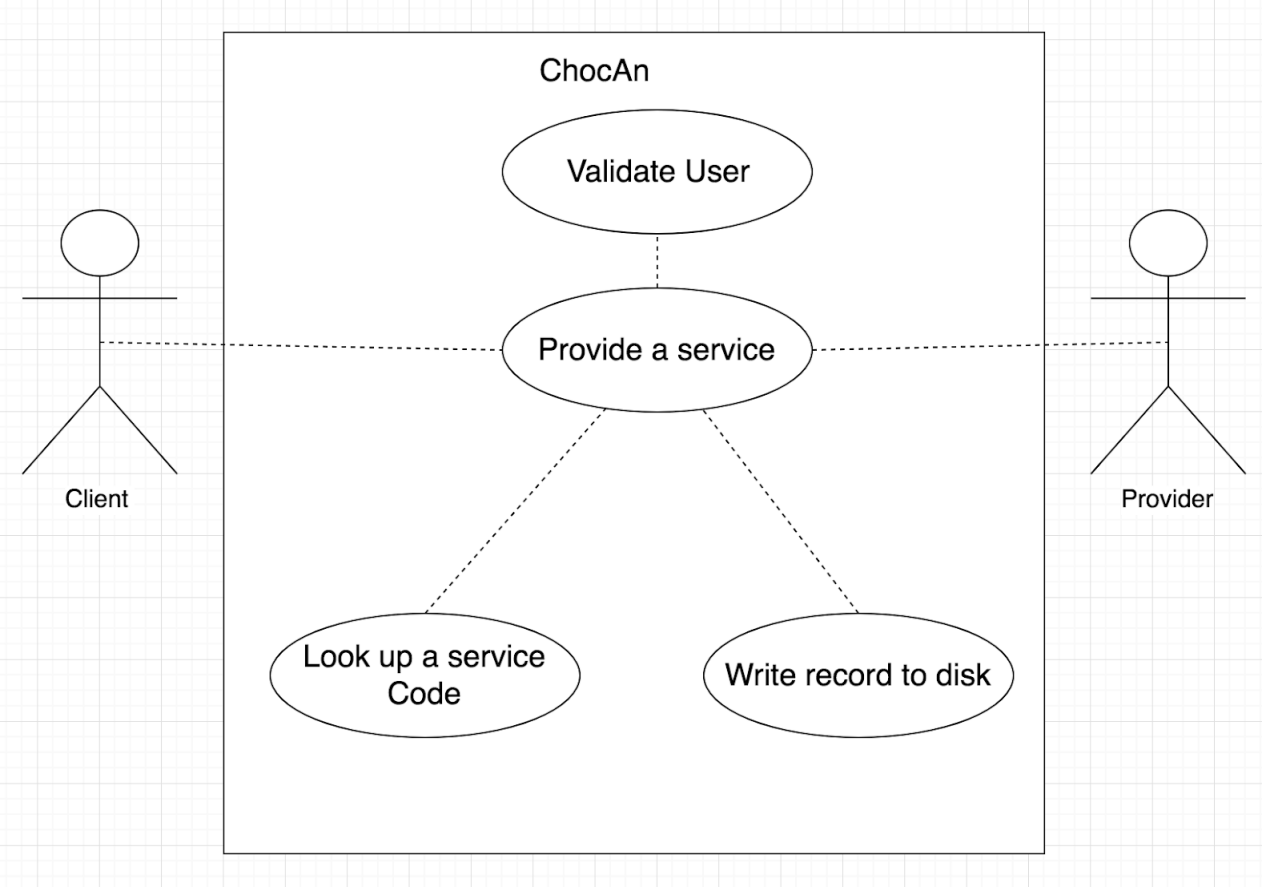
Description: Admin adds new User and Providers, updates existing Users and Providers and delete resigning Users and Providers

Step by step:

- The Admin chooses what type of account to manage.
- The admin chooses whether to add, delete or update an account of that type.
- This action will be performed successfully unless there was an unexpected error.



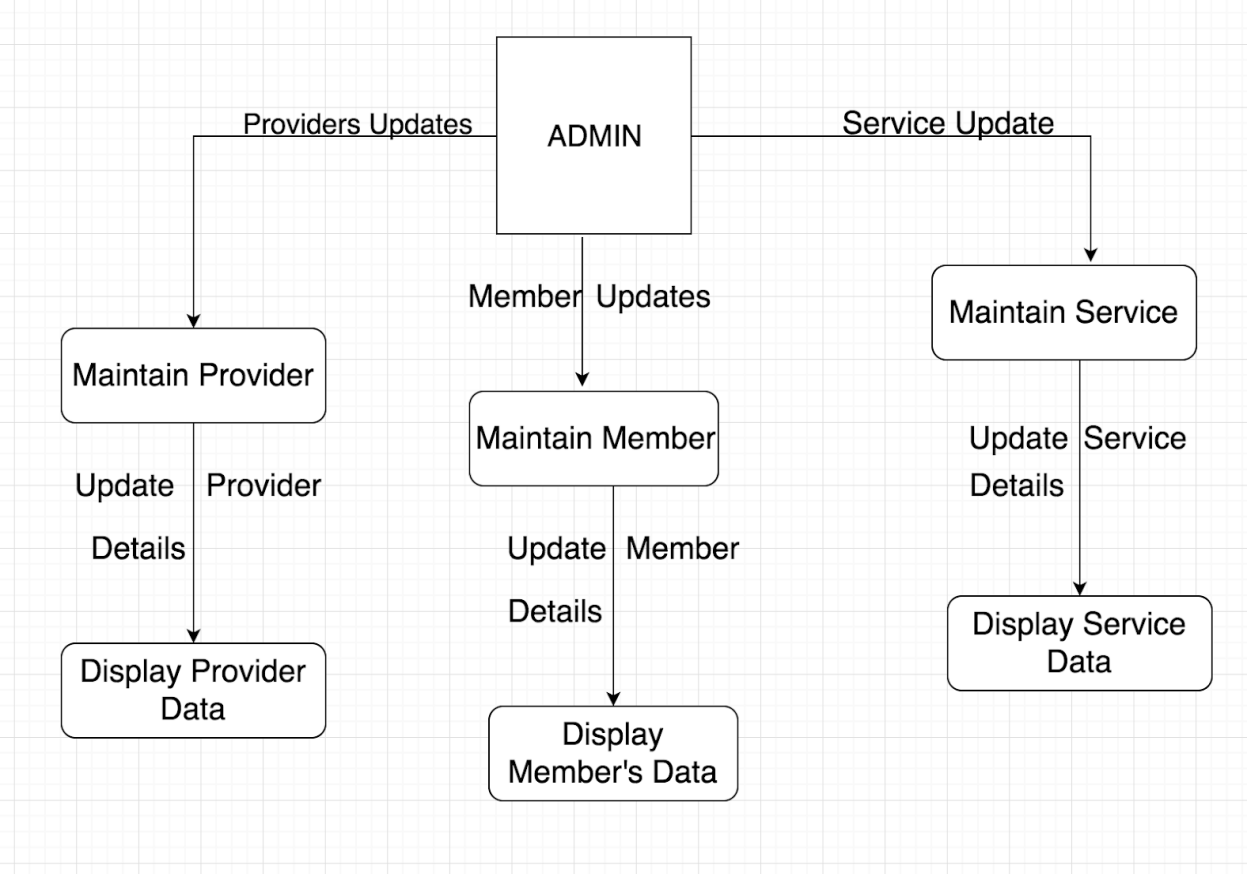
Description: Provider provides different services after verifying a member
Step by step: • The Provider uses the user's card/number to validate them • The provider provides a service to the Customer • Provider can request the software product for a Provider Directory • The provider can request a report at any time

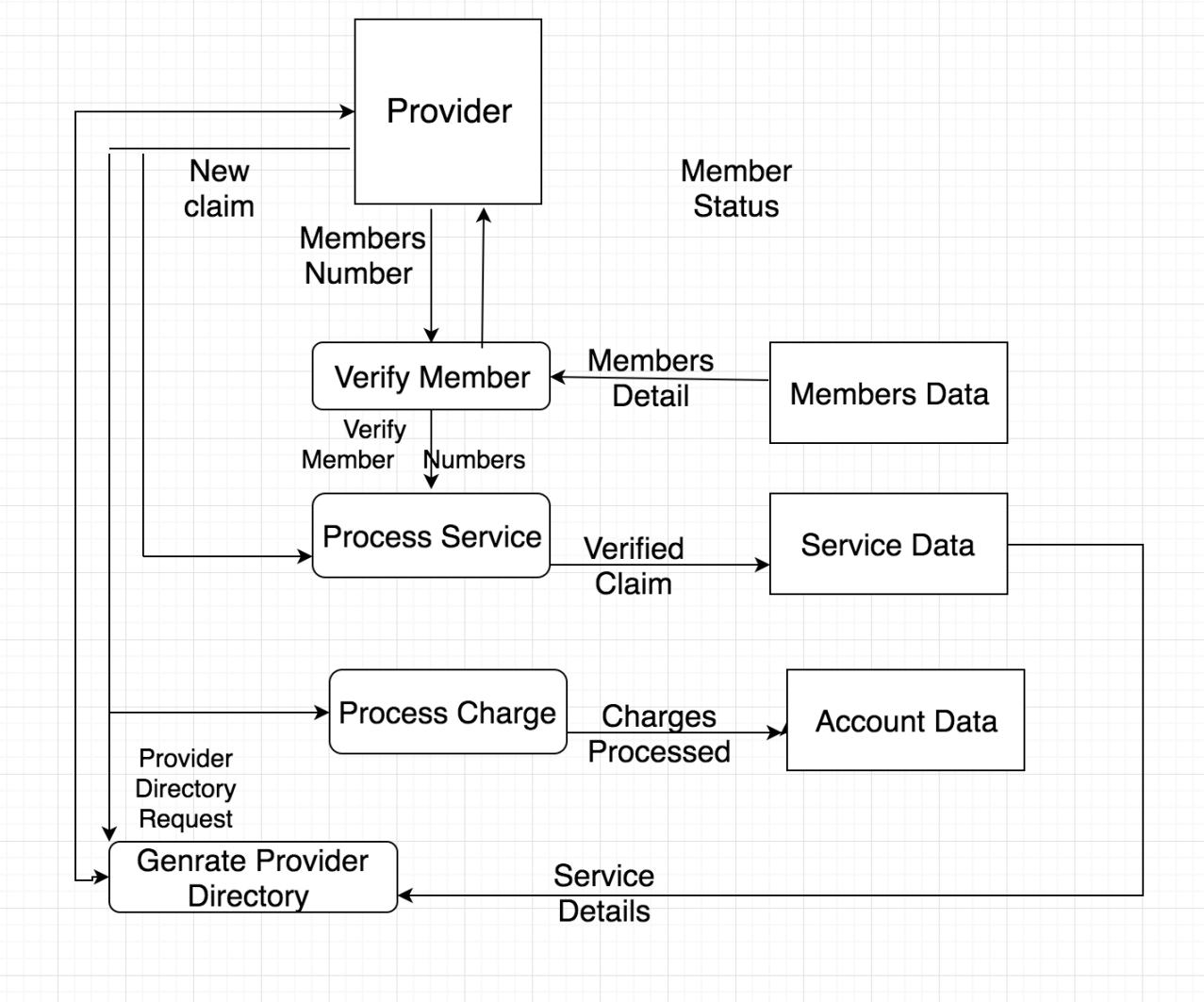


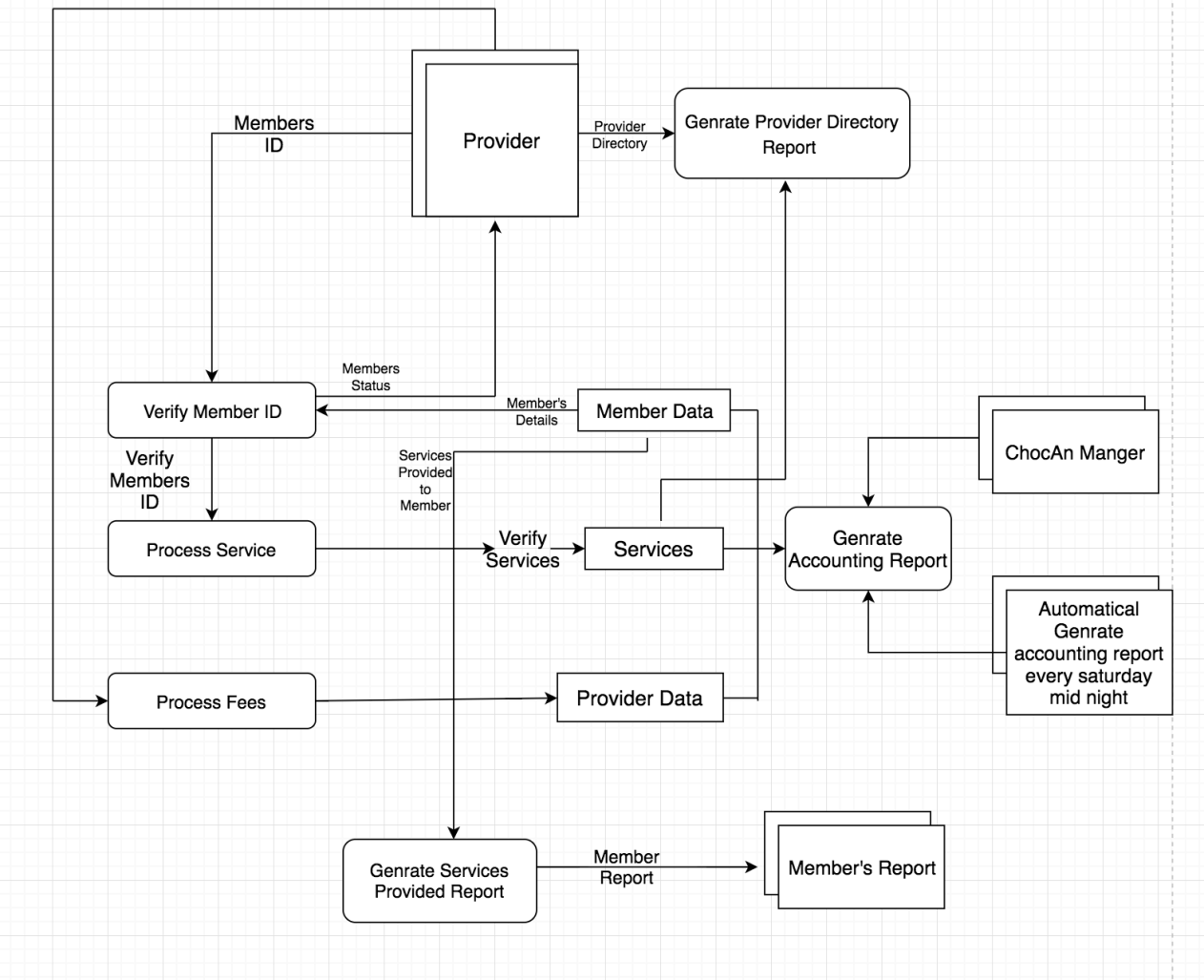
Description: The provider provides a service to the Customer.
Step by step: • The provider takes the card from the user • The provider validates the user • The provider keys in the date the service was provided • The provider uses the Provider Directory to look up the appropriate six-digit service code corresponding to the service provided • The provider keys in the service code • The software product now writes a record to disk • For verification purposes, the provider has a form on which to enter the current date and time, the date the service was provided, member name and number, service code, and fee to be paid.

12.20 (Term Project) Using the technique specified by your instructor, draw up a specification document for the Chocoholics Anonymous product described in Appendix A.

Step 1: Data flow diagram




Provider
New
claim
Member
Status
Members
Number
Verify Member
Members
Detail
Members Data
Verify
Member
Numbers
Process Service
Verified
Claim
Service Data
Process Charge
Charges
Processed
Account Data
Provider
Directory
Request
Genrate Provider
Directory
Service
Details



Step 2: Identify the section to be computerized and process to be used.

