KIRANKUMAR D NATIKAR EMPID: 2576955 **SOURCE CODE:** Package: com.questions: AddSQLQuestionsServlet.java: package com.questions; import java.io.IOException; import javax.servlet.ServletException; import javax.servlet.annotation.WebServlet; import javax.servlet.http.HttpServlet; import javax.servlet.http.HttpServletRequest; import javax.servlet.http.HttpServletResponse; import org.hibernate.Session; import org.hibernate.Transaction; import com.user.HibernateUtil; @WebServlet("/addsqlquestion") public class AddSQLQuestionServlet extends HttpServlet { private static final long serialVersionUID = 1L; protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException { String question = request.getParameter("question"); String option1 = request.getParameter("option1"); String option2 = request.getParameter("option2");

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```
String option3 = request.getParameter("option3");
String option4 = request.getParameter("option4");
int correctOption = Integer.parseInt(request.getParameter("correctOption"));
// Create a new SQLQuestion object and set the values
SQLQuestion sqlQuestion = new SQLQuestion();
sqlQuestion.setQuestion(question);
sqlQuestion.setOption1(option1);
sqlQuestion.setOption2(option2);
sqlQuestion.setOption3(option3);
sqlQuestion.setOption4(option4);
sqlQuestion.setCorrectOption(correctOption);
// Save the SQLQuestion object to the database using Hibernate
Session session = HibernateUtil.getSessionFactory().openSession();
Transaction transaction = session.beginTransaction();
session.save(sqlQuestion);
try {
  transaction.commit();
} catch (Exception e) {
  if (transaction != null) {
    transaction.rollback();
  }
  e.printStackTrace();
} finally {
```

```
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SOURCE CODE:
      session.close();
    }
    response.sendRedirect("addquestion.jsp");
  }
DeleteSQLQuestionServlet.java:
package com.questions;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/deletesqlquestion")
public class DeleteSQLQuestionServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
  protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    // Retrieve the question ID from the request parameter
```

```
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    Long questionId = Long.parseLong(request.getParameter("id"));
    // Delete the SQL question from the database
    SQLQuestionDAO.deleteSQLQuestion(questionId);
    // Redirect back to the view page
    response.sendRedirect(request.getContextPath() + "/viewsqllist");
  }
}
EditSQLQuestionServlet.java:
package com.questions;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/editsqlquestion")
public class EditSQLQuestionServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
```

```
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    // Retrieve the question ID from the request parameter
    Long questionId = Long.parseLong(request.getParameter("id"));
    // Retrieve the SQL question from the database
    SQLQuestion sqlQuestion = SQLQuestionDAO.getSQLQuestionById(questionId);
    // Forward the question object to the JSP page for editing
    request.setAttribute("question", sqlQuestion);
    request.getRequestDispatcher("editsqlquestion.jsp").forward(request, response);
  }
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    // Retrieve the question ID from the request parameter
    Long questionId = Long.parseLong(request.getParameter("id"));
    // Retrieve the SQL question from the database
    SQLQuestion sqlQuestion = SQLQuestionDAO.getSQLQuestionById(questionId);
    // Update the SQL question with the form data
    sqlQuestion.setQuestion(request.getParameter("question"));
    sqlQuestion.setOption1(request.getParameter("option1"));
    sqlQuestion.setOption2(request.getParameter("option2"));
```

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```
sqlQuestion.setOption3(request.getParameter("option3"));
    sqlQuestion.setOption4(request.getParameter("option4"));
    sqlQuestion.setCorrectOption(Integer.parseInt(request.getParameter("correctOption")));
    // Update the SQL question in the database
    SQLQuestionDAO.updateSQLQuestion(sqlQuestion);
    // Redirect to the SQL question list page
    response.sendRedirect("viewsqllist.jsp");
  }
}
SQLQuestion.java:
package com.questions;
import java.util.List;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.ld;
import javax.persistence.Table;
import javax.persistence.criteria.CriteriaBuilder;
import javax.persistence.criteria.CriteriaQuery;
import javax.persistence.criteria.Root;
```

```
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SOURCE CODE:
import javax.transaction.HeuristicMixedException;
import javax.transaction.HeuristicRollbackException;
import javax.transaction.RollbackException;
import javax.transaction.SystemException;
import javax.transaction.Transaction;
import org.hibernate.Session;
import com.user.HibernateUtil;
@Entity
@Table(name = "sql_question")
public class SQLQuestion {
  @ld
  @GeneratedValue(strategy = GenerationType.IDENTITY)
  private Long id;
  private String question;
  private String option1;
  private String option2;
  private String option3;
  private String option4;
  private int correctOption;
       public Long getId() {
```

return id;

```
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SOURCE CODE:
       }
        public void setId(Long id) {
               this.id = id;
       }
        public String getQuestion() {
               return question;
       }
        public void setQuestion(String question) {
               this.question = question;
        }
        public String getOption1() {
               return option1;
       }
        public void setOption1(String option1) {
               this.option1 = option1;
        }
        public String getOption2() {
               return option2;
        }
        public void setOption2(String option2) {
               this.option2 = option2;
        }
        public String getOption3() {
               return option3;
       }
```

