

Dbutil.java

```
package com.db.util;

import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.boot.Metadata;
import org.hibernate.boot.MetadataSources;
import org.hibernate.boot.registry.StandardServiceRegistry;
import org.hibernate.boot.registry.StandardServiceRegistryBuilder;

public class Dbutil {

    StandardServiceRegistry ssr=null;
    Metadata md=null;
    SessionFactory sf=null;
    Session session=null;

    public Session dbConn() {
        //SSR is used to map the config file and execute it .
        ssr=new StandardServiceRegistryBuilder().configure("hibernate.cfg.xml").build();

        //Metadata of the xml file is read by this object
        md=new MetadataSources(ssr).getMetadataBuilder().build();
        //session-factory- db
        sf=md.getSessionFactoryBuilder().build();
        //all the crud operations need to be done in Session
        session=sf.openSession();

        return session;
    }
}
```

UserDao.java

```
package com.quiz.dao;

import com.quiz.pojo.*;

import java.util.*;

import org.hibernate.Session;
import org.hibernate.Transaction;
import org.hibernate.query.Query;

import com.db.util.*;
```

```

public class UserDao {

    public int addUser(User user) {
        int value;
        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();

        String ses = (String) session.save(user);
        if (ses != null) {
            value = 1;
        } else {
            value = 0;
        }
        trans.commit();
        session.close();
        return value;
    }

    public String valid(String username, String pass) {

        String name = null;
        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();
        System.out.print(username);
        String hql = "FROM User U WHERE U.username = :userEmail";
        Query query = session.createQuery(hql);
        query.setParameter("userEmail", username);

        List<User> results = query.list();

        for (User use : results) {

            if (username.equals(use.getUsername()) && pass.equals(use.getPassword()))
            {
                name = use.getName();
            }

        }
        trans.commit();
        session.close();
        return name;
    }

    public String adminvalid(String username, String pass) {
        String name = null;
        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();
        String hql = "FROM Admin a WHERE a.useremail = :userEmail";

        Query query = session.createQuery(hql);
    }
}

```

```

        query.setParameter("userEmail", username);
        List<Admin> results = query.list();

        for (Admin admin : results) {
            if (username.equals(admin.getUseremail()) &&
pass.equals(admin.getUserpass())) {
                String s = admin.getUseremail();
                name = s.substring(0, 5);

            }

        }
        trans.commit();
        session.close();
        return name;
    }

    /*Add Quiz*/

    public int addquiz(String DbName, Quiz quiz) {
        int value = 0;
        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();

        session.createSQLQuery("use "+DbName).executeUpdate();

        int ses = (Integer) session.save(quiz);
        if (ses != 0) {
            value = 1;

        } else {
            value = 0;
        }
        trans.commit();
        session.close();
        return value;
    }

    //Fetch question for the user
    public List<Quiz> fetchQues(String DbName) {
//        ArrayList<Quiz> list=new ArrayList<Quiz>();
        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();
        session.createSQLQuery("use "+DbName).executeUpdate();
        String hql = "FROM Quiz";
        Query query = session.createQuery(hql);
        List<Quiz> questionList = query.list();

        return questionList;
    }

```

```

/*Add score table*/
public int addScore(TestScore Ts) {
    int value=0;
    Dbutil dbconn = new Dbutil();
    Session session = dbconn.dbConn();
    Transaction trans = session.beginTransaction();

    int ses = (Integer) session.save(Ts);
    if (ses > 0) {
        value = 1;
    }
    trans.commit();
    session.close();

    return value;
}

// Show Database
public List<String> display(){
    Dbutil dbconn = new Dbutil();
    Session session = dbconn.dbConn();
    Transaction trans = session.beginTransaction();
    //HQL
    String sql="show databases LIKE '%bank'";
    List<String> databases= session.createSQLQuery(sql).list();
    for(String database:databases) {
        String dbName=database;

    }

    trans.commit();
    session.close();
    return databases;
}

//display quiz admin
public List<Quiz> displayadmin(String dbname){
    Dbutil dbconn = new Dbutil();
    Session session = dbconn.dbConn();
    Transaction trans = session.beginTransaction();
    session.createSQLQuery("use "+dbname).executeUpdate();
    String hql ="From Quiz";
    Query query =session.createQuery(hql);
    List<Quiz> qlist=query.list();
    trans.commit();
    session.close();
    return qlist;
}

//edit quiz
public List<Quiz> editQuiz(String dbname,int id){
    Dbutil dbconn = new Dbutil();