The Data Flow Diagrams (DFD) mentioned above identifies the sections to be computerized. Following are the requirements for achieving it:

Central Database installed in Chocoholics Anonymous Datacenter.

Required to maintain a record of the members, store their information and other details.

Client / Server architecture

Required for online implementation of the procedures appearing in first DFD diagram.

Database to be kept up to date by the operator.

Dial-up modem

Required for the procedures or processes in second DFD diagram that is executed utilizing the provider terminals that cooperate with the server by means of a dial-up modem.

Step 3: Determine the Details of the Data Flows

Admin:

Username: string
Password: string

Member:

id: long, primary key
name: string
address: string
city: string
state: string
zipCode: string
isValid: Boolean

Provider:

id: long, primary key
name: string
password: string
address: string
city: string
state: string
zipCode: string

ProviderDir:

serviceCode: long, primary key
providerNumber: long
serviceName: string
providerName: string
fees: integer

ServiceProvided:

comments: string
fees: integer
id: integer

serviceCode: long
providerNumber: long
serviceName: string
providerName: string
timedate: Date

Step 4: Define Logic of Processes

Provider:

To add a new provider:
Insert the provider details into the database.
New provider number will appear for the new provider.

To update an existing provider:
Search for the existing provider by entering the provider number.
Update the provider details.

To delete an existing provider:
Search for the existing provider using the provider number.
Delete the provider.

Member:

To add a new member:
Insert the member details into the database.
New member number will appear for the new member.

To update an existing member:
Search for the existing member by entering the member number.
Update the member details.

To delete an existing member:
Search for the existing member using the member number.
Delete the member.

Verify Member:

By netering the member number, search for the member to verify he or she is an active member or not.

Services:

To add a new service:
Insert the service details into the database.

Generate Provider Directory:

Extract provider directory data from the database
Generate Accounts Report
Extract accounts payable report data from the database.

Step 5: Define the data stores

Providers Data
Contains provider details Members Data
Contains member details Services Data
Contains service details

Step 6: Define physical resources

Table Name: Members
Primary Key: id

Table Name: provider
Primary Key: providerNumber
Table Name: admin
Primary Key: username

Table Name: ProviderDir
Primary Key: serviceId

Table Name: serviceProvided
Primary Key: id

Step 7: Input/output Specification

Following are the inputs for the software:

AddMember
AddProvider
ServicesProvided

Following are the outputs displayed on the screen:
Report

Step 8: Perform Sizing

Database: 80KB
Admin: 5KB
Members: 14KB
Provider: 14KB

ProviderDir: 14KB
serviceProvided: 14KB

Step 9: Determine the Hardware Requirements

Desktop computer
External Hard disk for backups
Operating System: Windows
Printer for printing reports
Zip drive for backups

12.21 (Term Project) Draw up a software project management plan for the Chocoholics Anonymous product described in Appendix A.

Purpose:

To streamline and properly arrange the process of storing data about Chocoholics Anonymous (ChocAn) members and providers, and to make it simpler for the providers to charge ChocAn for giving services to its members.

Scope:

The ChocAn Data Center programmed software will be accessible by providers and managers and will work inside the bounds of the physical location of the ChocAn organization.

Objectives:

- Keeping records of the individuals from Chocoholics Anonymous and its health care experts, who are the providers in this case.
- Keeping records of service appointments of members with their providers, containing the date of the appointment, fees, and so on.
- Generating week after week member, provider and summary reports every week and on interest for the manager, through the ChocAn Data Center software.

Deliverables of the project are as follows:

Product:

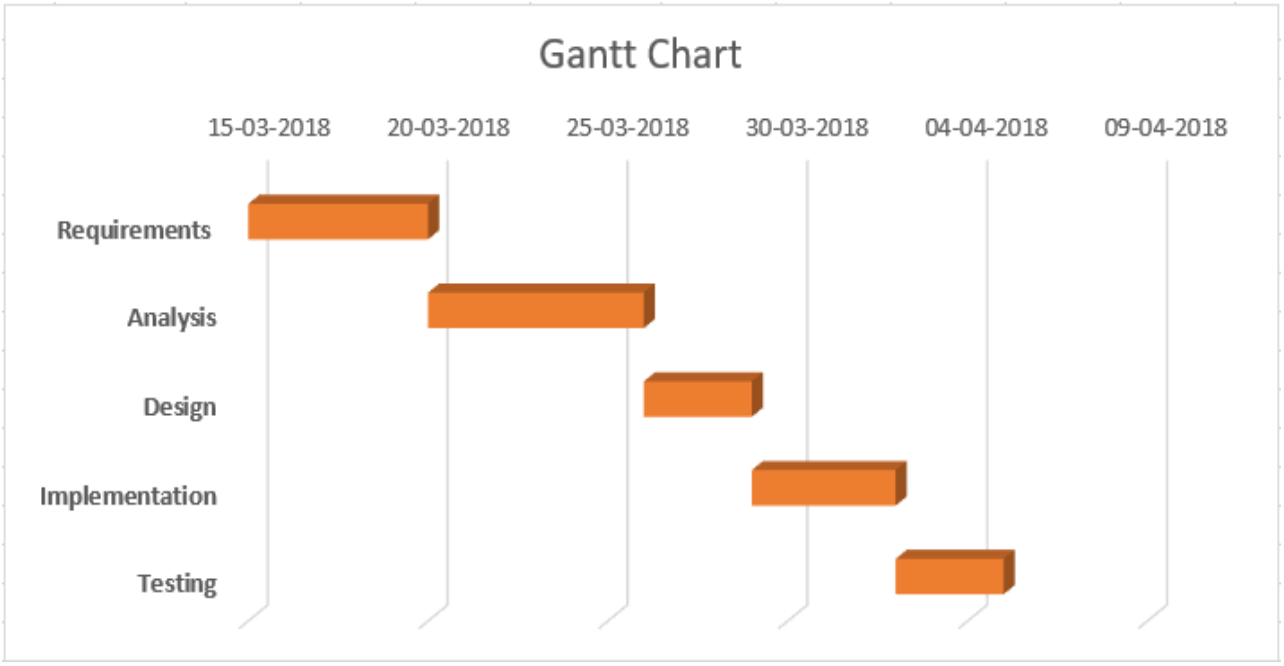
The product will have the accompanying significant functionalities:

- Providing a login module to providers and managers (which uses a keyboard for input, rather than swiping a card, for the acceptance test)
- Validating provider and manager details and giving them access to the services they individually need.
- Showing member and provider reports and a summarized report once every week.

Documentation:

- Use case diagram
- Description of all use cases
- Software Project Management Plan
- Entity-Relationship diagram
- State chart
- Data flow analysis
- Class diagram
- Collaboration diagram
- Black box test cases

Schedule:



13.22 (Term Project) Perform the analysis workflow of the Chocoholics Anonymous product described in Appendix A.

There are two types of scenario in the form of normal and exception case:

Normal:

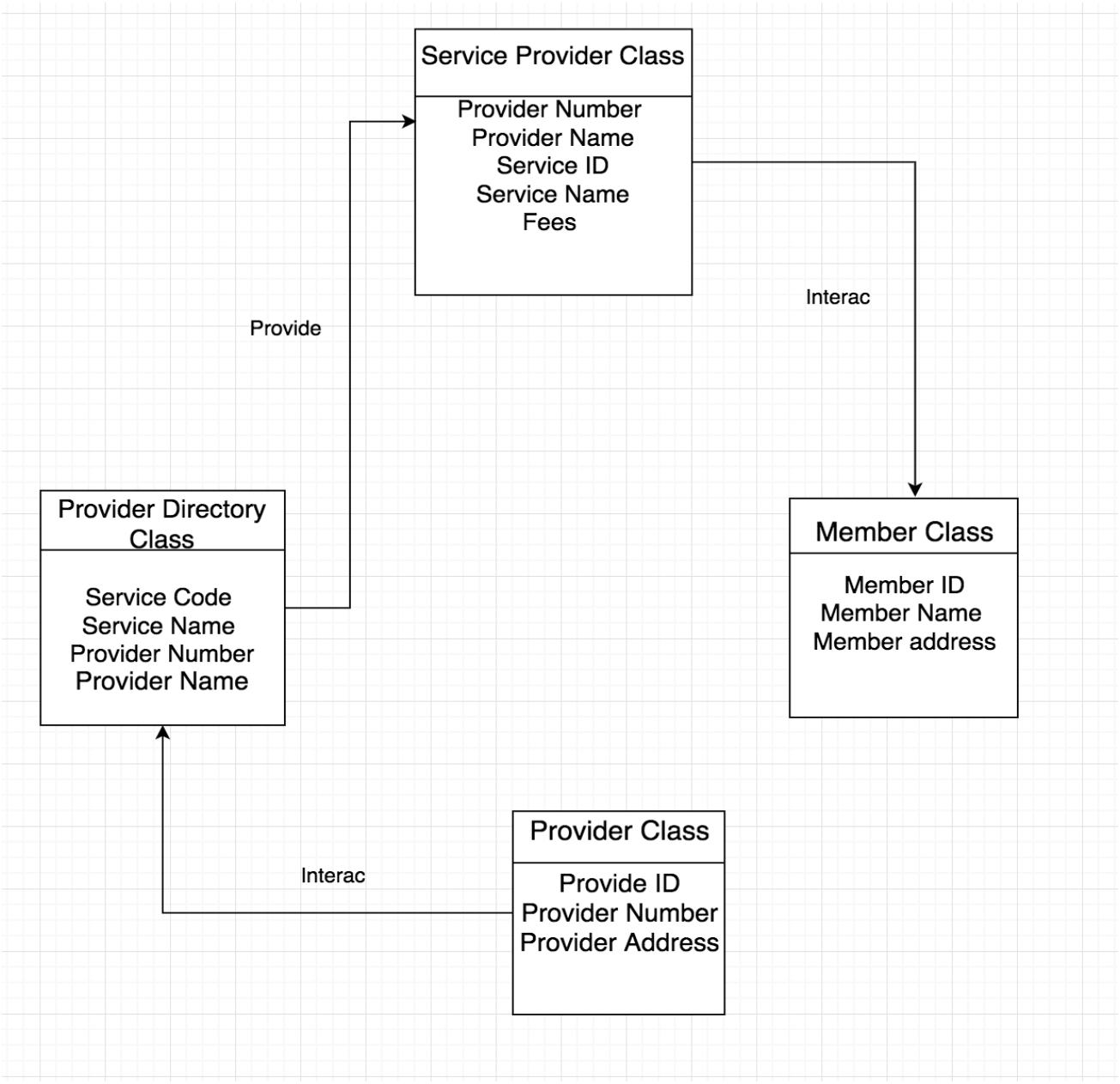
- It will help the provider to log in to the terminal
- Clients will come to ChocAn Centre and request for a service.
- The provider will swipe the customer's card and ChocAn Data Center will verify that the person is a member.
- Provider will provide the service
- Provider will swipe the customer's card to bill and enter the date of the service provided and will request the provider directory to lookup for the service code.
- Provider keys in the service code and will verify the services provided.
- Provider will check the amount of the displayed.
- Provider will fill the verification form for the member.
- And the manager will be receiving summary report for each month.

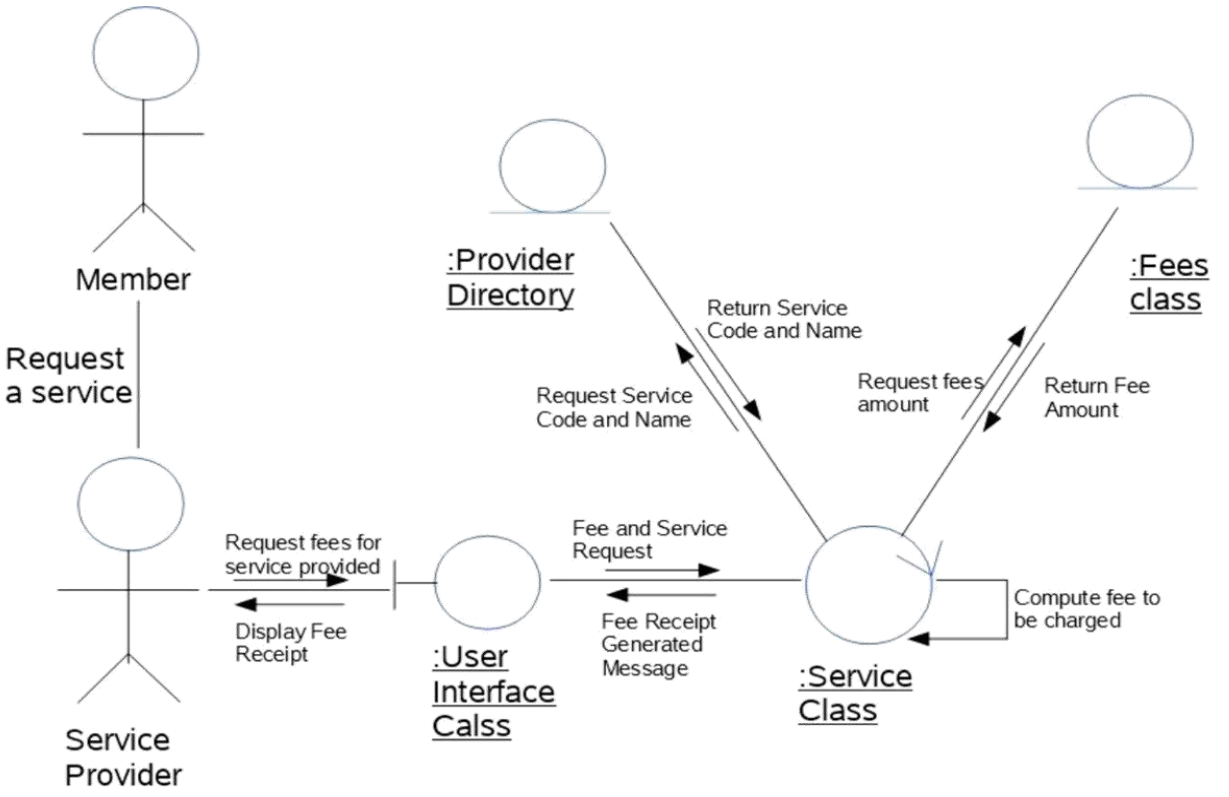
Exception:

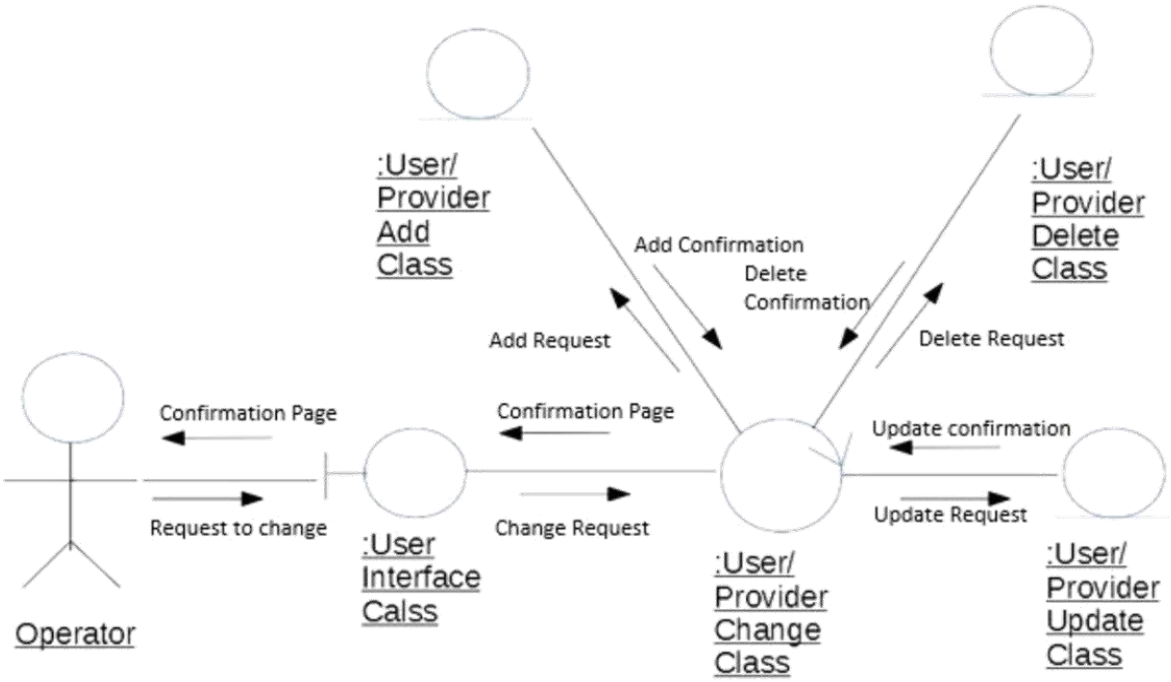
- Provider will log in to the terminal
- Clients will come to ChocAn Centre and request for a service.
- The provider will swipe the customer's card and ChocAn Data Center will not verify that the person is a member.
- The reason for not verifying the member will be displayed.
- And no services will be provided to that person by the provider.