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```

```
public void setOption3(String option3) {
                this.option3 = option3;
        }
        public String getOption4() {
                return option4;
        }
        public void setOption4(String option4) {
                this.option4 = option4;
       }
        public int getCorrectOption() {
                return correctOption;
        }
        public void setCorrectOption(int correctOption) {
                this.correctOption = correctOption;
        }
        public String formatOptions() {
    return option1 + ", " + option2 + ", " + option3 + ", " + option4;
  }
SQLQuestionDAO.java:
package com.questions;
import java.util.List;
```

```
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SOURCE CODE:
import javax.persistence.criteria.CriteriaBuilder;
import javax.persistence.criteria.CriteriaQuery;
import javax.persistence.criteria.Root;
import org.hibernate.Session;
import org.hibernate.Transaction;
import com.user.HibernateUtil;
public class SQLQuestionDAO {
        public static List<SQLQuestion> getAllSQLQuestions() {
               try (Session session = HibernateUtil.getSessionFactory().openSession()) {
                       CriteriaBuilder builder = session.getCriteriaBuilder();
                       CriteriaQuery<SQLQuestion> query = builder.createQuery(SQLQuestion.class);
                       Root<SQLQuestion> root = query.from(SQLQuestion.class);
                       query.select(root);
                       return session.createQuery(query).getResultList();
               }
       }
        public static String formatOptions(SQLQuestion question) {
               String options = question.getOption1() + ", " + question.getOption2() + ", " +
question.getOption3() + ", "
                               + question.getOption4();
               return options;
```

```
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SOURCE CODE:
       }
        public static SQLQuestion getSQLQuestionById(Long questionId) {
               try (Session session = HibernateUtil.getSessionFactory().openSession()) {
                       return session.get(SQLQuestion.class, questionId);
               }
               // Implement other methods for CRUD operations
               // ...
       }
        public static void deleteSQLQuestion(Long questionId) {
               try (Session session = HibernateUtil.getSessionFactory().openSession()) {
                       Transaction transaction = session.beginTransaction();
                       SQLQuestion question = session.get(SQLQuestion.class, questionId);
                       if (question != null) {
                               session.delete(question);
                       }
                       transaction.commit();
               }
       }
        public static void updateSQLQuestion(SQLQuestion sqlQuestion) {
```

```
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SOURCE CODE:
    try (Session session = HibernateUtil.getSessionFactory().openSession()) {
      Transaction transaction = session.beginTransaction();
      session.update(sqlQuestion);
      transaction.commit();
    }
        }
}
SQLTestServlet.java:
package com.questions;
import java.io.IOException;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/sqlTestServlet")
public class SQLTestServlet extends HttpServlet {
  protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    List<SQLQuestion> sqlQuestions = SQLQuestionDAO.getAllSQLQuestions();
    request.setAttribute("sqlQuestions", sqlQuestions);
```

```
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SOURCE CODE:
    request.getRequestDispatcher("sqlTest.jsp").forward(request, response);
 }
}
SubmitAnswerServlet.java:
package com.questions;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.IOException;
import java.util.HashMap;
import java.util.List;
import java.util.Map;
@WebServlet("/submitAnswerServlet")
public class SubmitAnswerServlet extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    Map<Long, Integer> userAnswers = new HashMap<>();
    // Get the submitted answers from the request parameters
```

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```
List<SQLQuestion> questionList = SQLQuestionDAO.getAllSQLQuestions();
  for (SQLQuestion question : questionList) {
    Long questionId = question.getId();
    int selectedOption = Integer.parseInt(request.getParameter("answer" + questionId));
    userAnswers.put(questionId, selectedOption);
  }
  // Calculate the score
  int score = calculateScore(userAnswers, questionList);
  // Set the score as a request attribute and forward to a result page
  request.setAttribute("score", score);
  request.getRequestDispatcher("/sqlTestResult.jsp").forward(request, response);
}
private int calculateScore(Map<Long, Integer> userAnswers, List<SQLQuestion> questionList) {
  int score = 0;
  for (SQLQuestion question : questionList) {
    Long questionId = question.getId();
    int selectedOption = userAnswers.getOrDefault(questionId, -1);
    int correctOption = question.getCorrectOption();
    if (selectedOption == correctOption) {
      score++; // Increment score for each correct answer
```