```

```

        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();
        session.createSQLQuery("use "+dbname).executeUpdate();
        String hql ="From Quiz where Srno =" +id;
        Query query =session.createQuery(hql);
        List<Quiz> qlist=query.list();
        trans.commit();
        session.close();
        return qlist;
    }

    //Update Quiz
    public int UpdateQuiz(String DbName,int id,Quiz updatedQuiz) {
        int value = 0;
        System.out.print(id);
        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();

        session.createSQLQuery("use "+DbName).executeUpdate();
        String hql = "update Quiz set ques = :ques, opt1 = :opt1, opt2 = :opt2, opt3 =
:opt3, opt4 = :opt4, correctopt = :correctopt where srno = :id";
        Query query = session.createQuery(hql);

        query.setParameter("ques", updatedQuiz.getQues());
        query.setParameter("opt1", updatedQuiz.getOpt1());
        query.setParameter("opt2", updatedQuiz.getOpt2());
        query.setParameter("opt3", updatedQuiz.getOpt3());
        query.setParameter("opt4", updatedQuiz.getOpt4());
        query.setParameter("correctopt", updatedQuiz.getCorrectopt());
        query.setParameter("id", id);
        int rowsAffected = query.executeUpdate();

        if (rowsAffected > 0) {
            value = 1; // Update successful
        } else {
            value = 0; // Update failed
        }

        trans.commit();
        session.close();
        return value;
    }

    // Delete question
    public int delete(String dbname,Quiz quiz) {
        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();
        session.createSQLQuery("use "+dbname).executeUpdate();
        session.delete(quiz);
        trans.commit();
        session.close();
        return 0;
    }

    //display Score
    public List<TestScore> showScore(){

```

```

        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();
        String hql ="From TestScore";
        Query query =session.createQuery(hql);
        List<TestScore> tlist=query.list();
        trans.commit();
        session.close();
        return tlist;
    }

    public int deleteDb(String dbname) {

        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();
        String sql = "DROP SCHEMA IF EXISTS " + dbname;
        session.createNativeQuery(sql).executeUpdate();
        trans.commit();
        session.close();
        return 0;
    }

    public int editDb(String oldDbname,String newDbName) {
        Dbutil dbconn = new Dbutil();
        Session session = dbconn.dbConn();
        Transaction trans = session.beginTransaction();
        String sql = "ALTER DATABASE " + oldDbname + " RENAME TO " +
// newDbName;
        String sql ="ALTER DATABASE " + oldDbname +"MODIFY
NAME="+newDbName;
        session.createNativeQuery(sql).executeUpdate();
        return 0;
    }

}

```

Admin.java

```

package com.quiz.pojo;

import javax.persistence.Entity;
import javax.persistence.Id;

@Entity
public class Admin {

    @Id
    private String useremail;
    private String userpass;
    public String getUseremail() {
        return useremail;
    }
    public String getUserpass() {