Classes:

Admin class, member class, Provider class, ProviderDir class, ServiceProvided class


Service Provider Class
Provider Number
Provider Name
Service ID
Service Name
Fees
Interac
Provide
Provider Directory Class
Service Code
Service Name
Provider Number
Provider Name
Member Class
Member ID
Member Name
Member address
Provider Class
Provide ID
Provider Number
Provider Address
Interac


Member
Request a service
Service Provider
:Provider Directory
:Fees class
Return Service Code and Name
Request Service Code and Name
Request fees amount
Return Fee Amount
Request fees for service provided
Display Fee Receipt
:User Interface Calss
Fee and Service Request
Fee Receipt Generated Message
:Service Class
Compute fee to be charged


:User/ Provider Add Class
:User/ Provider Delete Class
Add Confirmation
Delete Confirmation
Add Request
Delete Request
Confirmation Page
Confirmation Page
Update confirmation
Request to change
Change Request
Update Request
Operator
:User Interface Calss
:User/ Provider Change Class
:User/ Provider Update Class

14.16 (Term Project) Starting with your specifications of Problem 12.20 or 13.22, design the Chocoholics Anonymous product (Appendix A). Use the design technique specified by your instructor. (using Object-Oriented design technique)

- The Graphical User Interface will be manufactured utilizing Java with the Swing structure to make it speedier and less demanding.
- The reports and messages containing data on expenses and administrations will load data from databases.
- Our item will be installed at an endpoint gadget, for example, in a workstation at the front work area of Chocoholics Anonymous.
- The MySQL database will be kept in a database server introduced on premises.
- We will be using Hibernate ORM which is an object-relational mapping tool for the Java programming language.
- It helps us to provides a framework for mapping an object-oriented domain model to a relational database.

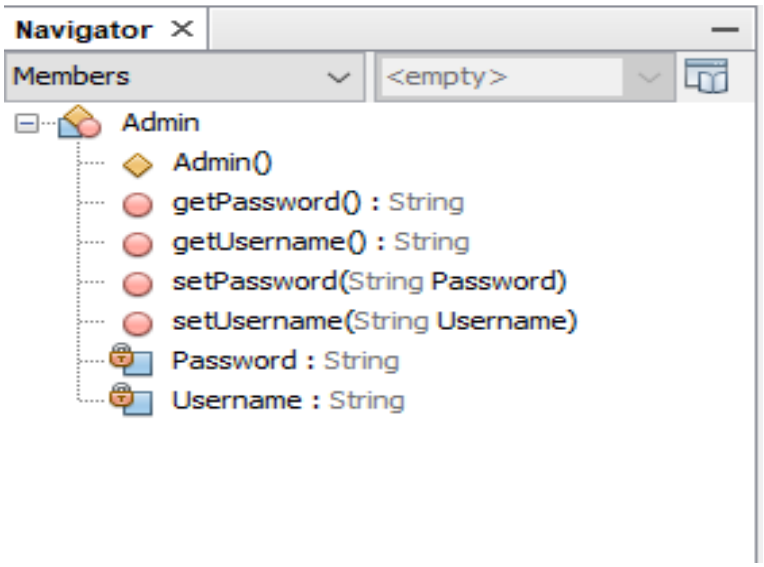
Design the product in terms of classes extracted during OOA

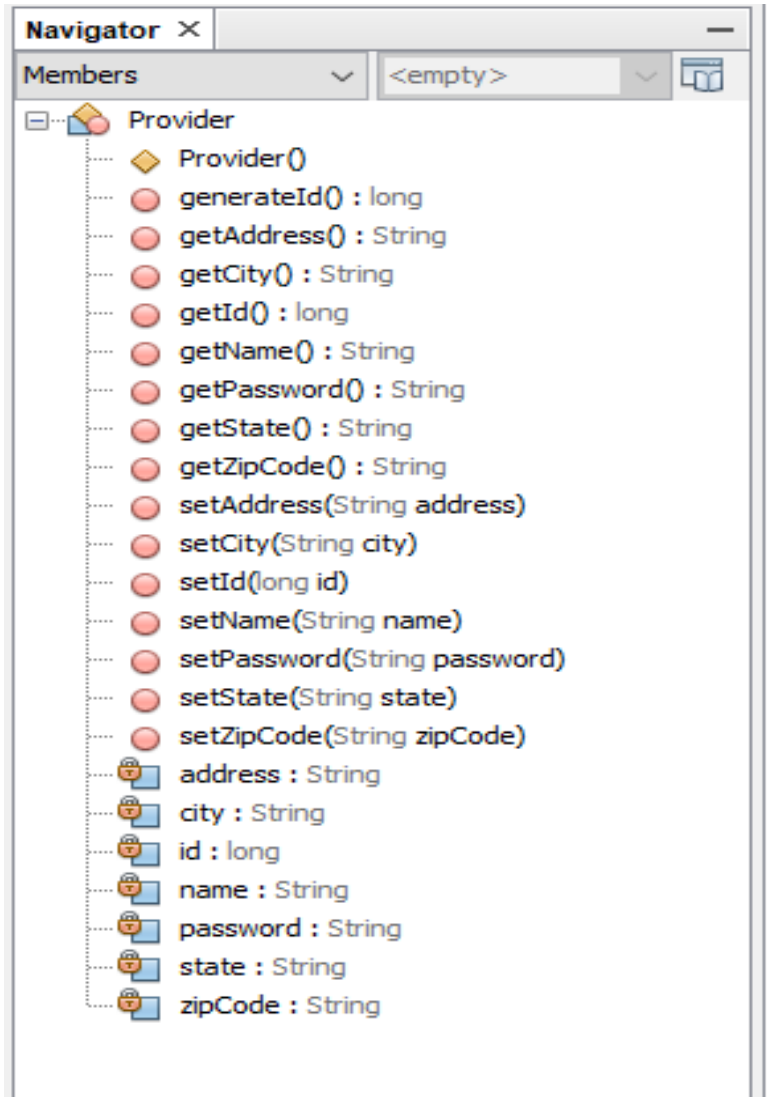
- The Service Provider class contains the fundamental factors, for example, Provider Name and Service Provided to charge Chocoholics Anonymous for the services (dietitian, trainer and yoga trainer) gave by the Provider.

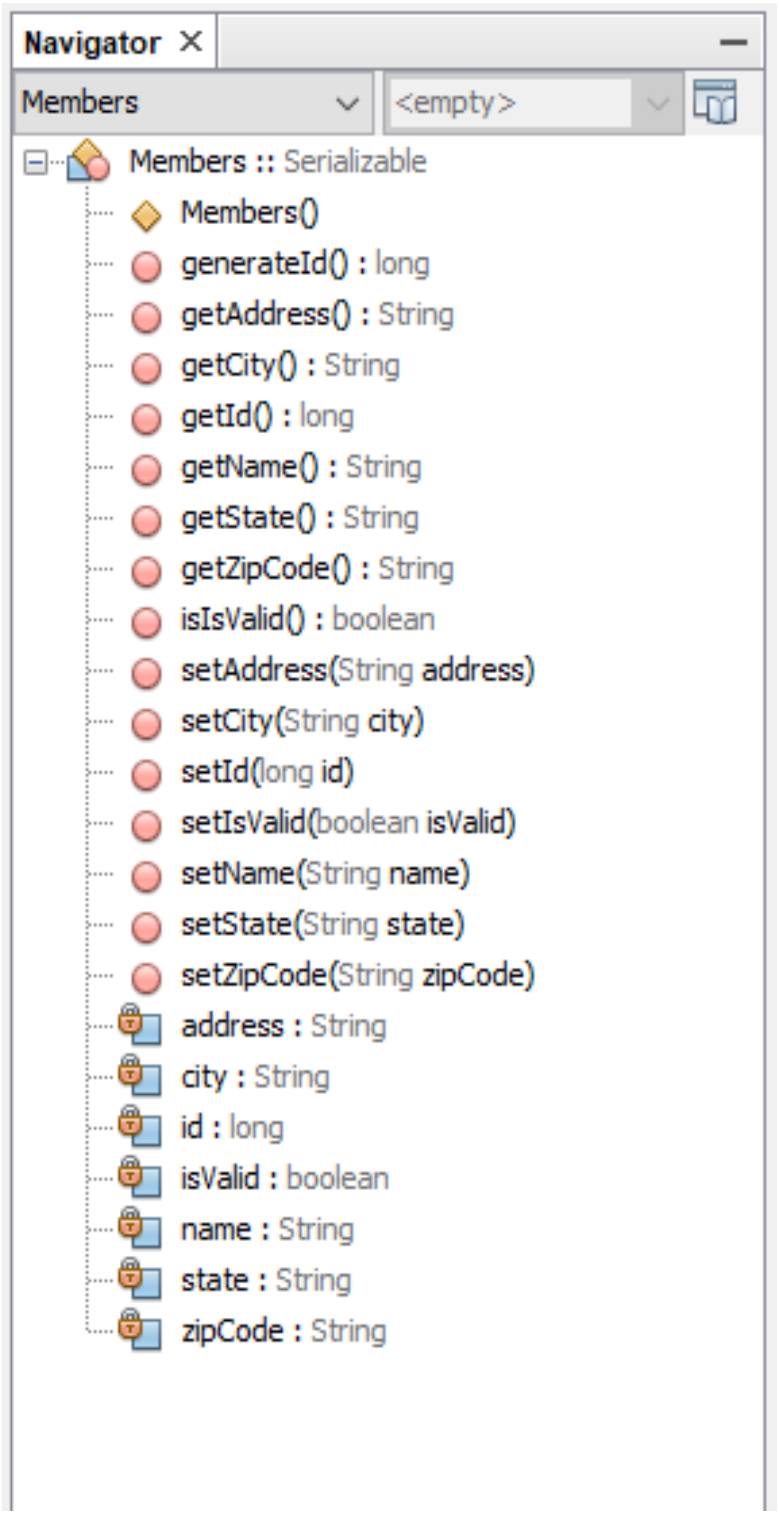
- The Service class contains the Service Name and Service Number and gives this data to the Service Provider class when required.

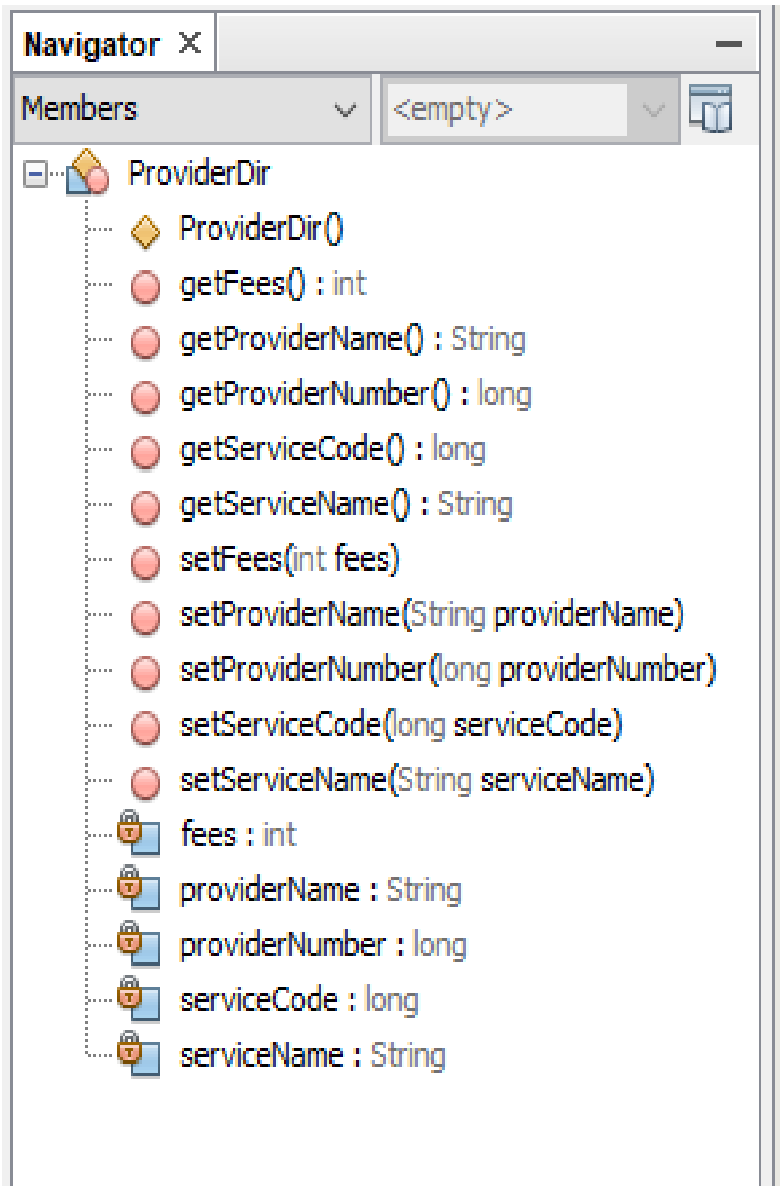
- The Members class contains factors to uniquely recognize every client, for example, Member Number and Member Name