```
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SOURCE CODE:
      }
    }
    return score;
  }
ViewSQLQuestionServlet.java:
package com.questions;
import java.io.IOException;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/viewsqllist")
public class ViewSQLQuestionServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
  protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
```

```
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SOURCE CODE:
    // Retrieve the list of SQL questions from the database
    List<SQLQuestion> questionList = SQLQuestionDAO.getAllSQLQuestions();
    // Forward the list to the JSP page for rendering
    request.setAttribute("questionList", questionList);
    request.getRequestDispatcher("viewsqllist.jsp").forward(request, response);
  }
}
Package: Com.User:
Admin.java:
package com.user;
import javax.persistence.*;
@Entity
@Table(name = "admin")
public class Admin {
  @ld
  @GeneratedValue(strategy = GenerationType.IDENTITY)
  @Column(name = "id")
  private int id;
  @Column(name = "email")
```

```
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SOURCE CODE:
  private String email;
  @Column(name = "password")
  private String password;
        public int getId() {
               return id;
       }
        public void setId(int id) {
               this.id = id;
       }
        public String getEmail() {
               return email;
       }
        public void setEmail(String email) {
               this.email = email;
       }
        public String getPassword() {
               return password;
```

}

```
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SOURCE CODE:
       public void setPassword(String password) {
               this.password = password;
       }
}
AdminDAO.java:
package com.user;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.query.Query;
public class AdminDAO {
  private SessionFactory sessionFactory;
  public AdminDAO() {
    sessionFactory = HibernateUtil.getSessionFactory();
  }
  public Admin validateAdmin(String email, String password) {
    try (Session session = sessionFactory.openSession()) {
      Query<Admin> query = session.createQuery("FROM Admin WHERE email = :email AND password
= :password", Admin.class);
```

```
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SOURCE CODE:
      query.setParameter("email", email);
      query.setParameter("password", password);
      return query.uniqueResult();
    } catch (Exception e) {
      e.printStackTrace();
    return null;
  }
}
AdminLoginServlet.java:
package com.user;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/adminLoginServlet")
public class AdminLoginServlet extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String email = request.getParameter("email");
```

```
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SOURCE CODE:
```

```
String password = request.getParameter("password");
    AdminDAO adminDAO = new AdminDAO();
    Admin admin = adminDAO.validateAdmin(email, password);
    if (admin != null) {
      request.getSession().setAttribute("adminAuthenticated", true);
      response.sendRedirect("admindashboardpage.jsp");
    } else {
      // Invalid admin credentials, display an error message or redirect to login page
      response.sendRedirect("adminlogin.jsp?error=invalidAdminCredentials");
    }
  }
DeleteUserServlet.java:
package com.user;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
@WebServlet("/deleteuser")
public class DeleteUserServlet extends HttpServlet {
  /**
       private static final long serialVersionUID = 1L;
       protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    Long userId = Long.parseLong(request.getParameter("userId"));
    UserDAO userDAO = new UserDAO();
    userDAO.deleteUser(userId);
    response.sendRedirect("viewuser.jsp");
  }
EditUserServlet.java:
package com.user;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
```

```
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SOURCE CODE:
import javax.servlet.http.HttpServletResponse;
@WebServlet("/edituser")
public class EditUserServlet extends HttpServlet {
  /**
       private static final long serialVersionUID = 1L;
       protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    Long userId = Long.parseLong(request.getParameter("userId"));
    UserDAO userDAO = new UserDAO();
    User user = userDAO.getUserById(userId); // to to userdao class call the method
    request.setAttribute("user", user);
    request.getRequestDispatcher("edituser.jsp").forward(request, response);
  }
}
HibernateUtil.java:
package com.user;
import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;
```

```
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SOURCE CODE:
public class HibernateUtil {
  private static final SessionFactory sessionFactory = buildSessionFactory();
  private static SessionFactory buildSessionFactory() {
    try {
      // Create the SessionFactory from hibernate.cfg.xml
      Configuration configuration = new Configuration();
      configuration.configure("hibernate.cfg.xml");
      return configuration.buildSessionFactory();
    } catch (Throwable ex) {
      // Handle any initial SessionFactory creation errors
      System.err.println("Initial SessionFactory creation failed: " + ex);
      throw new ExceptionInInitializerError(ex);
    }
  }
  public static SessionFactory getSessionFactory() {
    return sessionFactory;
  }
  public static void shutdown() {
    // Close caches and connection pools
    getSessionFactory().close();
  }
```

}