```

```
        return userpass;}}
```

Quiz.java

```
package com.quiz.pojo;
```

```
import javax.persistence.Entity;  
import javax.persistence.GeneratedValue;  
import javax.persistence.GenerationType;  
import javax.persistence.Id;
```

```
@Entity
```

```
public class Quiz {
```

```
    @Id
```

```
    private int Srno;
```

```
    private String ques;
```

```
    private String opt1;
```

```
    private String opt2;
```

```
    private String opt3;
```

```
    private String opt4;
```

```
    private String correctopt;
```

```
    public int getSrno() {
```

```
        return Srno;
```

```
    }
```

```
    public void setSrno(int srno) {
```

```
        Srno = srno;
```

```
    }
```

```
    public String getQues() {
```

```
        return ques;
```

```
    }
```

```
    public void setQues(String ques) {
```

```
        this.ques = ques;
```

```
    }
```

```
    public String getOpt1() {
```

```
        return opt1;
```

```
    }
```

```
    public void setOpt1(String opt1) {
```

```
        this.opt1 = opt1;
```

```
    }
```

```
    public String getOpt2() {
```

```
        return opt2;
```

```
    }
```

```
    public void setOpt2(String opt2) {
```

```
        this.opt2 = opt2;
```

```
    }
```

```
    public String getOpt3() {
```

```
        return opt3;
```

```
    }
```

```
    public void setOpt3(String opt3) {
```

```
        this.opt3 = opt3;
```

```
    }
```

```
    public String getOpt4() {
```

```
        return opt4;
```

```
    }
```

```
    public void setOpt4(String opt4) {
```

```

        this.opt4 = opt4;
    }
    public String getCorrectopt() {
        return correctopt;
    }
    public void setCorrectopt(String correctopt) {
        this.correctopt = correctopt;
    }
}

```

TestScore.java

```

package com.quiz.pojo;

import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;

@Entity
public class TestScore {
    @Id
    @GeneratedValue(strategy=GenerationType.AUTO)
    private int id;
    private String name;
    private int Score ;
    private String dbname;

    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public int getScore() {
        return Score;
    }
    public void setScore(int score) {
        Score = score;
    }
    public String getDbname() {
        return dbname;
    }
    public void setDbname(String dbname) {
        this.dbname = dbname;
    }
}

```

User.java

```

package com.quiz.pojo;

import javax.persistence.Entity;

```



```

import javax.persistence.Id;

@Entity
public class User {

    @Id
    private String username;
    private String password;
    private String name;
    public String getUsername() {
        return username;
    }
    public void setUsername(String username) {
        this.username = username;
    }
    public String getPassword() {
        return password;
    }
    public void setPassword(String password) {
        this.password = password;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
}

```

hibernate.cfg.xml

```

<hibernate-configuration>
<session-factory>
<property name="hibernate.connection.driver_class">com.mysql.jdbc.Driver</property>
<property name="hibernate.connection.password">root</property>
<property name="hibernate.connection.url">jdbc:mysql://localhost/quiz</property>
<property name="hibernate.connection.username">root</property>
<property name="hibernate.dialect">org.hibernate.dialect.MySQL8Dialect</property>
<!-- hibernate config -->
<property name="hbm2ddl.auto">update</property>
<property name="show_sql">true</property>
<!-- pojo -->
<mapping class="com.quiz.pojo.User"/>
<mapping class="com.quiz.pojo.Admin"/>
<mapping class="com.quiz.pojo.Quiz"/>
<mapping class="com.quiz.pojo.TestScore"/>
</session-factory>
</hibernate-configuration>

```

WEBAPP

addQuiz.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
    <% @include file="adminDashboard.jsp" %>
    <span><a href="showCat.jsp">Category</a></span>
    <div style="display: flex; flex-direction: row; width: 100vw;">
        <%
            String DbName = request.getParameter("database");
        %>

        <div
            style="text-align: left; border: 1px solid black; padding: 10px;margin-
left:500px;padding:50px">
            <h1>Create New Quiz</h1>
            <form action="addQuizController.jsp?database=<%=DbName%>"
                method="post">
                Question no<br> <input type="text" name="srno"><br>
                Question <br> <input type="text" name="ques"><br>
                Option 1 <br> <input type="text" name="opt1"><br>
                Option 2<br> <input type="text" name="opt2"><br>
                Option 3 <br> <input type="text" name="opt3"><br>
                Option 4 <br> <input type="text" name="opt4"><br>
                Correct Option <br> <input type="text" name="correctopt"><br>
                <input type="submit" name="Submit" style="margin-top: 10px;">
            </form>
        </div>