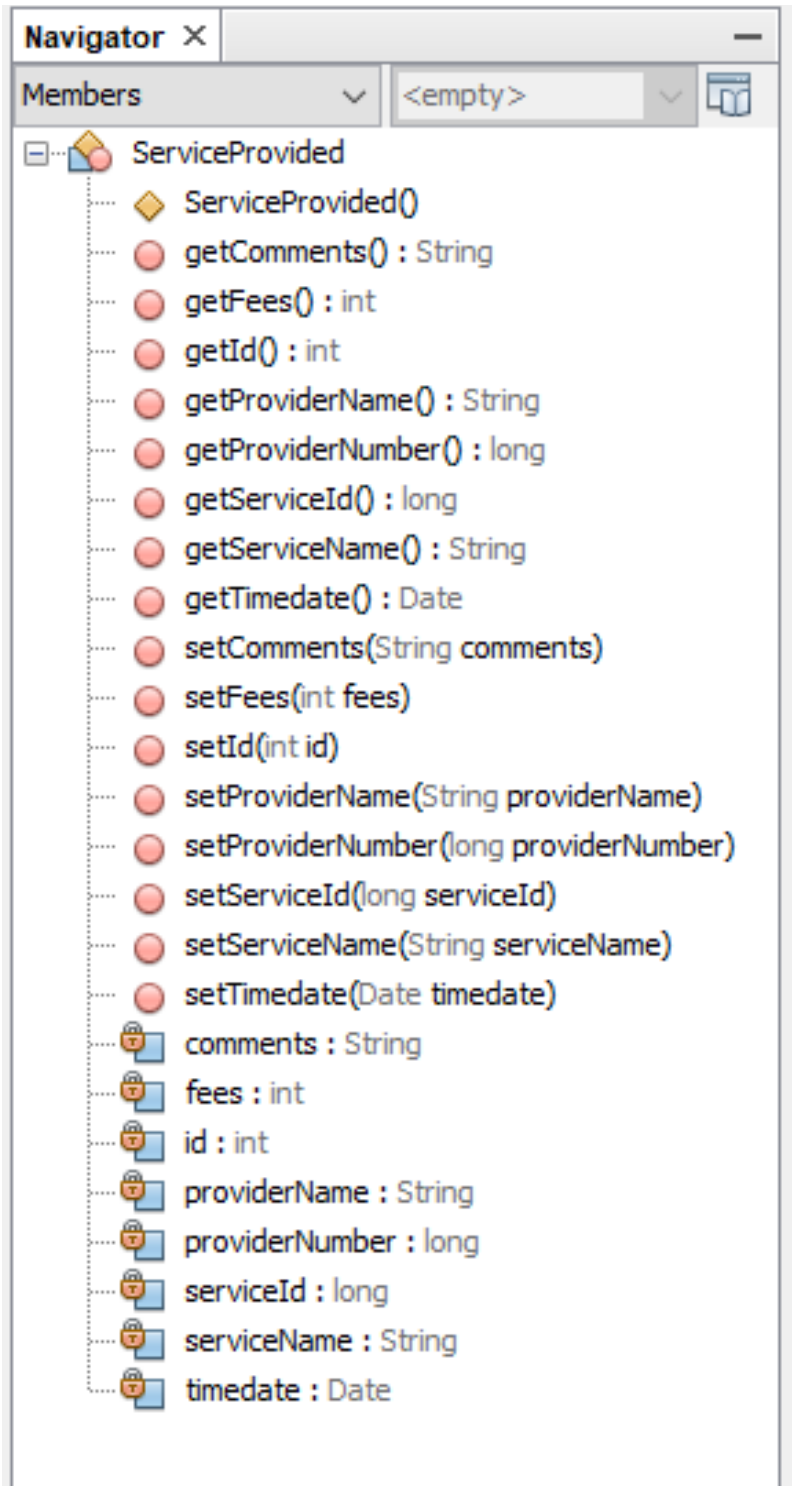
- The Fees class utilizes the service code (given from the Service Provider class) to charge the suitable sum.


Navigator
Members
<empty>
Admin
Admin()
getPassword() : String
getUsername() : String
setPassword(String Password)
setUsername(String Username)
Password : String
Username : String


Navigator
Members
<empty>
Provider
Provider()
generateId() : long
getAddress() : String
getCity() : String
getId() : long
getName() : String
getPassword() : String
getState() : String
getZipCode() : String
setAddress(String address)
setCity(String city)
setId(long id)
setName(String name)
setPassword(String password)
setState(String state)
setZipCode(String zipCode)
address : String
city : String
id : long
name : String
password : String
state : String
zipCode : String


Navigator
Members
<empty>
Members :: Serializable
Members()
generateId() : long
getAddress() : String
getCity() : String
getId() : long
getName() : String
getState() : String
getZipCode() : String
isIsValid() : boolean
setAddress(String address)
setCity(String city)
setId(long id)
setIsValid(boolean isValid)
setName(String name)
setState(String state)
setZipCode(String zipCode)
address : String
city : String
id : long
isValid : boolean
name : String
state : String
zipCode : String


Navigator
Members
<empty>
ProviderDir
ProviderDir()
getFees() : int
getProviderName() : String
getProviderNumber() : long
getServiceCode() : long
getServiceName() : String
setFees(int fees)
setProviderName(String providerName)
setProviderNumber(long providerNumber)
setServiceCode(long serviceCode)
setServiceName(String serviceName)
fees : int
providerName : String
providerNumber : long
serviceCode : long
serviceName : String


Navigator
Members
<empty>
ServiceProvided
ServiceProvided()
getComments() : String
getFees() : int
getId() : int
getProviderName() : String
getProviderNumber() : long
getServiceId() : long
getServiceName() : String
getTimedate() : Date
setComments(String comments)
setFees(int fees)
setId(int id)
setProviderName(String providerName)
setProviderNumber(long providerNumber)
setServiceId(long serviceId)
setServiceName(String serviceName)
setTimedate(Date timedate)
comments : String
fees : int
id : int
providerName : String
providerNumber : long
serviceId : long
serviceName : String
timedate : Date

15.33 (Term Project) Draw up black-box test cases for the product you specified in Problem 12.20 or 13.22. For each test case, state what is being tested and the expected outcome of that test case.

Test case 1:

Component	AdminLogin
Input	ID: Lav Password: passwordd
Output	Invalid login

Test case 2:

Component	ProviderLogin
Input	Provider ID: 8876543210 Password: shaikhh
Output	Invalid login

Test case 3:

Component	AdminInterface
Input	<"Provider Data" button clicked>
Output	<Provider Data>

Test case 4:

Component	Admin
Input	Member ID: 123456780
Output	<Member data>

Test case 5:

Component	Admin
Input	Provider ID: 876543210
Output	<Provider data>

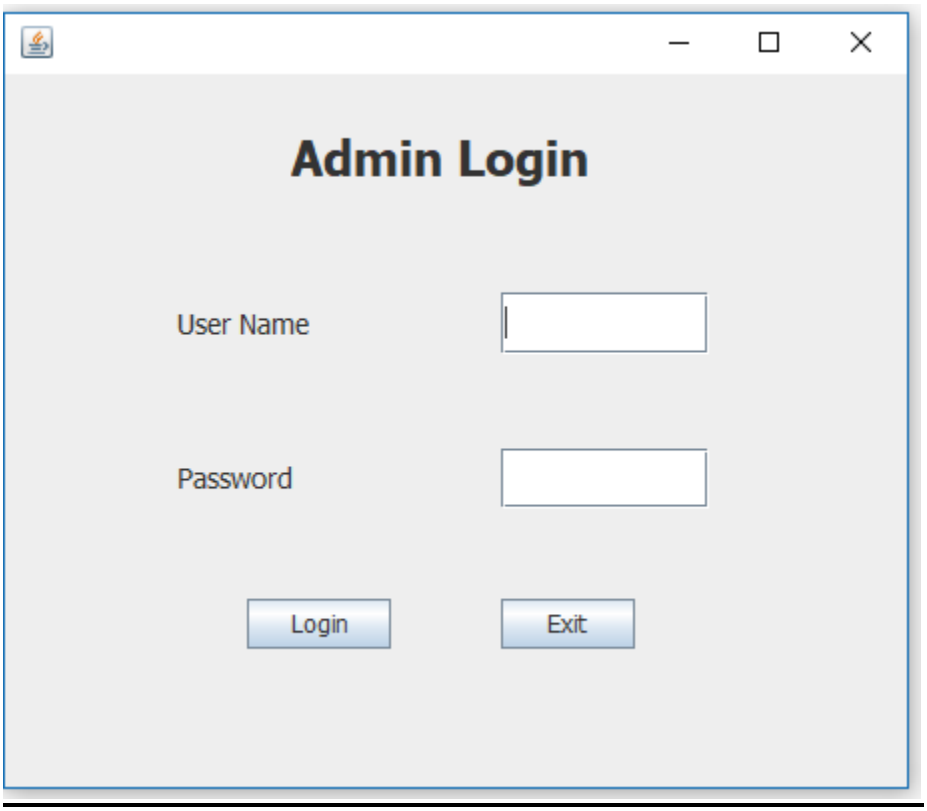
Test case 6:

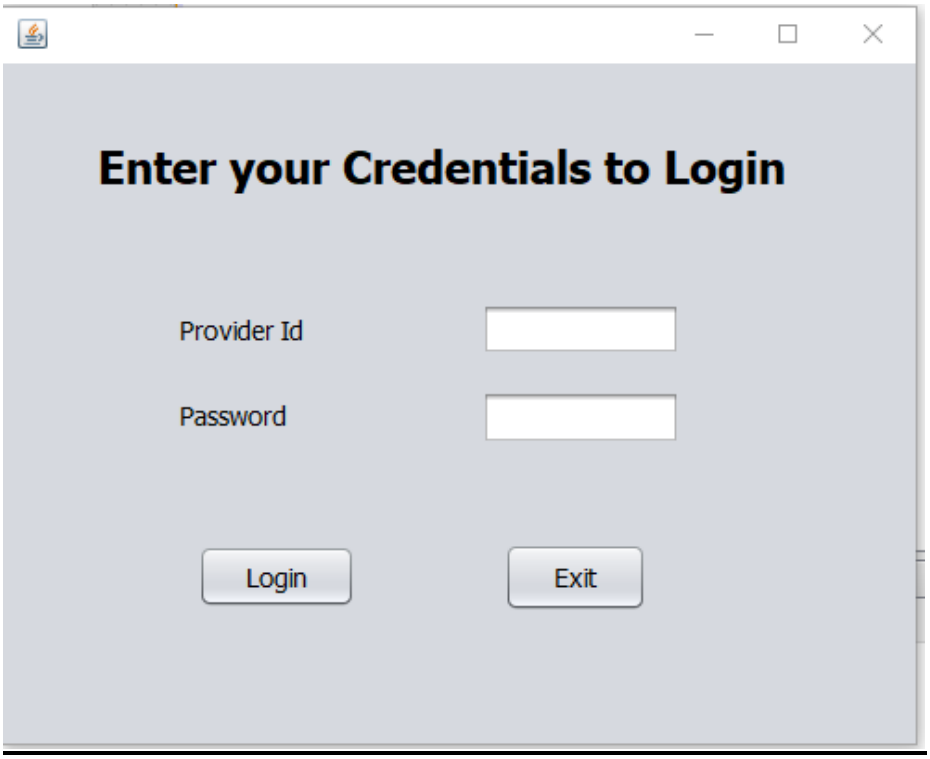
Component	Admin
Input	<” Report” button clicked>
Output	<Report>

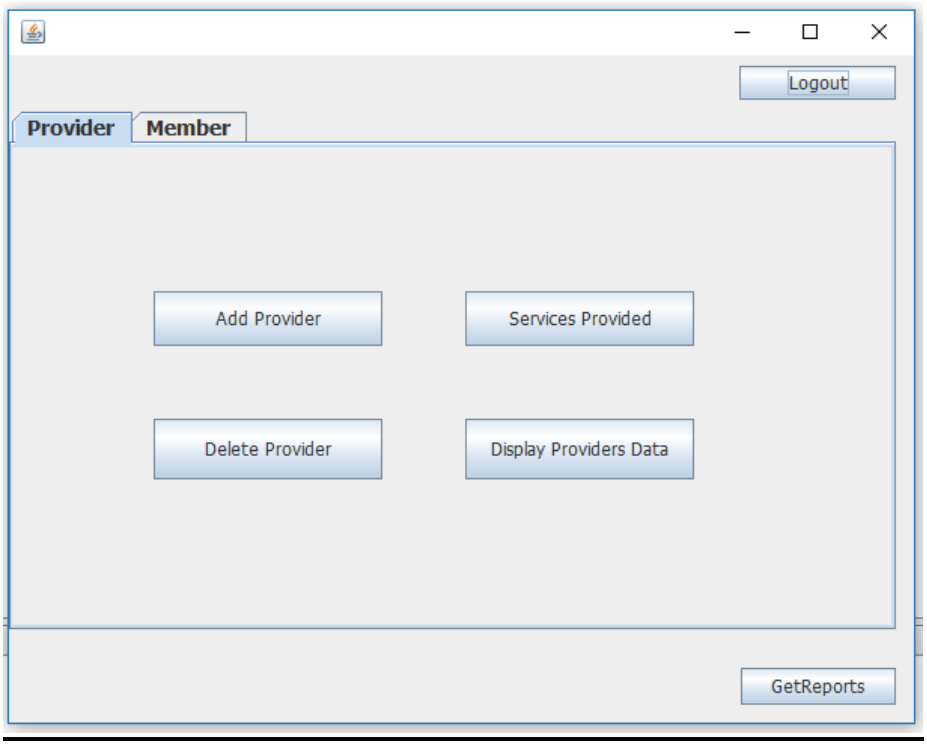
Test case 7:

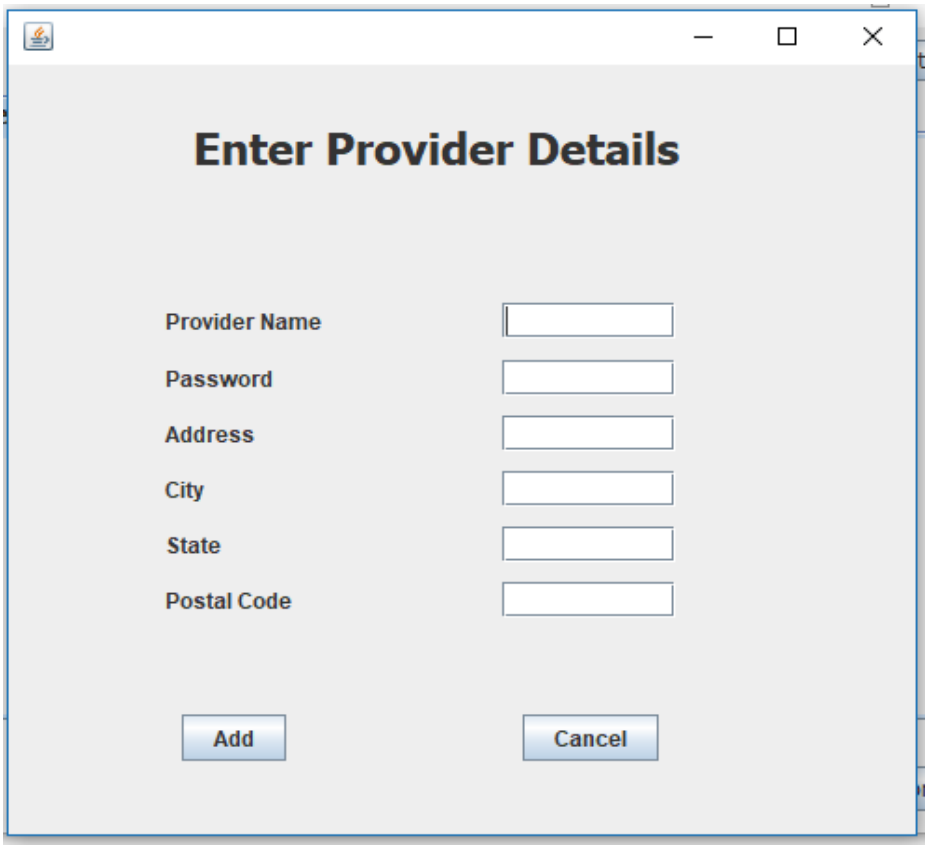
Component	Admin
Input	<”ServicesProvided” button clicked>
Output	<Services Provided>