```
LogoutServlet.java:
package com.user;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
@WebServlet("/logoutServlet")
public class LogoutServlet extends HttpServlet {
  protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    HttpSession session = request.getSession();
    session.invalidate();
    response.sendRedirect("loggedout.jsp");
 }
RegisterServlet.java:
package com.user;
```

```
import java.io.IOException;
import java.sql.Date;
import java.text.ParseException;
import java.text.SimpleDateFormat;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/registerServlet")
public class RegisterServlet extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String name = request.getParameter("name");
    String email = request.getParameter("email");
    String password = request.getParameter("password");
    SimpleDateFormat dateFormat = new SimpleDateFormat("yyyy-MM-dd");
    Date dob = null;
    try {
      dob = new Date(dateFormat.parse(request.getParameter("dob")).getTime());
    } catch (ParseException e) {
      e.printStackTrace();
    }
```

```
User user = new User();
    user.setName(name);
    user.setEmail(email);
    user.setPassword(password);
    user.setDob(dob);
    UserDAO userDAO = new UserDAO();
    userDAO.registerUser(user);
    response.sendRedirect("userdashboard.jsp");
  }
}
UpdateUserServlet.java:
package com.user;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
@WebServlet("/updateuser")
public class UpdateUserServlet extends HttpServlet {
  /**
       private static final long serialVersionUID = 1L;
       protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
                String userIdParam = request.getParameter("userId");
                 if (userIdParam != null && !userIdParam.isEmpty()) {
                   try {
                      Long userId = Long.parseLong(userIdParam);
                      String name = request.getParameter("name");
                      String email = request.getParameter("email");
                      UserDAO userDAO = new UserDAO();
                      User user = userDAO.getUserById(userId);
                      if (user != null) {
                        user.setName(name);
                        user.setEmail(email);
                        userDAO.updateUser(user);
                        response.sendRedirect("viewuser.jsp");
                        return;
```

```
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SOURCE CODE:
                     }
                   } catch (NumberFormatException e) {
                     // Handle parsing error
                   }
                 // Handle invalid userId or other errors
                 response.sendRedirect("error.jsp");
               }
}
User.java:
package com.user;
import java.sql.Date;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.ld;
import javax.persistence.Table;
@Entity
@Table(name = "users")
```

```
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SOURCE CODE:
public class User {
  @ld
  @GeneratedValue(strategy = GenerationType.IDENTITY)
  private Long id;
  private String name;
  private String email;
  private String password;
  private Date dob;
  public Long getId() {
               return id;
       }
       public void setId(Long id) {
               this.id = id;
       }
       public String getName() {
               return name;
       }
       public void setName(String name) {
               this.name = name;
       }
       public String getEmail() {
```

```
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SOURCE CODE:
               return email;
       }
        public void setEmail(String email) {
               this.email = email;
       }
        public String getPassword() {
               return password;
       }
        public void setPassword(String password) {
               this.password = password;
       }
        public Date getDob() {
               return dob;
       }
        public void setDob(Date dob) {
    this.dob = dob;
       }
}
```

UserDAO.java:

```
package com.user;
import java.util.List;
import org.hibernate.Session;
import org.hibernate.Transaction;
import org.hibernate.query.Query;
public class UserDAO {
  public void registerUser(User user) {
    Session session = HibernateUtil.getSessionFactory().openSession();
    Transaction transaction = session.beginTransaction();
    session.save(user);
    transaction.commit();
    session.close();
  }
  public User validateUser(String email, String password) {
    Session session = HibernateUtil.getSessionFactory().openSession();
    Query<User> query = session.createQuery("FROM User WHERE email = :email AND password =
:password", User.class);
    query.setParameter("email", email);
    query.setParameter("password", password);
    User user = query.uniqueResult();
    session.close();
```

```
return user;
 }
 // ----- show the list of user -----
 public List<User> getAllUsers() {
   Session session = HibernateUtil.getSessionFactory().openSession();
   Query<User> query = session.createQuery("FROM User", User.class);
   List<User> userList = query.list();
   session.close();
   return userList;
 }
 // ----- show the list of user -----
 public User getUserById(Long userId) {
   Session session = HibernateUtil.getSessionFactory().openSession();
   User user = session.get(User.class, userId);
   session.close();
   return user;
 }
// ------ Update the list of user ------
 public void updateUser(User user) {
   Session session = HibernateUtil.getSessionFactory().openSession();
   Transaction transaction = session.beginTransaction();
   session.update(user);
   transaction.commit();
```

