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ENROLLMENT NO – 1810DMBCSE03320

Subject –Advance java

MST ASSIGNMENT

Given the current situation of Covid-19, a lot of citizens are require to travel from one district to another or one state to another state. As travelling is prohibited due to lockdown, each state government is providing e-passes to the citizens having emergency. One such e-pass service is provided by Government of Madhya Pradesh at URL https://mapit.gov.in/covid-19/ . Please visit this URL and study the procedure of issuing e-pass to the citizens. Suppose you need to build this application by using JSP/servlet.

Q1 ] Provide the database schema (tables and relations) for this project.

ANSWER- TABLES USED IN DATABASE FOR THE PROGRAMME

DATABASE – covid.sql

Table name – covid

Table columns – 1.FIRST NAME NOT NULL;

2.LAST NAME ;

3.DISTRICT;

4.DESTINATION

5.ADDRESS

6.CONTACT NO.

SCHEMA-

1. COVID TABLE
2. FIRSTNAME
3. LASTNMAE
4. DISTRICT
5. DESTINATION
6. ADDRESS
7. CONTACT NO

Q2) Describe all the servlet classes and their functionalities that you need to build this project.

ANSWER- Source code of servlet class

package net.javaguides.paSSHmanagement.web;

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 net.javaguides.paSSHmanagement.dao.PaSSHDao;

import net.javaguides.paSSHmanagement.model.PaSSH;

/\*\*

\* @email Ramesh Fadatare

\*/

@WebServlet("/register")

public class PassServlet extends HttpServlet {

private static final long serialVersionUID = 1 L;

private PaSSHDao paSSHDao;

public void init() {

paSSHDao = new PaSSHDao();

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String firstName = request.getParameter("firstName");

String lastName = request.getParameter("lastName");

String username = request.getParameter("username");

String password = request.getParameter("password");

String address = request.getParameter("address");

String contact = request.getParameter("contact");

PaSSH paSSH = new PaSSH();

paSSH.setFirstName(firstName);

paSSH.setLastName(lastName);

paSSH.setUsername(username);

paSSH.setPassword(password);

paSSH.setContact(contact);

paSSH.setAddress(address);

try {

paSSHDao.registerPaSSH(paSSH);

} catch (Exception e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

response.sendRedirect("paSSHdetails.jsp");

}

}

Functionality of servlet class-

PassServlet class to process HTTP request parameters and redirect to the appropriate JSP page after request data stored in the database:

Q3) Describe all the non-servlet java classes and their functionalities that you will use in servlet classes.

ANSWER- There are two non servlet class in the programme –

1.Pass.java

2. Passdao.java

FUNCTIONALITIES-

1.Pass.java functionalities – paSSH javaBean class which we will use in JSP action tags.

Answer-

package net.javaguides.jsp.jdbc.bean;

import java.io.Serializable;

/\*\*

\* JavaBean class used in jsp action tags.

\* @author Ramesh Fadatare

\*/

public class PaSSH implements Serializable {

/\*\*

\*

\*/

private static final long serialVersionUID = 1 L;

private String firstName;

private String lastName;

private String username;

private String password;

private String address;

private String contact;

public String getFirstName() {

return firstName;

}

public void setFirstName(String firstName) {

this.firstName = firstName;

}

public String getLastName() {

return lastName;

}

public void setLastName(String lastName) {

this.lastName = lastName;

}

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 getAddress() {

return address;

}

public void setAddress(String address) {

this.address = address;

}

public String getContact() {

return contact;

}

public void setContact(String contact) {

this.contact = contact;

}

}

2.Passdao.java Functionalities - PaSSHDao class which contains JDBC code to connect with MySQL database. Add the following code to an PaSSHDao class.

Source code –

package net.javaguides.jsp.jdbc.database;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.SQLException;

import net.javaguides.jsp.jdbc.bean.PaSSH;

public class PaSSHDao {

public int registerPaSSH(PaSSH paSSH) throws ClassNotFoundException {

String INSERT\_USERS\_SQL = "INSERT INTO paSSH" +

" (id, first\_name, last\_name, username, password, address, contact) VALUES " +

" (?, ?, ?, ?, ?,?,?);";

int result = 0;

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

try (Connection connection = DriverManager

.getConnection("jdbc:mysql://localhost:3306/paSSHs?useSSL=false", "root", "root");

// Step 2:Create a statement using connection object

PreparedStatement preparedStatement = connection.prepareStatement(INSERT\_USERS\_SQL)) {

preparedStatement.setInt(1, 1);

preparedStatement.setString(2, paSSH.getFirstName());

preparedStatement.setString(3, paSSH.getLastName());

preparedStatement.setString(4, paSSH.getUsername());

preparedStatement.setString(5, paSSH.getPassword());

preparedStatement.setString(6, paSSH.getAddress());

preparedStatement.setString(7, paSSH.getContact());

System.out.println(preparedStatement);

// Step 3: Execute the query or update query

result = preparedStatement.executeUpdate();

} catch (SQLException e) {

// process sql exception

printSQLException(e);

}

return result;

}

private void printSQLException(SQLException ex) {

for (Throwable e: ex) {

if (e instanceof SQLException) {

e.printStackTrace(System.err);

System.err.println("SQLState: " + ((SQLException) e).getSQLState());

System.err.println("Error Code: " + ((SQLException) e).getErrorCode());

System.err.println("Message: " + e.getMessage());

Throwable t = ex.getCause();

while (t != null) {

System.out.println("Cause: " + t);

t = t.getCause();

}

}

}

}

}

Q4) Describe all the major challenges that you may face to build this project .

ANSWER – 1] The major challenge that I will face during this project is verification of the user i.e to generate otp for mobile numbers and verify the exact location o.

2] Slow processing of Net beans

3] Establishing Connectivity

4] Gathering complete information on covid 19

Q5) Build this application and submit the java source file and database .sql file.

Source code –

JSP code-

<%@ 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 align="center">

<h1>Employee Register Form</h1>

<form action="<%= request.getContextPath() %>/register" method="post">

<table style="with: 80%">

<tr>

<td>First Name</td>

<td><input type="text" name="firstName" /></td>

</tr>

<tr>

<td>Last Name</td>

<td><input type="text" name="lastName" /></td>

</tr>

<tr>

<td>UserName</td>

<td><input type="text" name="username" /></td>

</tr>

<tr>

<td>Password</td>

<td><input type="password" name="password" /></td>

</tr>

<tr>

<td>Address</td>

<td><input type="text" name="address" /></td>

</tr>

<tr>

<td>Contact No</td>

<td><input type="text" name="contact" /></td>

</tr>

</table>

<input type="submit" value="Submit" />

</form>

</div>

</body>

</html>

9. Create an epassdetails.jsp

After an epass successfully registered then this page show a successful message on screen:

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

pageEncoding="ISO-8859-1"%>

<%@page import="net.javaguides.employeemanagement.dao.\*"%>

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Insert title here</title>

</head>

<body>

<h1>User successfully registered!</h1>

</body>

</html>