    </div>
</body>
</html>
```

addQuizController.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
```

```

<% @ page import="com.quiz.dao.*"%>
<% @ page import="com.quiz.pojo.*"%>
<% @page errorPage="quizError.jsp" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
    <%
        UserDao dao= new UserDao();
        Quiz quiz = new Quiz();
        String DbName = request.getParameter("database");

        quiz.setSrno(Integer.parseInt(request.getParameter("srno")));
        quiz.setQues(request.getParameter("ques"));
        quiz.setOpt1(request.getParameter("opt1"));
        quiz.setOpt2(request.getParameter("opt2"));
        quiz.setOpt3(request.getParameter("opt3"));
        quiz.setOpt4(request.getParameter("opt4"));
        quiz.setCorrectopt(request.getParameter("correctopt"));
        int row = dao.addquiz(DbName, quiz);
        if(row>0){
            out.print("Quiz added Succesfully");

            RequestDispatcher rd=request.getRequestDispatcher("quiz.jsp");
            rd.include(request, response);
        } %>

</body>
</html>

```

admin.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
    <div style="border: 1px solid #ccc; margin-left:40%; padding: 20px; width:250px">
        <h4 style="text-align: center;">Quiz Portal</h4>
        <h4 style="text-align: center;">Admin Login</h4>
        <form action="adminLoginServlet.jsp" method="post">
            <div
                style="display: flex; justify-content: space-between; align-items:
center; margin-bottom: 10px;">

```

```

                                <label for="email" style="margin-right: 10px;">Email:</label>
<input
                                type="text" name="email">
                                </div>
                                <div
                                style="display: flex; justify-content: space-between; align-items:
center; margin-bottom: 10px;">
                                <label for="password" style="margin-right:
10px;">Password:</label>
                                <input type="password" name="password">
                                </div>
                                <div style="text-align: center;">
                                <input type="submit" value="Submit">
                                </div>
                                </form>
                                </div>
</body>
</html>

```

adminDashboard.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<div >

    <div style="display: flex; justify-content: space-between;">
    <h1 style="margin: 0;">Welcome</h1>
    <div style="text-align: right;">
        ${LoggedInUser}<br>
        <a href="logoutServlet.jsp">Logout</a>
    </div>
    </div>

</div>

</div>
</body>
</html>

```

adminLoginServlet.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<% @ page import="com.quiz.dao.*"%>
<% @page errorPage="adminError.jsp" %>
<!DOCTYPE html>

```

```

<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
    <%
        UserDao dao = new UserDao();
        String username = request.getParameter("email");
        String password = request.getParameter("password");
        String name=dao.adminvalid(username, password);
        if(name!=null){
            session.setAttribute("LoggedInUser", name);
            response.sendRedirect("showCat.jsp");
        }
    else{ %>
        <div style="text-align: center; margin-top: 20px;">
            <% out.print("Error Username or Password"); %>
        </div>
        <%
            RequestDispatcher rd=request.getRequestDispatcher("admin.jsp");
            rd.include(request, response);
        %>
    %>

</body>
</html>

```

Category.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>

    <table>
    <th> Category </th>
    <th> Edit table </th>
    <th> Delete table </th>
    </table>

    <a href=""></a>

</body>
</html>

```

deletCatcontroller.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
String dbName = request.getParameter("database");
UserDao d = new UserDao();
d.deleteDb(dbName);
%>
<%= "Category Get deleted" %>
<% @ include file="showCat.jsp" %>