```
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SOURCE CODE:
    session.close();
  }
// ----- Delete the list of user -----
  public void deleteUser(Long userId) {
    Session session = HibernateUtil.getSessionFactory().openSession();
    Transaction transaction = session.beginTransaction();
    User user = session.get(User.class, userId);
    if (user != null) {
      session.delete(user);
    }
    transaction.commit();
    session.close();
  }
}
UserLoginServlet.java:
package com.user;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
```

import javax.servlet.http.HttpServlet;

```
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SOURCE CODE:
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
@WebServlet("/userloginServlet")
public class UserLoginServlet extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String email = request.getParameter("email");
    String password = request.getParameter("password");
    UserDAO userDAO = new UserDAO();
    User user = userDAO.validateUser(email, password);
    if (user != null) {
      HttpSession session = request.getSession();
      session.setAttribute("name", user.getName());
      response.sendRedirect("userdashboard.jsp");
    } else {
      request.setAttribute("error", "Invalid email or password");
      request.getRequestDispatcher("userlogin.jsp").forward(request, response);
    }
```

```
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SOURCE CODE:
Hibernate.cfg.xml:
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE hibernate-configuration PUBLIC</pre>
            "-//Hibernate/Hibernate Configuration DTD 3.0//EN"
            "http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
 <session-factory>
   <property name="hibernate.connection.driver_class">com.mysql.jdbc.Driver/property>
   cproperty name="hibernate.connection.username">root/property>
   cproperty name="hibernate.dialect">org.hibernate.dialect.MySQLDialect/property>
   <mapping class="com.user.User"/>
   <mapping class="com.user.Admin"/>
   <mapping class="com.questions.SQLQuestion" />
 </session-factory>
</hibernate-configuration>
JSP FILES:
Edituser.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
 pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
```

