* **MAIN.JAVA:**

**package** com.dxc.assessment.client;

**public** **class** Main {

**public** **static** **void** main(String[] args) {

AssessmentApp app = **new** AssessmentApp();

app.display();

}

}

* **ASSESSMENTAPP.JAVA:**

**package** com.dxc.assessment.client;

**import** java.util.Scanner;

**import** com.dxc.assessment.model.DAO.UsersDAOimpl;

**public** **class** AssessmentApp {

**private** String username;

**private** String password;

**public** **void** display() {

UsersDAOimpl user = **new** UsersDAOimpl();

**boolean** choice = **true**;

**while**(choice) {

System.***out***.println("Please Enter your Credentials below: ");

Scanner sc = **new** Scanner(System.***in***);

System.***out***.println("Enter username: ");

username = sc.next();

System.***out***.println("Enter your Password: ");

password = sc.next();

**if**(user.authenticate(username, password)){

training train = **new** training();

train.display();

}

**else** {

System.***out***.println("Entered Credentials are Wrong....");

}

System.***out***.println("You have been logged out.Do you wish to continue (Y/N): ");

String option = sc.next();

**if**(option.charAt(0)=='Y' || option.charAt(0)=='y') {

choice=**true**;}

**else**

choice = **false**;

}

}

}

* **TRAINING.JAVA:**

**package** com.dxc.assessment.client;

**import** java.util.Scanner;

**import** com.dxc.assessment.model.DAO.TrainingDAOimpl;

**public** **class** training {

**public** **void** display() {

**int** option;

Scanner sc = **new** Scanner(System.***in***);

TrainingDAOimpl train = **new** TrainingDAOimpl();

System.***out***.println("M E N U");

System.***out***.println("1. Display all the records");

System.***out***.println("2. Display Records one by one and Update their percentages");

System.***out***.println("3. EXIT");

System.***out***.println("Enter your Option(1-3): ");

option = sc.nextInt();

**switch**(option) {

**case** 1: System.***out***.println(train.getallrecords());

**break**;

**case** 2: train.getrecordsonebyone();

**break**;

**case** 3: System.***out***.println("Thank you for using my program");

System.*exit*(0);

**break**;

**default**: System.***out***.println("Please Enter Correct choice: ");

**break**;

}

}

}

* **DBConnection.java:**

**package** com.dxc.assessment.dbcon;

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**import** java.sql.SQLException;

**public** **class** DBConnection {

**public** DBConnection() {

// **TODO** Auto-generated constructor stub

}

**public** **static** Connection getConnection() {

**try** {

Class.*forName*("com.mysql.jdbc.Driver");

} **catch** (ClassNotFoundException e1) {

e1.printStackTrace();

}

Connection con = **null**;

**try** {

con = DriverManager.*getConnection*("jdbc:mysql://localhost:3306/dxc","root", "root");

} **catch** (SQLException e) {

e.printStackTrace();

}

**return** con;

}

}

* **TRAININGDAO.JAVA**

**package** com.dxc.assessment.model.DAO;

**import** java.util.List;

**import** com.dxc.assessment.model1.Training;

**public** **interface** TrainingDAO {

**public** List<Training> getallrecords();

**public** **void** getrecordsonebyone();

}

* **TRAININGDAOIMPL.JAVA**

**package** com.dxc.assessment.model.DAO;

**import** java.sql.Connection;

**import** java.sql.PreparedStatement;

**import** java.sql.ResultSet;

**import** java.sql.SQLException;

**import** java.sql.Statement;

**import** java.util.ArrayList;

**import** java.util.List;

**import** java.util.Scanner;

**import** com.dxc.assessment.model1.Training;

**import** com.dxc.assessment.dbcon.DBConnection;

**public** **class** TrainingDAOimpl **implements** TrainingDAO {

Connection connection = DBConnection.*getConnection*();

**private** **static** **final** String ***FETCH\_PASSENGER\_ALL*** = "select \* from training";

**public** TrainingDAOimpl() {

// **TODO** Auto-generated constructor stub

}

**public** List<Training> getallrecords() {

List<Training> alltrainee = **new** ArrayList<Training>();

**try** {

Statement stat = connection.createStatement();

ResultSet res = stat.executeQuery(***FETCH\_PASSENGER\_ALL***);

**while**(res.next()) {

Training object = **new** Training();

object.setSapId(res.getInt(1));

object.setEmployeeName(res.getString(2));

object.setStream(res.getString(3));

object.setPercentage(res.getInt(4));

alltrainee.add(object);