</body>
</html>
```

deleteQuizController.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*"%>
    <% @ page import="java.util.*"%>
    <% @ page import="com.quiz.pojo.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
String dbName = request.getParameter("database");
String qid = request.getParameter("quizid");
int id = Integer.parseInt(qid);
UserDao dao = new UserDao();
Quiz quiz = new Quiz();
quiz.setSrno(id);
int value = dao.delete(dbName,quiz);
if (value ==0){
    out.print("Quiz Delete Succesfully");

    RequestDispatcher rd=request.getRequestDispatcher("quiz.jsp");
    rd.include(request, response);
}
%>
</body>
</html>
```

displayScore.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>

</body>
</html>
```

EditDB.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*"%>

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
String dbname =(request.getParameter("database"));
UserDao d = new UserDao();
out.print(dbname);
%>
<form action="editDbcontroller.jsp">
<input type="hidden" name="olddbname" value=<%=dbname %>>
New Category name :
<input type="text" name="newdbname">
<input type="submit">
</form>
</body>
</html>
```

editdbController.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*"%>
```

```

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
String olddb = request.getParameter("olddbname");
String newdb =request.getParameter("newdbname");
UserDao d= new UserDao();
d.editDb(olddb, newdb);

%>

</body>
</html>

```

EditQuiz.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<% @ page import="com.quiz.dao.*"%>
<% @page import="java.util.*"%>
<% @ page import="com.quiz.pojo.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
    <%
        String dbName = request.getParameter("database");
        String qid = request.getParameter("quizid");
        int sid = Integer.parseInt(qid);
        UserDao dao = new UserDao();
        List<Quiz> qlist = dao.editQuiz(dbName, sid);
    %>

    <div
        style="width: 20%; margin: auto; padding: 20px; border: 1px solid black; text-align:
left;">
        <h3>Edit Quiz</h3>
        <form

            action="EditQuizController.jsp?database=<%=dbName%>&quizid=<%=sid%>">
                <input type="hidden" name="dbname" value="<%=dbName%>">
                <%
                    for (Quiz q : qlist) {
                %>

                <input type="hidden" name="quizSrno" value="<%=q.getSrno()%>">
                <div style="padding: 10px;">

```



```

        <label>Question:</label> <br>
        <input type="text" name="question"
            value="<%=q.getQues()%>">
    </div>
    <div style="padding: 10px;">
        <label>Option 1:</label> <br> <input type="text" name="options1"
            value="<%=q.getOpt1()%>">
    </div>
    <div style="padding: 10px;">
        <label>Option 2:</label> <br> <input type="text" name="options2"
            value="<%=q.getOpt2()%>">
    </div>
    <div style="padding: 10px;">
        <label>Option 3:</label> <br> <input type="text" name="options3"
            value="<%=q.getOpt3()%>">
    </div>
    <div style="padding: 10px;">
        <label>Option 4:</label> <br> <input type="text" name="options4"
            value="<%=q.getOpt4()%>">
    </div>
    <div style="padding: 10px;">
        <label>Correct Option:</label> <br> <input type="text"
            name="correctOptions" value="<%=q.getCorrectopt()%>">
        <div style="padding: 10px;">
            <input type="submit" value="Update Quiz">
        </div>
    </div>

    <%
    }
    %>

    </form>
</div>
</body>
</html>

```

EditQuizController.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*"%>
    <% @ page import="java.util.*"%>
    <% @ page import="com.quiz.pojo.*"%>
    <!DOCTYPE html>
    <html>
    <head>
    <meta charset="ISO-8859-1">
    <title>Insert title here</title>

```

```

</head>
<body>
<%
String dbName = request.getParameter("dbname");

UserDao dao = new UserDao();
Quiz q = new Quiz();
int sno=Integer.parseInt(request.getParameter("quizSrno"));

q.setSrno(sno);
q.setQues(request.getParameter("question"));
q.setOpt1(request.getParameter("options1"));
q.setOpt2(request.getParameter("options2"));
q.setOpt3(request.getParameter("options3"));
q.setOpt4(request.getParameter("options4"));
q.setCorrectopt(request.getParameter("correctOptions"));
int row = dao.UpdateQuiz(dbName, sno, q);
if(row>0){ %>
    <%="The Quiz Edited successfully" %>