```
KIRANKUMAR D NATIKAR
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SOURCE CODE:
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1>Edit User</h1>
  <form action="updateuser" method="post">
    <input type="hidden" name="userId" value="${user.id}">
    <label>Name: </label>
    <input type="text" name="name" value="${user.name}">
    <br>
    <label>Email: </label>
    <input type="email" name="email" value="${user.email}">
    <br>
    <input type="submit" value="Update">
  </form>
</body>
</html>
Addquestion.jsp:
<@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-
1"%>
<!DOCTYPE html>
<%@ include file="header.jsp" %>
<html>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
<style>
  table {
    width: 100%;
    border-collapse: collapse;
  }
  th, td {
    border: 1px solid black;
    padding: 8px;
    text-align: left;
  }
  tr:nth-child(even) {
    background-color: #f2f2f2;
 }
</style>
</head>
<body>
  <h1>Add Questions to Quiz</h1>
  <h2>Subjects:</h2>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
   <thead>
     Subject
      Add Question
      View Question
    </thead>
   SQL
      <a href="addquestionsql.jsp">Add SQL Question</a>
      <a href="viewsqllist.jsp">View SQL Questions</a>
     </body>
</html>
Addquestionsql.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
 pageEncoding="ISO-8859-1"%>
 <%@ include file="header.jsp" %>
<!DOCTYPE html>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1>Add SQL Questions</h1>
  <form action="addsqlquestion" method="post">
    <label>Question:</label>
    <input type="text" name="question">
    <br>
    <br>
    <label>Option 1:</label>
    <input type="text" name="option1">
    <br>
    <br>
    <label>Option 2:</label>
    <input type="text" name="option2">
    <br>
    <br>
    <label>Option 3:</label>
    <input type="text" name="option3">
    <br>
    <br>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
    <label>Option 4:</label>
    <input type="text" name="option4">
    <br>
    <br>
    <label>Correct Option:</label>
    <input type="text" name="correctOption">
    <br>
    <br>
    <input type="submit" value="Add Question">
  </form>
</body>
</html>
Admindashboardpage.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
  pageEncoding="ISO-8859-1"%><%@ include file="header.jsp" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1>Welcome, Admin!</h1>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
<h3><a href="addquestion.jsp">Add Questions to quiz</a></h3>
<h3><a href="viewuser.jsp">View User List </a></h3>
<br>
<br>
</body>
</html>
Adminlogin.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>
<style>
  body {
    display: flex;
    justify-content: left;
    align-items: left;
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
    height: 100vh;
  }
  h1 {
    text-align: left;
  }
  form {
    text-align: left;
  }
  input[type="email"],
  input[type="password"] {
    width: 100%;
    padding: 10px;
    margin-bottom: 10px;
  }
</style>
</head>
<body>
  <div align="left">
    <h1>Admin Login</h1>
    <form action="adminLoginServlet" method="post">
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
      Email: <input type="email" name="email"><br>
      Password: <input type="password" name="password"><br>
      <br>
      <input type="submit" value="Login">
    </form> <br>
   <h3><a href="index.jsp" class="button">Main</a></h3>
  </div>
</body>
</html>
Editsqlquestion.jsp:
<@ page language="java" contentType="text/html; charset=ISO-8859-1"
  pageEncoding="ISO-8859-1"%><%@ include file="header.jsp" %>
 <%@ page import="com.questions.SQLQuestion" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1>Edit SQL Question</h1>
```

<form action="editsqlquestion" method="post">

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
    <input type="hidden" name="id" value="<%= ((SQLQuestion)
request.getAttribute("question")).getId() %>">
    <label>Question:</label>
    <input type="text" name="question" value="<%= ((SQLQuestion)
request.getAttribute("question")).getQuestion() %>">
    <br>
    <label>Option 1:</label>
    <input type="text" name="option1" value="<%= ((SQLQuestion)
request.getAttribute("question")).getOption1() %>">
    <br>
    <label>Option 2:</label>
    <input type="text" name="option2" value="<%= ((SQLQuestion)
request.getAttribute("question")).getOption2() %>">
    <br>
    <label>Option 3:</label>
    <input type="text" name="option3" value="<%= ((SQLQuestion)
request.getAttribute("question")).getOption3() %>">
    <br>
    <label>Option 4:</label>
    <input type="text" name="option4" value="<%= ((SQLQuestion)
request.getAttribute("question")).getOption4() %>">
    <br>
    <label>Correct Option:</label>
    <input type="number" name="correctOption" value="<%= ((SQLQuestion)
request.getAttribute("question")).getCorrectOption() %>">
    <br>
    <input type="submit" value="Update">
  </form>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
  <a href="viewsqllist.jsp">Back to List</a>
</body>
</html>
Edituser.jsp:
<@ page language="java" contentType="text/html; charset=ISO-8859-1"
  pageEncoding="ISO-8859-1"%><%@ include file="header.jsp" %><%@ include file="header.jsp" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1>Edit User</h1>
  <form action="updateuser" method="post">
    <input type="hidden" name="userId" value="${user.id}">
    <label>Name: </label>
    <input type="text" name="name" value="${user.name}">
    <br>
    <label>Email: </label>
    <input type="email" name="email" value="${user.email}">
    <br>
    <input type="submit" value="Update">
  </form>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
</body>
</html>
Error.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1>Something error happen!</h1>
</body>
</html>
Header.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>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
</head>
<body>
<a href="logoutServlet">Logout</a>
  <hr>
</body>
</html>
Index.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-</pre>
1"%>
<!DOCTYPE html>
<html>
<head>
  <meta charset="ISO-8859-1">
  <title>Online Quiz Portal</title>
  <style>
    body {
    h1 {
      margin-top: 50px;
    }
    h3 {
      margin-top: 30px;
    }
```

KIRANKUMAR D NATIKAR EMPID: 2576955 SOURCE CODE:

```
ul {
      list-style-type: none;
      padding: 0;
    }
    ul li {
      display: inline-block;
      margin: 10px;
    }
    ul li a {
      text-decoration: none;
    }
  </style>
</head>
<body>
  <h1>Online Quiz Portal</h1>
  <h3><a href="userregister.jsp">User Registration</a></h3>
  <h3><a href="userlogin.jsp">User Login</a></h3>
  <h3><a href="adminlogin.jsp">Admin Login</a></h3>
</body>
</html>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
Loggedout.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>Logged Out</title>
</head>
<body>
<h1>Logged Out</h1>
 <b>Your session has terminated.</b><br>
<a href="index.jsp">Login again</a>
</body>
</html>
Sqltest.jsp:
<@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"
%>
<%@ page import="com.questions.SQLQuestion" %><%@ include file="header.jsp" %>
<%@ page import="com.questions.SQLQuestionDAO" %>
<%@ page import="java.util.List" %>
<!DOCTYPE html>
<html>
<head>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
<meta charset="ISO-8859-1">
<title>SQL Test</title>
</head>
<body>
<h1 >Online Quiz Portal</h1>
  <h3>SQL Test</h3>
  <form action="submitAnswerServlet" method="post">
    <%
    List<SQLQuestion> questionList = SQLQuestionDAO.getAllSQLQuestions();
    if (questionList != null) {
      for (SQLQuestion question: questionList) { %>
        <h3><%= question.getQuestion() %></h3>
        <input type="hidden" name="questionId" value="<%= question.getId() %>">
        <input type="radio" name="answer<%= question.getId() %>" value="1"> <%=
question.getOption1() %><br>
        <input type="radio" name="answer<%= question.getId() %>" value="2"> <%=
question.getOption2() %><br>
        <input type="radio" name="answer<%= question.getId() %>" value="3"> <%=
question.getOption3() %><br>
        <input type="radio" name="answer<%= question.getId() %>" value="4"> <%=
question.getOption4() %><br>
        <hr>
    <% } } %>
    <input type="submit" value="Submit">
  </form>
  <br>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
  <br>
  <form action="userdashboard.jsp" method="get">
    <input type="submit" value="Back to Dashboard">
  </form>
</body>
</html>
Sqltestresult.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"</pre>
<!DOCTYPE html><%@ include file="header.jsp" %>
<html>
<head>
  <meta charset="ISO-8859-1">
  <title>SQL Test Result</title>
</head>
<body>
  <h1>SQL Test Result</h1>
  Your score: <%= request.getAttribute("score") %>
  <a href="userdashboard.jsp">Back to Dashboard</a>
</body>
</html>
Userdashboard.jsp:
```