}

} **catch** (SQLException e) {

// **TODO** Auto-generated catch block

e.printStackTrace();

}

**return** alltrainee;

}

**public** **void** getrecordsonebyone() {

Scanner sc = **new** Scanner(System.***in***);

**try** {

Statement stat = connection.createStatement(ResultSet.***TYPE\_SCROLL\_INSENSITIVE***,

ResultSet.***CONCUR\_UPDATABLE***);

ResultSet res = stat.executeQuery(***FETCH\_PASSENGER\_ALL***);

**while**(res.next()) {

System.***out***.println("You are Updating the percentage of: "+ res.getString(2));

System.***out***.println("Enter percentage you want to update: ");

**int** percent = sc.nextInt();

res.updateInt(4, percent);

res.updateRow();

}

} **catch** (SQLException e) {

// **TODO** Auto-generated catch block

e.printStackTrace();

}

}

}

* **USERDAO.JAVA**

**package** com.dxc.assessment.model.DAO;

**public** **interface** UsersDAO {

**public** **boolean** authenticate(String username, String password);

}

* **USERDAOIMPL.JAVA**

**package** com.dxc.assessment.model.DAO;

**import** java.sql.Connection;

**import** java.sql.PreparedStatement;

**import** java.sql.ResultSet;

**import** java.sql.SQLException;

**import** com.dxc.assessment.dbcon.DBConnection;

**public** **class** UsersDAOimpl **implements** UsersDAO {

Connection connection = DBConnection.*getConnection*();

**private** **static** **final** String ***FETCH\_USER*** = "select \* from users where Username = ? and Password = ?";

**public** UsersDAOimpl() {

// **TODO** Auto-generated constructor stub

}

**public** **boolean** authenticate(String username, String password) {

**boolean** valid = **false**;

**try** {

PreparedStatement stat = connection.prepareStatement(***FETCH\_USER***);

stat.setString(1, username);

stat.setString(2, password);

ResultSet res = stat.executeQuery();

**if**(res.next())

valid = **true**;

} **catch** (SQLException e) {

// **TODO** Auto-generated catch block

e.printStackTrace();

}

**return** valid;

}

}

* **TRAINING.JAVA(com.dxc.assessment.model1)**

**package** com.dxc.assessment.model1;

**public** **class** Training {

**private** **int** SapId;

**private** String EmployeeName;

**private** String Stream;

**private** **int** percentage;

**public** Training() {

// **TODO** Auto-generated constructor stub

}

**public** Training(**int** sapId, String employeeName, String stream, **int** percentage) {

**super**();

SapId = sapId;

EmployeeName = employeeName;

Stream = stream;

**this**.percentage = percentage;

}

@Override

**public** **int** hashCode() {

**final** **int** prime = 31;

**int** result = 1;

result = prime \* result + ((EmployeeName == **null**) ? 0 : EmployeeName.hashCode());

result = prime \* result + SapId;

result = prime \* result + ((Stream == **null**) ? 0 : Stream.hashCode());

result = prime \* result + percentage;

**return** result;

}

@Override

**public** **boolean** equals(Object obj) {

**if** (**this** == obj)

**return** **true**;

**if** (obj == **null**)

**return** **false**;

**if** (getClass() != obj.getClass())

**return** **false**;

Training other = (Training) obj;

**if** (EmployeeName == **null**) {

**if** (other.EmployeeName != **null**)

**return** **false**;

} **else** **if** (!EmployeeName.equals(other.EmployeeName))

**return** **false**;

**if** (SapId != other.SapId)

**return** **false**;

**if** (Stream == **null**) {

**if** (other.Stream != **null**)

**return** **false**;

} **else** **if** (!Stream.equals(other.Stream))

**return** **false**;

**if** (percentage != other.percentage)

**return** **false**;

**return** **true**;

}

**public** **int** getSapId() {

**return** SapId;

}

**public** **void** setSapId(**int** sapId) {

SapId = sapId;

}

**public** String getEmployeeName() {

**return** EmployeeName;

}

**public** **void** setEmployeeName(String employeeName) {

EmployeeName = employeeName;

}

**public** String getStream() {

**return** Stream;

}

**public** **void** setStream(String stream) {

Stream = stream;

}

**public** **int** getPercentage() {

**return** percentage;

}

**public** **void** setPercentage(**int** percentage) {

**this**.percentage = percentage;

}

@Override

**public** String toString() {

**return** " \n Training [SapId=" + SapId + ", EmployeeName=" + EmployeeName + ", Stream=" + Stream + ", percentage="

+ percentage + "]";

}

}