<%
response.sendRedirect("quiz.jsp?database="+dbName);
} %>

</body>
</html>

```

Index.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<div style="width: 300px; margin: 0 auto; border: 1px solid #ccc; padding: 20px; text-align: center;">
    <h2>Quiz Portal</h2>
    <h4>User Login</h4>
    <form action="loginUserServlet.jsp" method="post">
        <div style="text-align: center; margin-bottom: 10px;">
            <label style="display: inline-block; text-align: right; width: 80px;">Email:</label>
            <input type="text" name="email" style="margin-bottom: 10px;">
        </div>
        <div style="text-align: center; margin-bottom: 10px;">
            <label style="display: inline-block; text-align: right; width: 80px;">Password:</label>
            <input type="password" name="password" style="margin-bottom: 10px;">
        </div>
        <div style="text-align: center;">
            <input type="submit" value="Submit" style="margin-bottom: 10px;">

```

```

        </div>
    </form>
    <div style="text-align: center; margin-bottom: 10px;">
        Not a user? <a href="register.jsp">Register</a>
    </div>
    <div style="text-align: center;">
        Admin Login: <a href="admin.jsp">Admin</a>
    </div>

</div>

</body>
</html>

```

loginUserServlet.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*" %>
    <% @ page import="com.quiz.pojo.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
    UserDao dao = new UserDao();
    User use = new User();
    String username = request.getParameter("email");
    String password = request.getParameter("password");
    String name = use.getName();
    String row=dao.valid(username, password);
    if(row!=null){
        session.setAttribute("LoggedInUser", row);
        response.sendRedirect("UserDashboard.jsp");
    }
else{%>
    <div style="text-align: center;">
        <% out.print("Error Login Username and Password"); %>
    </div>
    <% @ include file="index.jsp" %>

<% }%>

</body>
</html>

```

logOutServlet.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"

```

```

    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
    session.invalidate();
%>

<div style="text-align: center;">
    <% out.print("You are logout Successfully"); %>
</div>
<% @ include file="index.jsp" %>
</body>
</html>

```

quiz.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<% @ page import="com.quiz.dao.*"%>
<% @page import="java.util.*"%>
<% @ page import="com.quiz.pojo.*"%>
<% @page errorPage="QuizListError.jsp"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
    <%
String databaseName = request.getParameter("database");
%>
    <% @include file="adminDashboard.jsp" %>

        <span><a href="addQuiz.jsp?database=<%=databaseName%>">Add Quiz</a></span>
        <span><a href="showCat.jsp">Category</a></span>
        <br>
<table style="border-collapse: collapse; width: 100%; text-align: center;">
    <tr style="background-color: #f2f2f2;">
        <th style="padding: 10px;">Question</th>
        <th style="padding: 10px;">Option 1</th>
        <th style="padding: 10px;">Option 2</th>
        <th style="padding: 10px;">Option 3</th>
        <th style="padding: 10px;">Option 4</th>
        <th style="padding: 10px;">Correct Answer</th>
        <th style="padding: 10px;">Edit</th>
        <th style="padding: 10px;">Delete</th>
    </tr>
    <% UserDao daoo = new UserDao();

```

```

        int quizId;
        List<Quiz> qlist = daoo.displayadmin(databaseName);
        for (Quiz quz : qlist) {
            quizId = quz.getSrno();
        %>
        <tr>
            <td style="padding: 10px;"><%= quz.getQues() %></td>
            <td style="padding: 10px;"><%= quz.getOpt1() %></td>
            <td style="padding: 10px;"><%= quz.getOpt2() %></td>
            <td style="padding: 10px;"><%= quz.getOpt3() %></td>
            <td style="padding: 10px;"><%= quz.getOpt4() %></td>
            <td style="padding: 10px;"><%= quz.getCorrectopt() %></td>
            <td style="padding: 10px;"><a href="EditQuiz.jsp?database=<%= databaseName
%>&quizid=<%= quizId %>">Edit</a></td>
            <td style="padding: 10px;"><a href="deleteQuizController.jsp?database=<%= databaseName
%>&quizid=<%= quizId %>">Delete</a></td>
        </tr>
        <% } %>
    </table>