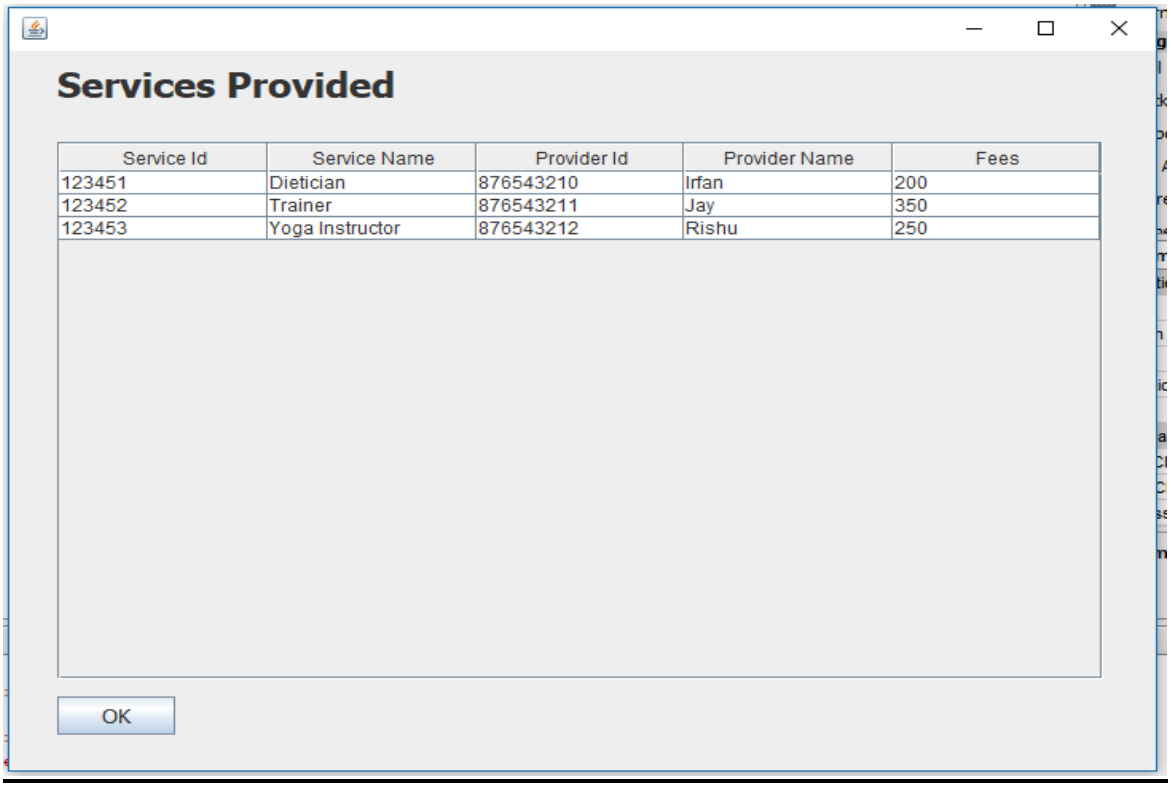
Here are some of the screenshots of our working software

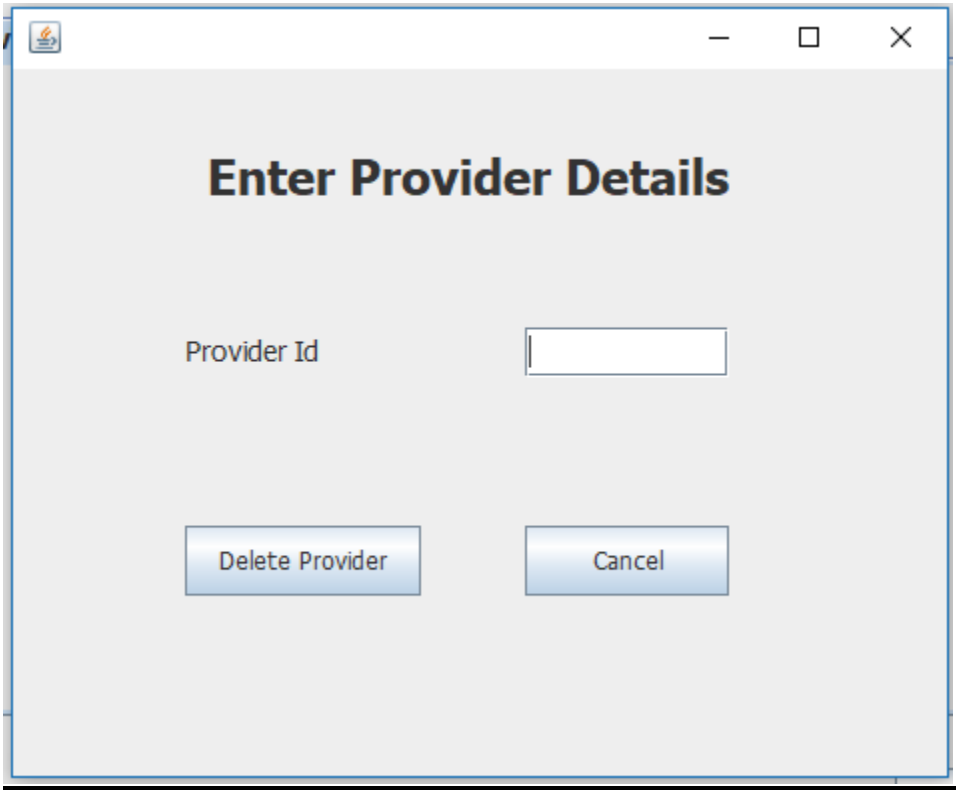


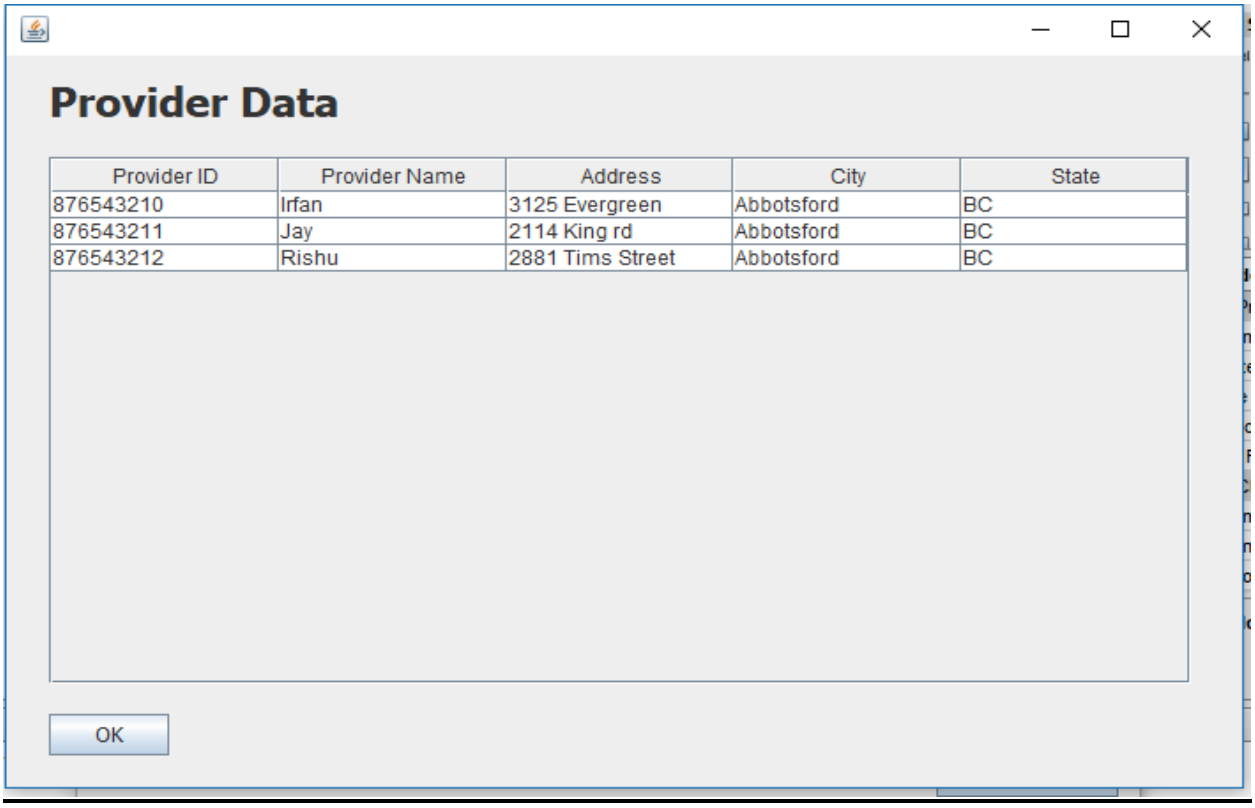


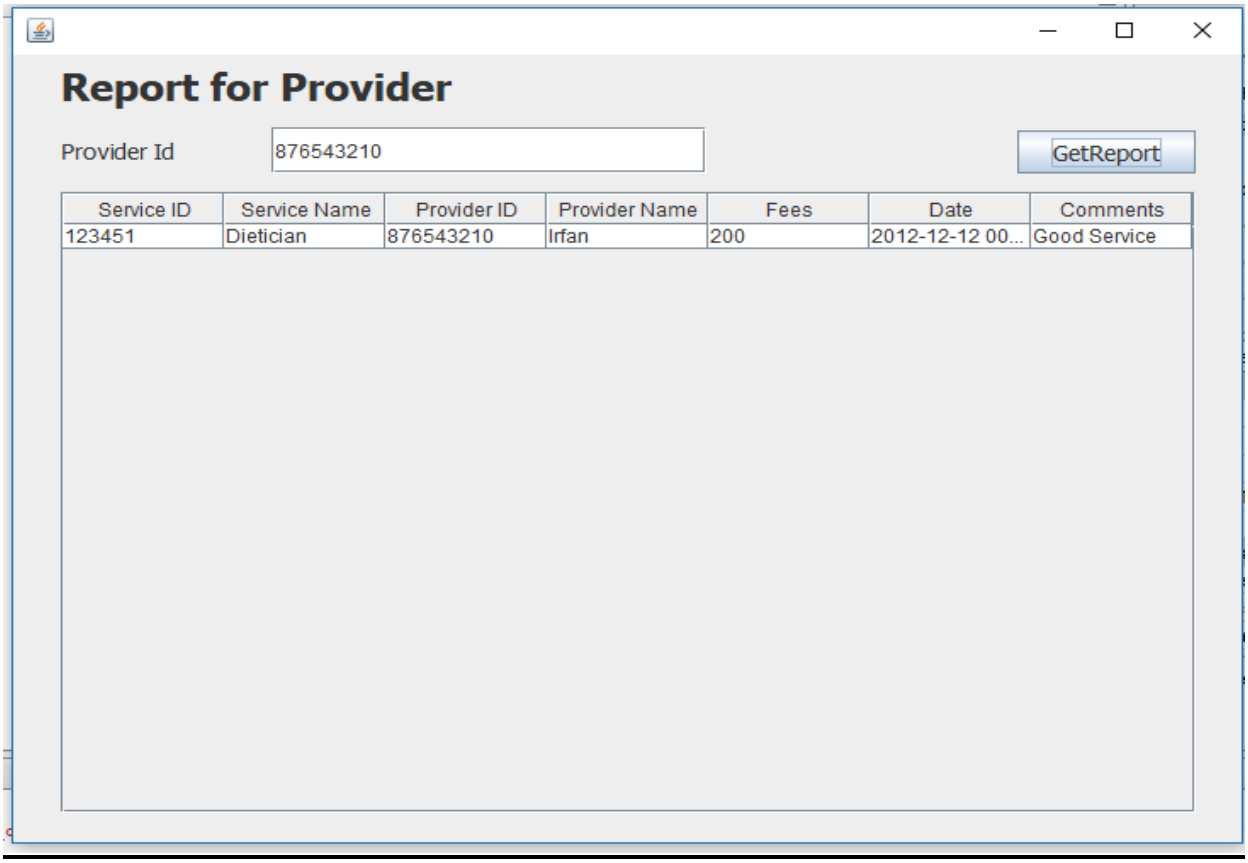

Logout
Provider
Member
Add Provider
Services Provided
Delete Provider
Display Providers Data
GetReports

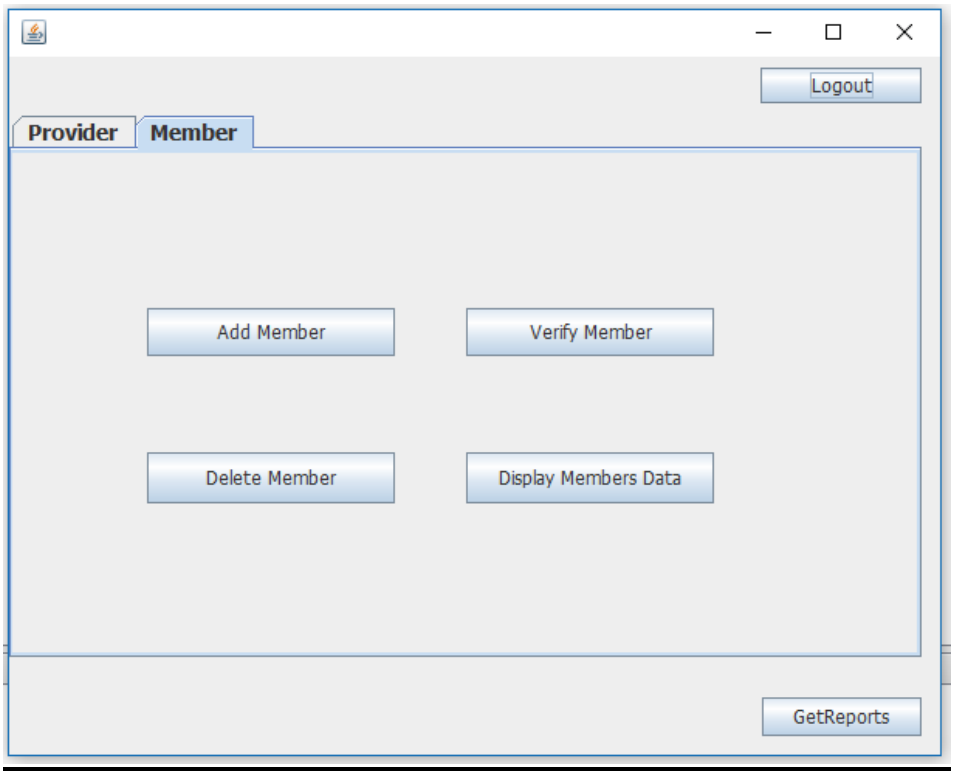

Enter Provider Details
Provider Name
Password
Address
City
State
Postal Code
Add
Cancel

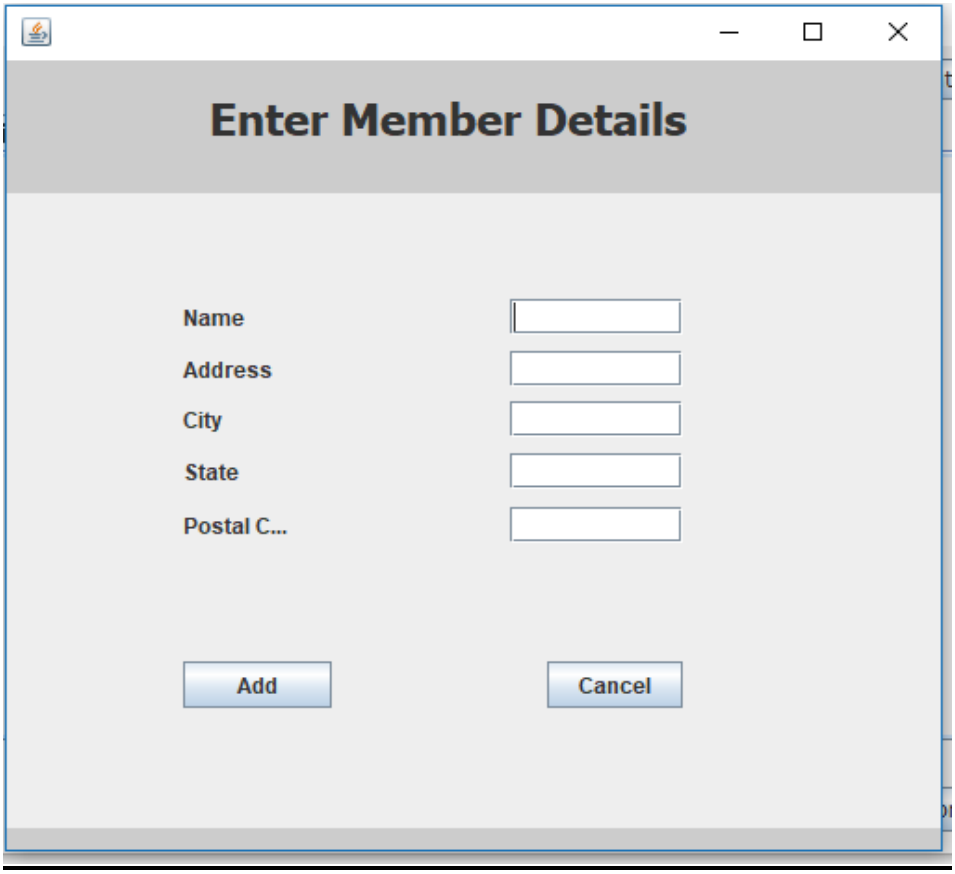

Services Provided
Service Id
Service Name
Provider Id
Provider Name
Fees
123451
Dietician
876543210
Irfan
200
123452
Trainer
876543211
Jay
350
123453
Yoga Instructor
876543212
Rishu
250
OK