KIRANKUMAR D NATIKAR

```
EMPID: 2576955
SOURCE CODE:
```

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-</pre>
1"%>
<%@ include file="header.jsp" %>
<!DOCTYPE html>
<html>
<head>
  <meta charset="ISO-8859-1">
  <title>Dashboard</title>
  <style>
    .container {
      max-width: 800px;
      margin: 0 auto;
      padding: 20px;
    }
    h2 {
      text-align: left;
    }
    h1{
    text-align: left;
    }
    .welcome-message {
      text-align: left;
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
     margin-bottom: 20px;
    }
    .action-link {
      display: block;
      margin: 0 auto 10px;
     text-align: left;
    }
    .logout-form {
     text-align: left;
   }
  </style>
</head>
<body>
  <div class="container">
  <h1>Online Quiz Portal</h1>
    <h2>Welcome to the User Dashboard</h2>
    Welcome, <%= session.getAttribute("name") %>!
    <button class="action-link" onclick="window.location.href='sqlTestServlet'">Take SQL
Test</button>
  </div>
</body>
</html>
Userlogin.jsp:
```

KIRANKUMAR D NATIKAR

```
EMPID: 2576955
SOURCE CODE:
```

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-</pre>
1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
<style>
  body {
    display: flex;
    justify-content: left;
    align-items: left;
    height: 100vh;
  }
  h2 {
    text-align: left;
  }
  form {
    text-align: left;
  }
  input[type="email"],
  input[type="password"] {
    width: 100%;
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
    padding: 10px;
    margin-bottom: 10px;
  }
</style>
</head>
<body>
  <div align="center">
  <h1>Online Quiz Portal</h1>
    <h2>User Login</h2>
    <form action="userloginServlet" method="post">
      Email: <input type="email" name="email"><br>
      Password: <input type="password" name="password"><br>
      <br>
      <input type="submit" value="Login">
    </form> <br>
   <h3><a href="index.jsp" class="button">Main</a></h3>
  </div>
</body>
</html>
Userquizdetails.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
  pageEncoding="ISO-8859-1"%><%@ include file="header.jsp" %>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
 <%@ page import="com.user.User" %>
<%@ page import="com.user.UserDAO" %>
<%@ page import="java.util.List" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h1>Admin Dashboard</h1>
 User ID
     Name
     Email
     Score
   UserDAO userDAO = new UserDAO();
   List<User> userList = userDAO.getAllUsers();
   if (userList != null) {
     for (User user: userList) { %>
```

<%= user.getId() %>

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
         <%= user.getName() %>
         <%= user.getEmail() %>
         <%= request.getAttribute("score") %>
       <% } } %>
  </body>
</html>
Userregister.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-</pre>
1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Registration Page</title>
<style>
  body {
    display: flex;
   justify-content: left;
   align-items: left;
   height: 100vh;
  }
  h1 {
     margin-top: 50px;
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
    }
  h2 {
    text-align: left;
  }
  form {
   text-align: left;
  }
  table {
    width: 80%;
  }
  input[type="text"],
  input[type="email"],
  input[type="password"],
  input[type="date"] {
    width: 100%;
    padding: 10px;
    margin-bottom: 10px;
 }
</style>
</head>
<body>
```

KIRANKUMAR D NATIKAR

EMPID: 2576955 SOURCE CODE:

```
<div align="center">
 <h1>Online Quiz Portal</h1>
   <h2>Registration Page</h2>
   <form action="registerServlet" method="POST">
     <input type="text" name="name" placeholder="Name">
      <input type="email" name="email" placeholder="Email">
      <input type="password" name="password" placeholder="Password">
      <input type="date" name="dob" placeholder="Date of Birth">
      <br>
     <input type="submit" value="Register"> <br> <h3><a href="index.jsp">Main</a></h3>
   </form>
 </div>
</body>
</html>
```

KIRANKUMAR D NATIKAR EMPID: 2576955 **SOURCE CODE:** Viewsqllist.jsp: <@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1" <%@ page import="com.questions.SQLQuestion" %><%@ include file="header.jsp" %> <%@ page import="com.questions.SQLQuestionDAO" %> <%@ page import="java.util.List" %> <!DOCTYPE html> <html> <head> <meta charset="ISO-8859-1"> <title>View SQL Questions</title> <style> table { width: 100%; border-collapse: collapse; } th, td { border: 1px solid black; padding: 8px; text-align: left; } tr:nth-child(even) {

background-color: #f2f2f2;

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
 }
</style>
</head>
<body>
 <h1>View SQL Questions</h1>
 <thead>
     ID
      Question
      Options
      Correct Option
      Action
     </thead>
   <%
     SQLQuestionDAO sqlQuestionDAO = new SQLQuestionDAO();
     List<SQLQuestion> questionList = sqlQuestionDAO.getAllSQLQuestions();
     for (SQLQuestion question: questionList) { %>
      <%= question.getId() %>
        <%= question.getQuestion() %>
        <%= question.getOption1() %>, <%= question.getOption2() %>, <%=
question.getOption3() %>, <%= question.getOption4() %>
        <%= question.getCorrectOption() %>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
         <a href="editsqlquestion?id=<%= question.getId() %>">Edit</a>
           <a href="deletesqlquestion?id=<%= question.getId() %>">Delete</a>
         <% } %>
    <br> <br>>
  <a href="admindashboardpage.jsp">Go Back Admin Dashboard</a>
</body>
</html>
Viewuser.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-</pre>
1"%>
<%@ page import="com.user.User"%>
<%@ page import="com.user.UserDAO"%>
<%@ page import="java.util.List"%><%@ include file="header.jsp" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>User List</title>
```

KIRANKUMAR D NATIKAR EMPID: 2576955 SOURCE CODE:

```
<style>
  table {
    width: 100%;
    border: 1px solid black;
  }
  th, td {
    border: 1px solid black;
    padding: 8px;
    text-align: left;
  }
  tr:nth-child(even) {
    background-color: #f2f2f2;
  }
  tr:hover {
    background-color: #e6e6e6;
  }
</style>
</head>
<body>
  <h1>User List</h1>
  <thead>
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
    ID
      Name
      Email
      Date of Birth
      Action
    </thead>
   <%
    UserDAO userDAO = new UserDAO();
    List<User> userList = userDAO.getAllUsers();
    for (User user: userList) { %>
    <%= user.getName() %>
      <%= user.getEmail() %>
      <%= user.getDob() %>
      <a href="edituser?userId=<%= user.getId() %>">Edit</a>
       <a href="deleteuser?userId=<%= user.getId() %>">Delete</a>
```

<% } %>

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
  <br> <br>>
  <a href="admindashboardpage.jsp">Go Back to Admin Dashboard</a>
</body>
</html>
MYSQLCODE:
create database Register;
USE register;
CREATE TABLE users (
id INT AUTO_INCREMENT PRIMARY KEY,
name VARCHAR(255),
email VARCHAR(255),
 password VARCHAR(255),
dob DATE
);
select *from users;
CREATE TABLE admin (
id INT AUTO_INCREMENT PRIMARY KEY,
email VARCHAR(255) NOT NULL,
password VARCHAR(255) NOT NULL
);
INSERT INTO admin (email, password)
```

```
KIRANKUMAR D NATIKAR
EMPID: 2576955
SOURCE CODE:
VALUES ('Kirankumar@gmail.com', 'kiran');

CREATE TABLE sql_question (
   id INT PRIMARY KEY AUTO_INCREMENT,
   question VARCHAR(255),
   option1 VARCHAR(255),
   option2 VARCHAR(255),
   option3 VARCHAR(255),
   option4 VARCHAR(255),
   correctOption VARCHAR(255)
);
```

select * from sql_question;