</body>
</html>

```

quizError.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
    <% out.print("Question no is already Present in database."); %>
    <% @ include file="addQuiz.jsp" %><br>
</body>
</html>

```

QuizListError.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
    <%

```

```
String dbName = request.getParameter("database");
%>
<a href="addQuiz.jsp?database=<%=dbName%>">Add Quiz</a><br>
<%= "No user" %>

</body>
</html>
```

quizSubmitController.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @page import="java.util.*" %>
    <% @ page import="com.quiz.dao.*"%>
    <% @ page import="com.quiz.pojo.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>

<%
String dbName = request.getParameter("database");
TestScore Ts = new TestScore();
String loggedInUser = (String) session.getAttribute("LoggedInUser");
int score = 0;
UserDao dao=new UserDao();

List<Quiz> quizQuestions = dao.fetchQues(dbName);

//Iterate through each quiz question and check the user's answer
for (Quiz question : quizQuestions) {
    String userAnswer = request.getParameter("name" + question.getSrno());
    String correctAnswer = request.getParameter("correctAnswer" + question.getSrno());

    // Compare the user's answer with the correct answer
    if (userAnswer != null && userAnswer.equals(correctAnswer)) {
        score++;
    }
}
Ts.setName(loggedInUser);
Ts.setScore(score);
Ts.setDbname(dbName);
int value = dao.addScore(Ts);
if(value>0){
    List<TestScore> Tscore = dao.showScore();%>
    <h2 style="text-align: center; margin-top: 20px;">Score Board</h2>
<table style="border-collapse: collapse; width: 50%; margin: 20px 0 0 25%;">
    <tr style="background-color: #f2f2f2;">
        <th style="padding: 10px; border: 1px solid #ccc;">Name</th>
        <th style="padding: 10px; border: 1px solid #ccc;">Category Name</th>
        <th style="padding: 10px; border: 1px solid #ccc;">Score</th>
    </tr>
```

```

        <% for (TestScore t : Tscore) { %>
            <tr>
                <td style="padding: 10px; border: 1px solid #ccc;"><%= t.getName() %></td>
                <td style="padding: 10px; border: 1px solid #ccc;"><%= t.getDbname() %></td>
                <td style="padding: 10px; border: 1px solid #ccc;"><%= t.getScore() %></td>
            </tr>
        <% } %>
    </table>

<% } %>

</body>
</html>

```

register.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1>User Registration</h1>
<form action="RegisterUserController.jsp" method="post">
<table>
<tr><td>Name</td><td><input type="text" name="uname"></td></tr>
<tr><td>Email</td><td><input type="email" name="uemail"></td></tr>
<tr><td>Password</td><td><input type="text" name="upass"></td></tr>
<tr><td></td><td><input type="submit" value="Register"></td></tr>
</table>

</form>

</body>
</html>

```

RegisterUserController.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*" %>
    <% @ page import="com.quiz.pojo.*" %>
    <% @ page errorPage="ReguserError.jsp" %>

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
 UserDao dao= new UserDao();

```

```
User user = new User();

user.setName(request.getParameter("uname"));
user.setUsername(request.getParameter("uemail"));
user.setPassword(request.getParameter("upass"));
int row=dao.addUser(user);
```

```
        if(row>0){ %>
            <%= "User Added Successfully" %>
<% @ include file="register.jsp" %>
<a href="index.jsp">Back to HomePage</a>
<% } %>
```

```
</body>
</html>
```

ReguserError.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @page isErrorPage="true" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<% @ include file="index.jsp" %><br>
<% out.print("User Already Present in Database"); %>
</body>
</html>
```

showCat.jsp

```
<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*"%>
    <% @page import="java.util.*" %>

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<div>
<% @include file="adminDashboard.jsp" %>
<table style="border-collapse: collapse; width: 50%; text-align: center; margin-left:350px">
    <tr style="background-color: #f2f2f2;">
        <th style="padding: 10px;">Category</th>
        <th style="padding: 10px;">Edit table</th>
        <th style="padding: 10px;">Delete table</th>
    </tr>
```