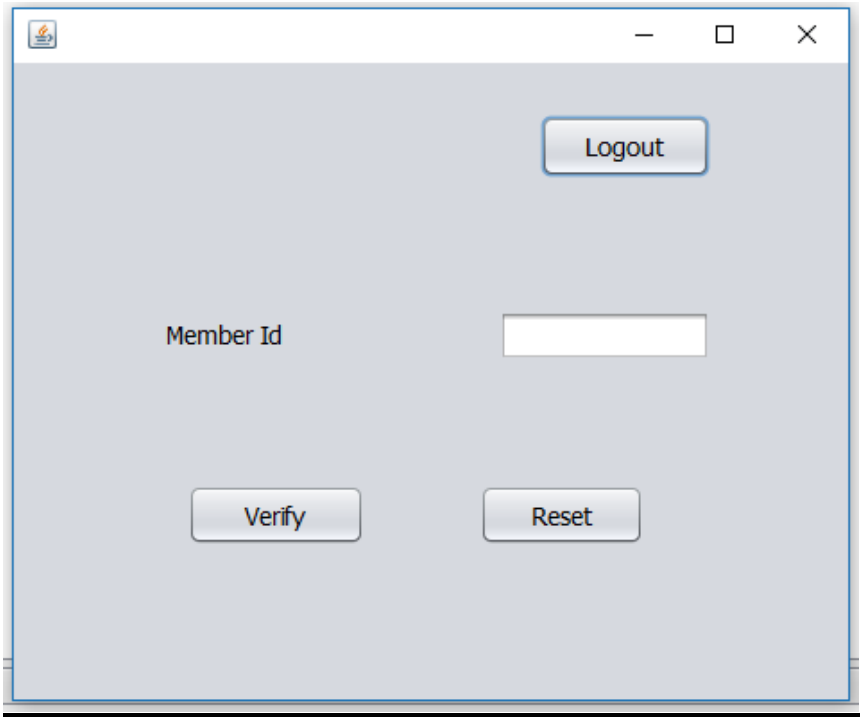

Enter Provider Details
Provider Id
Delete Provider
Cancel

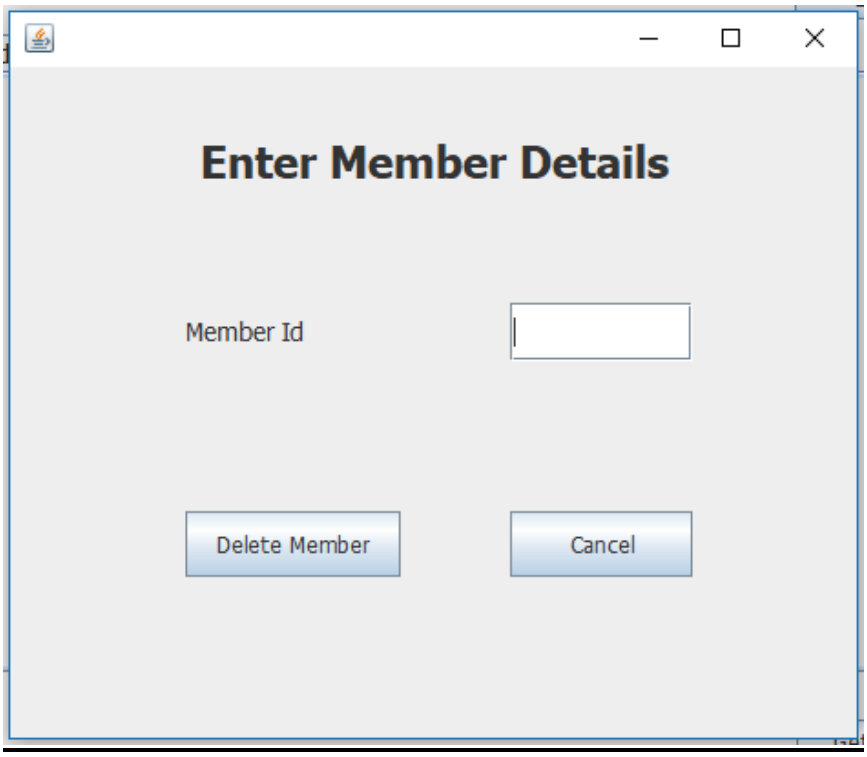

Provider Data
Provider ID
Provider Name
Address
City
State
876543210
Irfan
3125 Evergreen
Abbotsford
BC
876543211
Jay
2114 King rd
Abbotsford
BC
876543212
Rishu
2881 Tims Street
Abbotsford
BC
OK

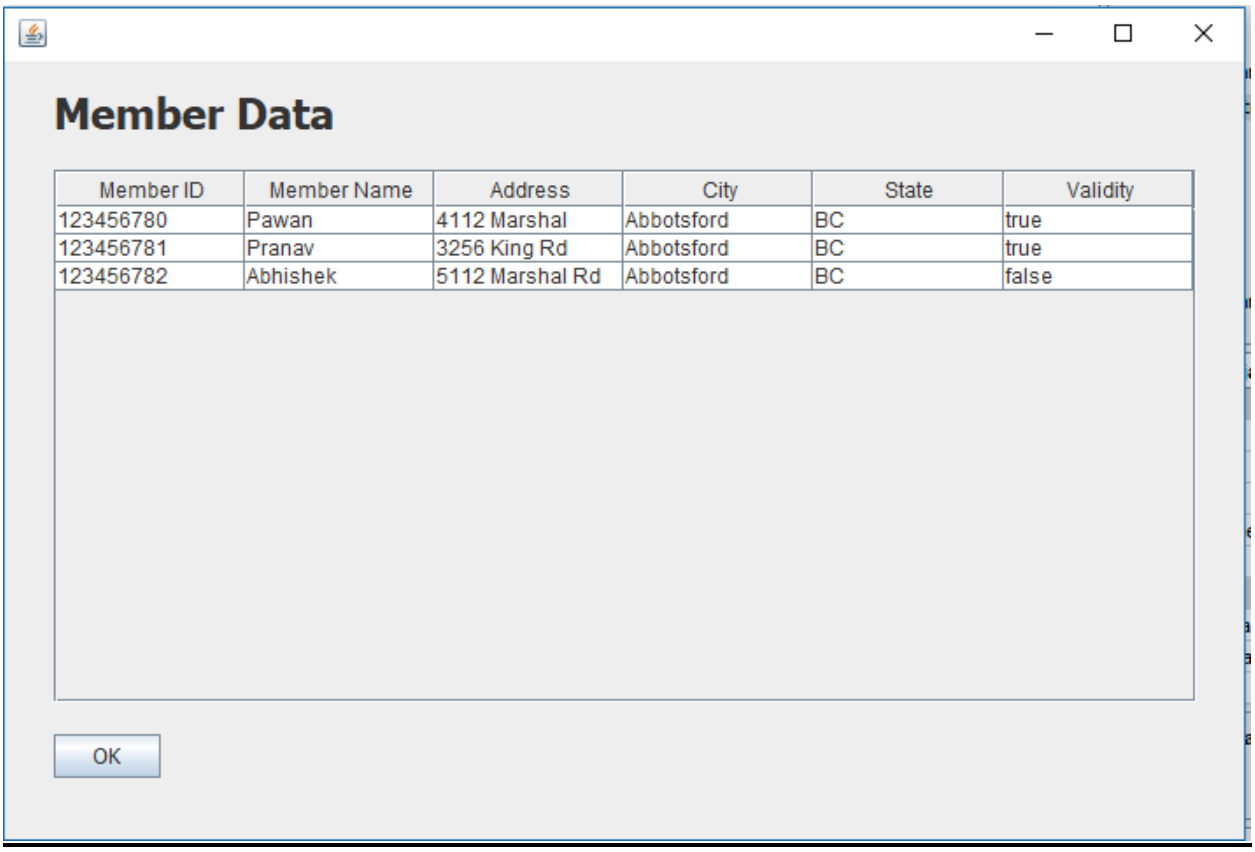

Report for Provider
Provider Id
876543210
GetReport
Service ID
Service Name
Provider ID
Provider Name
Fees
Date
Comments
123451
Dietician
876543210
Irfan
200
2012-12-12 00...
Good Service

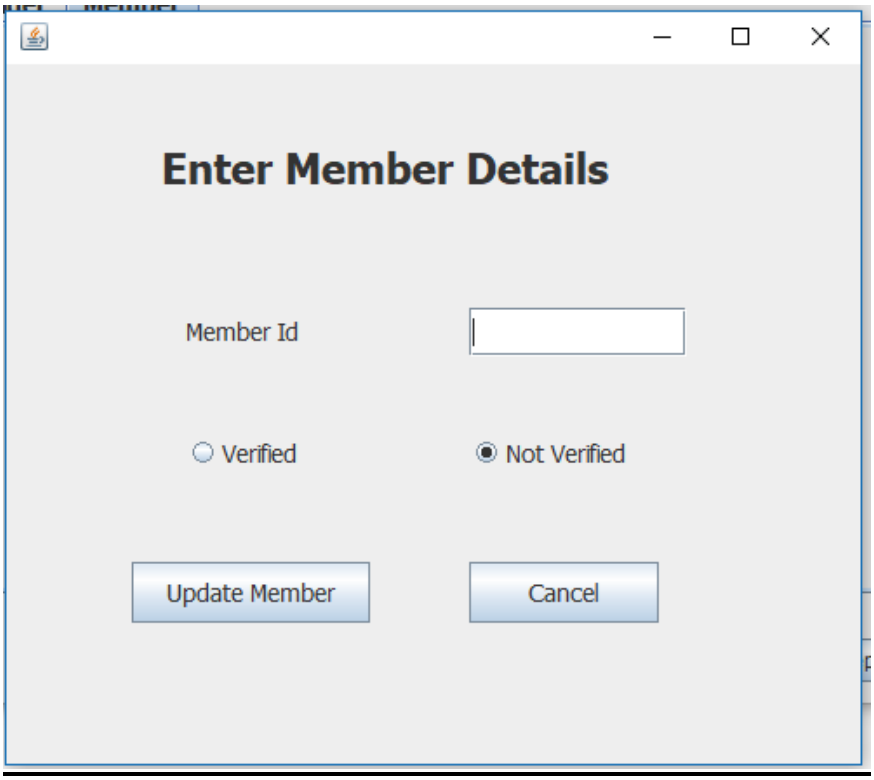

Logout
Provider
Member
Add Member
Verify Member
Delete Member
Display Members Data
GetReports

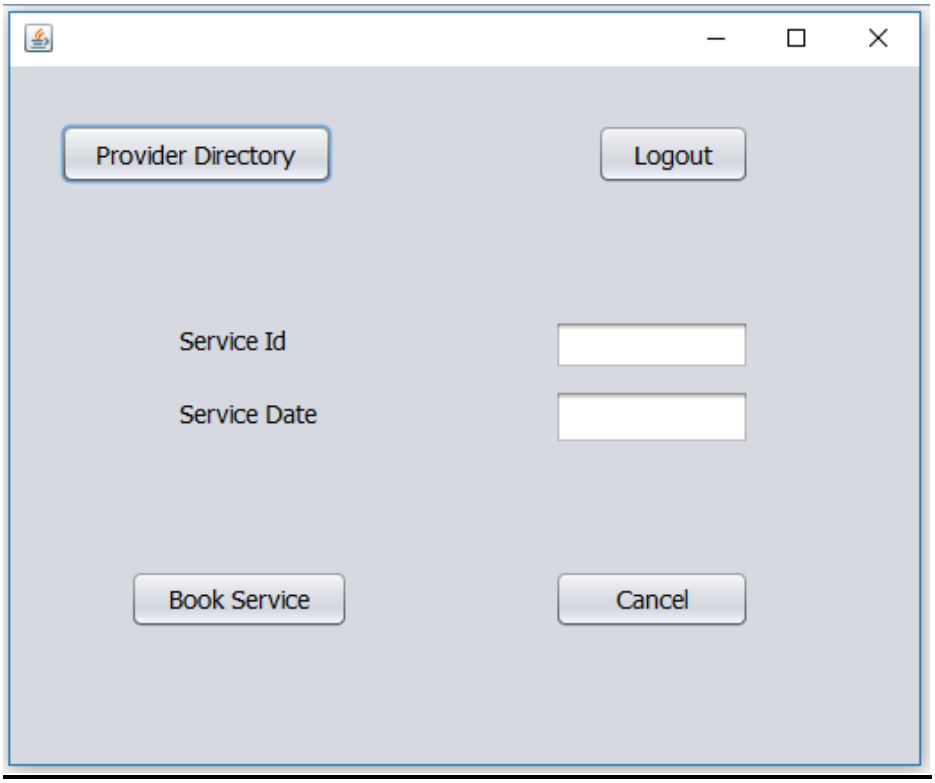

Enter Member Details
Name
Address
City
State
Postal C...
Add
Cancel


Logout
Member Id
Verify
Reset


Enter Member Details
Member Id
Delete Member
Cancel


Member Data
Member ID
Member Name
Address
City
State
Validity
123456780
Pawan
4112 Marshal
Abbotsford
BC
true
123456781
Pranav
3256 King Rd
Abbotsford
BC
true
123456782
Abhishek
5112 Marshal Rd
Abbotsford
BC
false
OK


Enter Member Details
Member Id
Verified
Not Verified
Update Member
Cancel



CODING

AdminLogin

```
package admin;
import entities.Admin;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;

public class AdminLogin extends javax.swing.JFrame {

    public AdminLogin() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }

    @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();
```

```
        username = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        password = new javax.swing.JPasswordField();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Admin Login");

        jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel2.setText("User Name");

        jLabel3.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel3.setText("Password");

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton1.setText("Login");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jButton2.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton2.setText("Exit");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(86, 86, 86)

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

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE,
107, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE,
107, javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 72,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
                    .addGap(55, 55, 55)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 67,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                            .addComponent(password, javax.swing.GroupLayout.DEFAULT_SIZE, 104,
Short.MAX_VALUE)
                            .addComponent(username))))
                .addGroup(layout.createSequentialGroup()
                    .addGap(143, 143, 143)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 171,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(0, 99, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(23, 23, 23)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 37,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(49, 49, 49)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(username, javax.swing.GroupLayout.DEFAULT_SIZE, 31,
Short.MAX_VALUE))
                .addGap(47, 47, 47)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 29,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(password, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(45, 45, 45)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton1)
                    .addComponent(jButton2))
                .addContainerGap(69, Short.MAX_VALUE))
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        Session session = Utils.getSession();
        session.beginTransaction();
        Admin admin = (Admin) session.get(Admin.class, username.getText());
```

```
        session.getTransaction().commit();
        session.close();

        if(admin.getPassword().equals(password.getText())){
            AdminInterface ai = new AdminInterface();
            ai.setVisible(true);
            setVisible(false);
        }else{
            JOptionPane.showMessageDialog(null, "Invalid Login");
        }
    }
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }

    public static void main(String args[]) {

        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new AdminLogin().setVisible(true);
            }
        });
    }
    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JPasswordField password;
    private javax.swing.JTextField username;
    // End of variables declaration
}
```

AdminInterface

```
package admin;
public class AdminInterface extends javax.swing.JFrame {

    public AdminInterface() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {
        jButton2 = new javax.swing.JButton();
        jTabbedPane1 = new javax.swing.JTabbedPane();
        jPanel2 = new javax.swing.JPanel();
```

```
jButton6 = new javax.swing.JButton();
jButton7 = new javax.swing.JButton();
jButton8 = new javax.swing.JButton();
jButton9 = new javax.swing.JButton();
jPanel1 = new javax.swing.JPanel();
jButton1 = new javax.swing.JButton();
jButton3 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
jButton5 = new javax.swing.JButton();
jButton10 = new javax.swing.JButton();
jButton11 = new javax.swing.JButton();

jButton2.setText("jButton2");
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
jTabbedPane1.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton6.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
jButton6.setText("Add Provider");
jButton6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton6ActionPerformed(evt);
    }
});
jButton7.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
jButton7.setText("Services Provided");
jButton7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton7ActionPerformed(evt);
    }
});

jButton8.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
jButton8.setText("Delete Provider");
jButton8.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton8ActionPerformed(evt);
    }
});

jButton9.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
jButton9.setText("Display Providers Data");
jButton9.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton9ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup()
                .addContainerGap(94, Short.MAX_VALUE)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                    .addComponent(jButton8, javax.swing.GroupLayout.DEFAULT_SIZE, 152,
Short.MAX_VALUE)
                    .addComponent(jButton6, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addGap(55, 55, 55)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
false)
                    .addComponent(jButton9, javax.swing.GroupLayout.DEFAULT_SIZE, 152,
Short.MAX_VALUE)
                    .addComponent(jButton7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addGap(131, 131, 131))
        );
        jPanel2Layout.setVerticalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(97, 97, 97)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton6, javax.swing.GroupLayout.PREFERRED_SIZE, 37,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton7, javax.swing.GroupLayout.PREFERRED_SIZE, 37,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(49, 49, 49)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton8, javax.swing.GroupLayout.PREFERRED_SIZE, 41,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton9, javax.swing.GroupLayout.PREFERRED_SIZE, 41,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(96, Short.MAX_VALUE))
        );

        jTabbedPane1.addTab("Provider", jPanel2);
        jButton1.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton1.setText("Add Member");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jButton3.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton3.setText("Verify Member");
        jButton3.addActionListener(new java.awt.event.ActionListener() {
```

```
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton3ActionPerformed(evt);
            }
        });
        jButton4.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton4.setText("Delete Member");
        jButton4.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton4ActionPerformed(evt);
            }
        });
        jButton5.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton5.setText("Display Members Data");
        jButton5.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton5ActionPerformed(evt);
            }
        });
        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(87, 87, 87)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 160,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 160,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(46, 46, 46)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                    .addComponent(jButton5, javax.swing.GroupLayout.DEFAULT_SIZE, 160,
Short.MAX_VALUE)
                    .addComponent(jButton3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addContainerGap(131, Short.MAX_VALUE))
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(100, 100, 100)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(62, 62, 62)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(94, Short.MAX_VALUE))
        );

        jTabbedPane1.addTab("Member", jPanel1);

        jButton10.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton10.setText("Logout");
        jButton10.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton10ActionPerformed(evt);
            }
        });

        jButton11.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton11.setText("GetReports");
        jButton11.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton11ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(0, 0, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jTabbedPane1, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 589,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton10, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 104,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton11, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 103,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap())
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(7, 7, 7)
```

```
            .addComponent(jButton10, javax.swing.GroupLayout.PREFERRED_SIZE, 23,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 351,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 26,
Short.MAX_VALUE)
            .addComponent(jButton11)
            .addContainerGap())
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        AddMember am = new AddMember();
        am.setVisible(true);
    }

    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
        VerifyMember vm = new VerifyMember();
        vm.setVisible(true);
    }

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
        DeleteMember dm = new DeleteMember();
        dm.setVisible(true);
    }

    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
        MemberData md = new MemberData();
        md.setVisible(true);
    }

    private void jButton11ActionPerformed(java.awt.event.ActionEvent evt) {
        Report re = new Report();
        re.setVisible(true);
    }

    private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {
        AddProvider ap = new AddProvider();
        ap.setVisible(true);
    }

    private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {
        ServicesProvided sp = new ServicesProvided();
        sp.setVisible(true);
    }

    private void jButton8ActionPerformed(java.awt.event.ActionEvent evt) {
        DeleteProvider dp = new DeleteProvider();
```

```
        dp.setVisible(true);
    }

    private void jButton9ActionPerformed(java.awt.event.ActionEvent evt) {
        ProviderData pd = new ProviderData();
        pd.setVisible(true);
    }

    private void jButton10ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
        AdminLogin al = new AdminLogin();
        al.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(AdminInterface.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(AdminInterface.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(AdminInterface.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(AdminInterface.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        }
        //</editor-fold>

        /* Create and display the form */
```

```
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new AdminInterface().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton10;
    private javax.swing.JButton jButton11;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JButton jButton5;
    private javax.swing.JButton jButton6;
    private javax.swing.JButton jButton7;
    private javax.swing.JButton jButton8;
    private javax.swing.JButton jButton9;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JTabbedPane jTabbedPane1;
    // End of variables declaration
}
```

AddProvider

```
package admin;

import entities.Provider;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;

public class AddProvider extends javax.swing.JFrame {

    public AddProvider() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
```

```
jLabel5 = new javax.swing.JLabel();
jLabel6 = new javax.swing.JLabel();
jLabel7 = new javax.swing.JLabel();
jLabel8 = new javax.swing.JLabel();
proname = new javax.swing.JTextField();
proadd = new javax.swing.JTextField();
procity = new javax.swing.JTextField();
prostate = new javax.swing.JTextField();
propostal = new javax.swing.JTextField();
jButton1 = new javax.swing.JButton();
jButton2 = new javax.swing.JButton();
propassword = new javax.swing.JPasswordField();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setMaximumSize(new java.awt.Dimension(214749000, 2147483647));

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
jLabel1.setText("Enter Provider Details");

jLabel3.setText("Provider Name");

jLabel4.setText("Password");

jLabel5.setText("Address");

jLabel6.setText("City");

jLabel7.setText("State");

jLabel8.setText("Postal Code");

proname.setMaximumSize(new java.awt.Dimension(214749000, 2147483647));
proname.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        pronameActionPerformed(evt);
    }
});

proadd.setMaximumSize(new java.awt.Dimension(214749000, 2147483647));

procity.setMaximumSize(new java.awt.Dimension(214749000, 2147483647));

prostate.setMaximumSize(new java.awt.Dimension(214749000, 2147483647));

propostal.setMaximumSize(new java.awt.Dimension(214749000, 2147483647));

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

```
        });

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

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(84, 84, 84)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(9, 9, 9)
                        .addComponent(jButton1)
                        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                    .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                            .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                            .addComponent(jLabel4, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                            .addComponent(jLabel5, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                            .addComponent(jLabel6, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                            .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                            .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 70,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                                .addGroup(layout.createSequentialGroup()
                                    .addGap(11, 11, 11)
                                    .addComponent(jButton2))
                                .addComponent(proname, javax.swing.GroupLayout.DEFAULT_SIZE, 93,
Short.MAX_VALUE)
                                .addComponent(proadd, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```

```
                        .addComponent(procity, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(prostate, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                    .addComponent(propostal, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 93,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(propassword,
javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED_SIZE,
93, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(129, 129, 129))))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addContainerGap(99, Short.MAX_VALUE)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 321,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(67, 67, 67))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(25, 25, 25)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(64, 64, 64)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(proname, 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.BASELINE)
                .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(propassword, 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.BASELINE)
                .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(proadd, 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.BASELINE)
                .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
                .addComponent(procity, 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.BASELINE)
                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(prostate, 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.BASELINE)
                .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 24,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(propostal, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(52, 52, 52)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton1)
                .addComponent(jButton2))
            .addContainerGap(41, Short.MAX_VALUE))
        );

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

    private void pronameActionPerformed(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:
        Session session = Utils.getSession();
        session.beginTransaction();

        Provider provider = new Provider();
        provider.setId(provider.generateId());
        provider.setName(proname.getText());
        provider.setPassword(propassword.getText());
        provider.setAddress(proadd.getText());
        provider.setCity(procity.getText());
        provider.setState(prostate.getText());
        provider.setZipCode(propostal.getText());

        session.save(provider);

        session.getTransaction().commit();
        session.close();

        JOptionPane.showMessageDialog(this, "Added Successfully");
```

```
        proname.setText("");
        propassword.setText("");
        proadd.setText("");
        procity.setText("");
        prostate.setText("");
        propostal.setText("");
    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    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.JTextField proadd;
    private javax.swing.JTextField procity;
    private javax.swing.JTextField proname;
    private javax.swing.JPasswordField propassword;
    private javax.swing.JTextField propostal;
    private javax.swing.JTextField prostate;
    // End of variables declaration
}
```

DeleteProvider

```
package admin;

import entities.Provider;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;

public class DeleteProvider extends javax.swing.JFrame {

    public DeleteProvider() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }

    @SuppressWarnings("unchecked")
```

```
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        proid = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Enter Provider Details");

        jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel2.setText("Provider Id");

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton1.setText("Delete Provider");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jButton2.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton2.setText("Cancel");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(86, 86, 86)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                    .addComponent(jLabel1)
                    .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE,
102, javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
```

```
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                        .addComponent(jButton1)
                        .addGap(52, 52, 52)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addComponent(proid, javax.swing.GroupLayout.DEFAULT_SIZE, 102,
Short.MAX_VALUE)
                    .addComponent(jButton2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))
            .addContainerGap(109, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(33, 33, 33)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(55, 55, 55)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(proid, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(74, 74, 74)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(90, Short.MAX_VALUE))
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        Session session = Utils.getSession();
        session.beginTransaction();
        try{
            Provider provider = (Provider) session.get(Provider.class,
Long.parseLong(proid.getText()));
            session.delete(provider);
            JOptionPane.showMessageDialog(this, "Provider Deleted");
        }
        catch(Exception e){
            JOptionPane.showMessageDialog(this, "Invalid ID");
        }
        finally{
```

```
            session.getTransaction().commit();
            session.close();
        }
    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JTextField proid;
    // End of variables declaration
}
```

ProviderData

```
package admin;

import entities.Provider;
import java.util.List;
import javax.swing.table.DefaultTableModel;
import org.hibernate.Session;
import utility.Utils;

public class ProviderData extends javax.swing.JFrame {
    public ProviderData() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
        DefaultTableModel model = new DefaultTableModel(new String[]{"Provider ID","Provider
Name","Address","City","State"},0);
        Session session = Utils.getSession();
        session.beginTransaction();
        List<Provider> providerlist = session.createCriteria(Provider.class).list();
        providerlist.forEach(e -> model.addRow(new
Object[]{e.getId(),e.getName(),e.getAddress(),e.getCity(),e.getState()}));
        jTable1.setModel(model);
        session.getTransaction().commit();
        session.close();
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {
        jLabel1 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jButton1 = new javax.swing.JButton();
```

```
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Provider Data");
        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null}
            },
            new String [] {
                "Title 1", "Title 2", "Title 3", "Title 4"
            }
        ));
        jScrollPane1.setViewportView(jTable1);
        jButton1.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton1.setText("OK");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(24, 24, 24)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 197,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 68,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 646,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(29, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(6, 6, 6)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 43,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 317,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jButton1)
                .addContainerGap(19, Short.MAX_VALUE))
        );
```

```
        pack();
    }// </editor-fold>

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    // End of variables declaration
}
```

ServicesProvided

```
package admin;

import entities.ProviderDir;
import java.util.List;
import javax.swing.table.DefaultTableModel;
import org.hibernate.Session;
import utility.Utils;
public class ServicesProvided extends javax.swing.JFrame {
    public ServicesProvided() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
        DefaultTableModel model = new DefaultTableModel(new String[]{"Service Id","Service
Name","Provider Id","Provider Name","Fees"},0);
        Session session = Utils.getSession();
        session.beginTransaction();
        List<ProviderDir> memberlist = session.createCriteria(ProviderDir.class).list();
        memberlist.forEach(e -> model.addRow(new
Object[]{e.getServiceCode(),e.getServiceName(),e.getProviderNumber(),e.getProviderName(),e
.getFees()}));
        jTable1.setModel(model);
        session.getTransaction().commit();
        session.close();
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {
        jLabel1 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jButton1 = new javax.swing.JButton();
```

```
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Services Provided");
        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null}
            },
            new String [] {
                "Title 1", "Title 2", "Title 3", "Title 4"
            }
        ));
        jScrollPane1.setViewportView(jTable1);

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton1.setText("OK");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(30, 30, 30)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 74,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 270,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 656,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(33, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 46,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 378,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jButton1)
```

```
                .addContainerGap(25, Short.MAX_VALUE))
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    // End of variables declaration
}
```

AddMember

```
package admin;

import entities.Members;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;

public class AddMember extends javax.swing.JFrame {
    public AddMember() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        jPanel2 = new javax.swing.JPanel();
        jButton1 = new javax.swing.JButton();
        jLabel3 = new javax.swing.JLabel();
        jButton2 = new javax.swing.JButton();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        memname = new javax.swing.JTextField();
        memadd = new javax.swing.JTextField();
        memcity = new javax.swing.JTextField();
```

```
        memstate = new javax.swing.JTextField();
        mempostal = new javax.swing.JTextField();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jPanel1.setBackground(new java.awt.Color(204, 204, 204));
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Enter Member Details");
        jButton1.setText("Add");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jLabel3.setText("Name");
        jButton2.setText("Cancel");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

        jLabel4.setText("Address");
        jLabel5.setText("City");
        jLabel6.setText("State");
        jLabel7.setText("Postal Code");
        javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
        jPanel2.setLayout(jPanel2Layout);
        jPanel2Layout.setHorizontalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(95, 95, 95)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                    .addGroup(jPanel2Layout.createSequentialGroup()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                            .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 49,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 49,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 49,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(116, 116, 116)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                    .addComponent(memname)
                    .addComponent(memadd)
                    .addComponent(memcity)
                    .addComponent(memstate)
                    .addComponent(mempostal, javax.swing.GroupLayout.PREFERRED_SIZE,
93, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 73,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap(139, Short.MAX_VALUE))
        );
        jPanel2Layout.setVerticalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(57, 57, 57)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 24,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(memname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 22,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(memadd, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 22,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(memcity, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 24,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(memstate, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(mempostal, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(63, 63, 63)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton1)
                .addComponent(jButton2))
            .addContainerGap(67, Short.MAX_VALUE))
        );
        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 289,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(105, 105, 105))
            .addComponent(jPanel2, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 41,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 21,
Short.MAX_VALUE)
                .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap())
        );
        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 jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        Session session = Utils.getSession();
        session.beginTransaction();
        Members member = new Members();
        member.setId(member.generateId());
        member.setName(memname.getText());
        member.setAddress(memadd.getText());
        member.setCity(memcity.getText());
        member.setState(memstate.getText());
        member.setZipCode(mempostal.getText());
        member.setIsValid(false);

        session.save(member);
        session.getTransaction().commit();
        session.close();
        JOptionPane.showMessageDialog(this, "Added Successfully");

        memname.setText("");
        memadd.setText("");
        memcity.setText("");
        memstate.setText("");
        mempostal.setText("");

    }
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }
    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    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.JPanel jPanel1;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JTextField memadd;
    private javax.swing.JTextField memcity;
    private javax.swing.JTextField memname;
    private javax.swing.JTextField mempostal;
    private javax.swing.JTextField memstate;
    // End of variables declaration
}
```