```

    <% UserDao dao = new UserDao();
    List<String> databases = dao.display();
    for (String database : databases) { %>
    <tr>
        <td style="padding: 10px;"><a href="quiz.jsp?database=<%=database%>"><%= database %>
    </a></td>
        <td style="padding: 10px;"><a href="EditDB.jsp?database=<%=database%>">Edit</a></td>
        <td style="padding: 10px;"><a
href="deleteCatcontroller.jsp?database=<%=database%>">Delete</a></td>
    </tr>
    <% } %>
</table>

</div>
</body>
</html>

```

UserDashboard.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<% @ page import="com.quiz.dao.*"%>
<% @page import="java.util.*"%>
<% @ page import="com.quiz.pojo.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>

    <%
String loggedInUser = (String) session.getAttribute("LoggedInUser");
%>
<div style="display: flex; justify-content: space-between;">
    <h3 style="margin-right: 10px; display: inline;">Welcome ,
    <i><% out.print("Hello " + " "+loggedInUser); %></i>
    </h3>
    <div style="margin-left: auto;">

        <a href="logoutServlet.jsp" style="margin-left: 10px;">Logout</a>
    </div>
</div>

<h3 style="text-align: center;">Quiz Category List</h3>

<table style="width: 50%; border-collapse: collapse; margin-left:25%">
    <tr>
        <th style="padding: 10px; background-color: #f2f2f2;border-right: 1px solid
#ddd;">Category</th>
        <th style="padding: 10px; background-color: #f2f2f2;">Edit table</th>
    </tr>
    <% UserDao dao = new UserDao();

```

```

        List<String> databases = dao.display();
        for (String database : databases) { %>
<tr>
    <td style="padding: 10px; border-bottom: 1px solid #ddd;border-right: 1px solid #ddd;"><%=
database %></td>
    <td style="padding: 10px; border-bottom: 1px solid #ddd;border-right: 1px solid #ddd;"><a
href="userQuestion.jsp?database=<%= database %>">Take Test</a></td>
</tr>
<% } %>
</table>

</body>
</html>

```

userQuestion.jsp

```

<% @ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <% @ page import="com.quiz.dao.*"%>
    <% @ page import="java.util.*" %>
    <% @ page import="com.quiz.pojo.*"%>
    <!DOCTYPE html>
    <html>
    <head>
    <meta charset="ISO-8859-1">
    <title>Insert title here</title>
    </head>
    <body>
    <% String dbName = request.getParameter("database"); %>
    <h2 style="text-align: center; margin-top: 20px;">Quiz</h2>
    <div style="max-width: 500px; margin: 0 auto; border: 1px solid black; padding: 20px;">
    <form action="quizSubmitController.jsp?database=<%=dbName %>" method="post">
    <%
        UserDao dao = new UserDao();
        List<Quiz> list = dao.fetchQues(dbName);
        for (Quiz q : list) { %>
            <div style="margin-bottom: 20px; padding: 10px; border: 1px solid gray;">
                <p><strong>Q<%= q.getSrno() %> :</strong> <%= q.getQues() %></p>
                <label><input type="radio" name="name<%= q.getSrno() %>" value="<%= q.getOpt1()
%>"> <%= q.getOpt1() %></label><br>
                <label><input type="radio" name="name<%= q.getSrno() %>" value="<%= q.getOpt2()
%>"> <%= q.getOpt2() %></label><br>
                <label><input type="radio" name="name<%= q.getSrno() %>" value="<%= q.getOpt3()
%>"> <%= q.getOpt3() %></label><br>
                <label><input type="radio" name="name<%= q.getSrno() %>" value="<%= q.getOpt4()
%>"> <%= q.getOpt4() %></label><br>
                <input type="hidden" name="correctAnswer<%= q.getSrno() %>" value="<%=
q.getCorrectopt() %>">
            </div>
        <% } %>
        <input type="submit" value="Submit" style="margin-top: 10px;">
    </form>
    </div>

```

```
</body>  
</html>
```