DeleteMember

```
package admin;

import entities.Members;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;


public class DeleteMember extends javax.swing.JFrame {

    public DeleteMember() {
        initComponents();
        this.setLocationRelativeTo(null);                       //Screen on Center
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        memid = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Enter Member Details");

        jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel2.setText("Member Id");

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton1.setText("Delete Member");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jButton2.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton2.setText("Cancel");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
```

```
        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(96, 96, 96)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 270,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 113,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jButton1))
                        .addGap(60, 60, 60)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                            .addComponent(memid, javax.swing.GroupLayout.DEFAULT_SIZE, 100,
Short.MAX_VALUE)
                            .addComponent(jButton2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))
                .addContainerGap(90, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(29, 29, 29)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 44,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(55, 55, 55)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 32,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(memid, javax.swing.GroupLayout.PREFERRED_SIZE, 32,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(82, 82, 82)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(88, Short.MAX_VALUE))
        );

        pack();
    }// </editor-fold>
```

```
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

        Session session = Utils.getSession();
        session.beginTransaction();

        try{
            Members member = (Members) session.get(Members.class,
Long.parseLong(memid.getText()));
            session.delete(member);
            JOptionPane.showMessageDialog(this, "Member Deleted");
        }catch(Exception e){
            JOptionPane.showMessageDialog(this, "Invalid ID");
        }finally{
            session.getTransaction().commit();
            session.close();
        }
    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }



    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JTextField memid;
    // End of variables declaration
}
```

VerifyMember

```
package admin;

import entities.Members;
import javax.swing.ButtonGroup;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;

public class VerifyMember extends javax.swing.JFrame {

    public VerifyMember() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
```

```
    notVerified.setSelected(true);
    ButtonGroup group = new ButtonGroup();
    group.add(notVerified);
    group.add(verified);
    setDefaultCloseOperation(HIDE_ON_CLOSE);

}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    memid = new javax.swing.JTextField();
    verified = new javax.swing.JRadioButton();
    notVerified = new javax.swing.JRadioButton();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
    jLabel1.setText("Enter Member Details");

    jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
    jLabel2.setText("Member Id");

    memid.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            memidActionPerformed(evt);
        }
    });

    verified.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
    verified.setText("Verified");
    verified.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            verifiedActionPerformed(evt);
        }
    });

    notVerified.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
    notVerified.setText("Not Verified");

    jButton1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
    jButton1.setText("Update Member");
    jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
```

```
        });

        jButton2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton2.setText("Cancel");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                        .addContainerGap()
                        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 137,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(57, 57, 57))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(103, 103, 103)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 87,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(verified))
                        .addGap(76, 76, 76)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(notVerified)
                    .addComponent(memid, javax.swing.GroupLayout.PREFERRED_SIZE, 125,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 109,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addContainerGap(89, Short.MAX_VALUE)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 299,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(103, 103, 103))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(31, 31, 31)
```

```
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 56,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(52, 52, 52)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(memid, javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(43, 43, 43)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(verified)
                .addComponent(notVerified))
            .addGap(50, 50, 50)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(81, Short.MAX_VALUE))
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        Session session = Utils.getSession();
        session.beginTransaction();

        Members member = (Members) session.get(Members.class,
Long.parseLong(memid.getText()));
        member.setIsValid(verified.isSelected());

        session.getTransaction().commit();
        session.close();

        JOptionPane.showMessageDialog(this, "Action Performed");
        memid.setText("");
    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }
    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JTextField memid;
```

```
    private javax.swing.JRadioButton notVerified;
    private javax.swing.JRadioButton verified;
    // End of variables declaration
}
```

MemberData

```
package admin;

import entities.Members;
import java.util.List;
import javax.swing.table.DefaultTableModel;
import org.hibernate.Session;
import utility.Utils;

public class MemberData extends javax.swing.JFrame {

    public MemberData() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center

        DefaultTableModel model = new DefaultTableModel(new String[]{"Member ID","Member
Name","Address","City","State","Validity"},0);
        Session session = Utils.getSession();
        session.beginTransaction();


        List<Members> memberlist = session.createCriteria(Members.class).list();

        memberlist.forEach(e -> model.addRow(new
Object[]{e.getId(),e.getName(),e.getAddress(),e.getCity(),e.getState(),e.isIsValid()}));

        jTable1.setModel(model);

        session.getTransaction().commit();
        session.close();
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jButton1 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Member Data");

        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null}
            },
            new String [] {
                "Title 1", "Title 2", "Title 3", "Title 4"
            }
        ));
        jScrollPane1.setViewportView(jTable1);

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
        jButton1.setText("OK");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(28, 28, 28)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 61,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 652,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 208,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(27, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(16, 16, 16)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 304,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jButton1)
```

```
                .addContainerGap(35, Short.MAX_VALUE))
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    // End of variables declaration
}
```

Report

```
package admin;

import entities.ServiceProvided;
import java.util.List;
import javax.swing.table.DefaultTableModel;
import org.hibernate.Session;
import org.hibernate.criterion.Restrictions;
import utility.Utils;

public class Report extends javax.swing.JFrame {

    public Report() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        providerid = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Report for Provider");

        jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel2.setText("Provider Id");

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton1.setText("GetReport");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null}
            },
            new String [] {
                "Title 1", "Title 2", "Title 3", "Title 4"
            }
        ));
        jScrollPane1.setViewportView(jTable1);

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(28, 28, 28)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jLabel1, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.PREFERRED_SIZE, 289,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addGroup(layout.createSequentialGroup()
                            .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGap(34, 34, 34)
                            .addComponent(providerid, javax.swing.GroupLayout.PREFERRED_SIZE,
256, javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGap(183, 183, 183)
                            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 105,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
668, javax.swing.GroupLayout.PREFERRED_SIZE)))
```

```
                .addContainerGap(27, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 41,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(providerid, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(0, 0, Short.MAX_VALUE))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(2, 2, 2)
                        .addComponent(jButton1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 403,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(19, 19, 19))
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        Session session = Utils.getSession();
        session.beginTransaction();

        DefaultTableModel model = new DefaultTableModel(new String[]{"Service ID","Service
Name","Provider ID","Provider Name","Fees","Date","Comments"},0);

        List<ServiceProvided> services = session.createCriteria(ServiceProvided.class)
                .add(Restrictions.eq("providerNumber", Long.parseLong(providerid.getText())))
                .list();

        services.forEach(e -> model.addRow(new
Object[]{e.getServiceId(),e.getServiceName(),e.getProviderNumber(),e.getProviderName(),e.get
Fees(),e.getTimedate().toString(),e.getComments()}));
        jTable1.setModel(model);

        session.getTransaction().commit();
        session.close();
    }

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

```
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JTextField providerid;
    // End of variables declaration
}
```

ProviderLogin

```
package provider;

import entities.Provider;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;

public class ProviderLogin extends javax.swing.JFrame {

    public ProviderLogin() {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center
    }

    @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();
        id = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        password = new javax.swing.JPasswordField();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("Enter your Credentials to Login");

        jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel2.setText("Provider Id");

        jLabel3.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel3.setText("Password");

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton1.setText("Login");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
```

```
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jButton2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton2.setText("Exit");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(51, 51, 51)
                        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 396,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(95, 95, 95)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 95,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 95,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 85,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(68, 68, 68)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
77, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addGap(18, 18, 18))
                            .addComponent(id, javax.swing.GroupLayout.PREFERRED_SIZE, 107,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(password, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.PREFERRED_SIZE, 107,
javax.swing.GroupLayout.PREFERRED_SIZE))))
                    .addContainerGap(45, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
```

```
            .addGap(31, 31, 31)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(50, 50, 50)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(id, javax.swing.GroupLayout.DEFAULT_SIZE, 28,
Short.MAX_VALUE))
            .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 29,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(password, javax.swing.GroupLayout.PREFERRED_SIZE, 29,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(53, 53, 53)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 37,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(71, Short.MAX_VALUE))
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        Session session = Utils.getSession();
        session.beginTransaction();
        Provider provider = (Provider) session.get(Provider.class, Long.parseLong(id.getText()));
        session.getTransaction().commit();
        session.close();

        if(provider.getPassword().equals(password.getText())){
            UserCardSwipe ucs = new UserCardSwipe(provider);
            ucs.setVisible(true);
            setVisible(false);
        }else{
            JOptionPane.showMessageDialog(null, "Invalid Login");
        }
    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }

    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(ProviderLogin.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(ProviderLogin.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(ProviderLogin.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(ProviderLogin.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        }
        //</editor-fold>

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

    // Variables declaration - do not modify
    private javax.swing.JTextField id;
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JPasswordField password;
    // End of variables declaration
}
```

ProviderService

```
package provider;

import entities.Members;
import entities.Provider;
import entities.ProviderDir;
import java.text.ParseException;
import java.text.SimpleDateFormat;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;

public class ProviderService extends javax.swing.JFrame {

    private Members member;
    private Provider provider;

    public ProviderService(Members menber, Provider provider) {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center

        this.member = menber;
        this.provider = provider;
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        serviceid = new javax.swing.JTextField();
        servicedate = new javax.swing.JTextField();
        jButton3 = new javax.swing.JButton();
        jButton4 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton1.setText("Provider Directory");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jButton2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
```

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

        jLabel1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel1.setText("Service Id");

        jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel2.setText("Service Date");

        serviceid.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                serviceidActionPerformed(evt);
            }
        });

        servicedate.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                servicedateActionPerformed(evt);
            }
        });

        jButton3.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton3.setText("Book Service");
        jButton3.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton3ActionPerformed(evt);
            }
        });

        jButton4.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton4.setText("Cancel");
        jButton4.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton4ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()

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

```
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 153,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(124, 124, 124))
            .addGroup(layout.createSequentialGroup()
                .addGap(67, 67, 67)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 123,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 95,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(115, 115, 115)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jButton4, javax.swing.GroupLayout.DEFAULT_SIZE, 110,
Short.MAX_VALUE)
            .addComponent(serviceid)
            .addComponent(servicedate)
            .addComponent(jButton2, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 86,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap(95, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(32, 32, 32)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(69, 69, 69)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
            .addGroup(layout.createSequentialGroup()
                .addComponent(serviceid, javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(11, 11, 11)
                .addComponent(servicedate, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
                    .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(70, 70, 70)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(70, Short.MAX_VALUE))
        );

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

    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
        Session session = Utils.getSession();
        session.beginTransaction();

        ProviderDir providerDir = (ProviderDir) session.get(ProviderDir.class,
Long.parseLong(serviceid.getText()));
        if (providerDir.getProviderNumber()== provider.getId()) {
            try {
                VerifyService service = new VerifyService(providerDir, member, new
SimpleDateFormat("dd/MM/yyyy").parse(servicedate.getText()));
            } catch (ParseException ex) {
                ex.printStackTrace();
                JOptionPane.showMessageDialog(this, "Invalid ID");
            }

        }
        session.getTransaction().commit();
        session.close();

    }

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

        admin.ServicesProvided sp = new admin.ServicesProvided();
        sp.setVisible(true);
    }

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
        ProviderLogin pl = new ProviderLogin();
        pl.setVisible(true);
    }
```

```
    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JTextField servicedate;
    private javax.swing.JTextField serviceid;
    // End of variables declaration
}
```

UserCardSwipe

```
package provider;

import entities.Members;
import entities.Provider;
import javax.swing.JOptionPane;
import org.hibernate.Session;
import utility.Utils;

public class UserCardSwipe extends javax.swing.JFrame {

    private Provider provider;

    public UserCardSwipe(Provider provider) {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center

        this.provider = provider;
        setDefaultCloseOperation(HIDE_ON_CLOSE);
    }
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        memid = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jLabel1.setText("Member Id");

        memid.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                memidActionPerformed(evt);
```

```
        }
    });

    jButton1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
    jButton1.setText("Verify");
    jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });

    jButton2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
    jButton2.setText("Reset");
    jButton2.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton2ActionPerformed(evt);
        }
    });

    jButton3.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
    jButton3.setText("Logout");
    jButton3.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton3ActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(85, 85, 85)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 111,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 99,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
64, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                            .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
92, javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
                        .addGap(37, 37, 37))
                    .addComponent(memid, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 118,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(layout.createSequentialGroup()
                    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 95,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(77, 77, 77))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(29, 29, 29)
                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(73, 73, 73)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(memid, javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(69, 69, 69)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(86, Short.MAX_VALUE))
        );

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

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        Session session = Utils.getSession();
        session.beginTransaction();
        Members member = (Members) session.get(Members.class,
Long.parseLong(memid.getText()));
        session.getTransaction().commit();
        session.close();

        if (member.isIsValid()) {
            this.setVisible(false);
```

```
            ProviderService ps = new ProviderService(member, provider);
            ps.setVisible(true);
        } else {
            JOptionPane.showMessageDialog(this, "Member not valid");
        }
    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        memid.setText("");
    }

    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
        ProviderLogin pl = new ProviderLogin();
        pl.setVisible(true);
    }
    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JTextField memid;
    // End of variables declaration
}
```

VerifyService

```
package provider;

import entities.Members;
import entities.Provider;
import entities.ProviderDir;
import entities.ServiceProvided;
import java.util.Date;
import org.hibernate.Session;
import utility.Utils;

public class VerifyService extends javax.swing.JFrame {

    private ProviderDir providerDir;
    private Provider provider;
    private Members member;
    private Date date;

    public VerifyService(ProviderDir providerDir, Members member, Date date) {
        initComponents();
        this.setLocationRelativeTo(null);                    //Screen on Center

        this.providerDir = providerDir;
        this.provider = provider;
        this.member = member;
```

```
        this.date = date;
        this.setVisible(true);
        setDefaultCloseOperation(HIDE_ON_CLOSE);
        jLabel1.setText(providerDir.getProviderName() + " provided " +
providerDir.getServiceName() + " to " + member.getName() + " on " + date.toString() + " and a
fess of " + providerDir.getFees() + "will be chargerd");

    }
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jTextField1 = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

        jLabel2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jLabel2.setText("Additional Comments");

        jTextField1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jTextField1ActionPerformed(evt);
            }
        });

        jButton1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton1.setText("Confirm");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jButton2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
        jButton2.setText("Cancel");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addGroup(layout.createSequentialGroup()
                .addGap(33, 33, 33)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE,
465, javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 154,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
89, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addGap(147, 147, 147)
                                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
88, javax.swing.GroupLayout.PREFERRED_SIZE)))
                        .addContainerGap(190, Short.MAX_VALUE))))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(21, 21, 21)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(98, 98, 98)
                .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 24,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, 157,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 70,
Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(99, 99, 99))
        );

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

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

        Session session = Utils.getSession();
        session.beginTransaction();
```

```
        ServiceProvided service = new ServiceProvided();
        service.setComments(jTextField1.getText());
        service.setFees(providerDir.getFees());
        service.setProviderName(providerDir.getProviderName());
        service.setProviderNumber(providerDir.getProviderNumber());
        service.setServiceId(providerDir.getServiceCode());
        service.setServiceName(providerDir.getServiceName());
        service.setTimedate(date);

        session.save(service);

        session.getTransaction().commit();
        session.close();

        this.setVisible(false);
        ProviderService pl = new ProviderService(member, provider);
        pl.setVisible(true);

    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
    }
    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JTextField jTextField1;
    // End of variables declaration
}
```

NOTE: The code for entities and database is not provided above. If you have any queries regarding the code you can contact us anytime.