AIM:

   To implement online student course registration using JSP with database connectivity

ALGORITHM:

1. Sets the content type of the response to text/html;charset=UTF-8.

2. Defines the database connection parameters for a MySQL database named courseregister.

3. Gets the course registration responses using a HTML form and set submit action to the JSP file.

4. Loads the MySQL driver and connects to the database using the defined parameters.

5. Gets the name, email,phone number,gender,DOB,selected courses and course duration parameter from the request and uses it to prepare an SQL query to set the corresponding columns with the data the student-registration table.

6. Generates HTML dynamically to display the courses the student have registered to.

7. Closes the database connection.

CODE:

registration.jsp
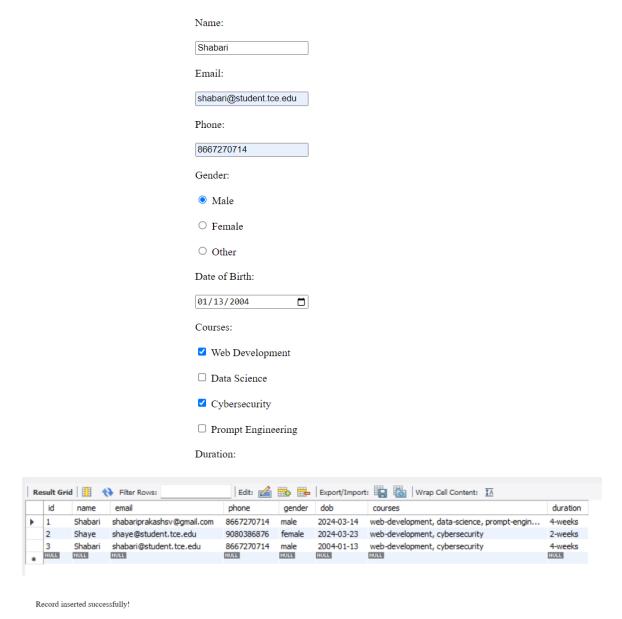
```
<%@ page import="java.sql.*" %>
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<html>
<body>

  <%!
    String name;
    String email;
    String phone;
    String gender;
    String dob;
    String selectedCourses;
```

```jsp
        String duration;
    %>
    <%
    try {
        Class.forName("com.mysql.jdbc.Driver");
        Connection connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/courseregister","root","2323");
        name = request.getParameter("name");
        email = request.getParameter("email");
        phone = request.getParameter("phone");
        gender = request.getParameter("gender");
        dob = request.getParameter("dob");
        String[] courses = request.getParameterValues("courses");
        selectedCourses = (courses != null) ? String.join(", ", courses) : "";
        duration = request.getParameter("duration");

        String sql = "INSERT INTO studreg (name,email,phone, gender,dob,courses, duration) VALUES (?, ?, ?, ?, ?, ?,
?)";
        try (PreparedStatement stmnt = connection.prepareStatement(sql)) {
            stmnt.setString(1, name);
            stmnt.setString(2, email);
            stmnt.setLong(3, Long.parseLong(phone));
            stmnt.setString(4, gender);
            stmnt.setString(5, dob);
            stmnt.setString(6, selectedCourses);
            stmnt.setString(7, duration);

            int rowsAffected = stmnt.executeUpdate();

            if (rowsAffected > 0) {
                out.println("Record inserted successfully!");
            } else {
                out.println("Failed to insert the record.");
            }

        } catch (SQLException e) {
            e.printStackTrace();
        }

        connection.close();
    }

    catch (Exception e) {
        out.println("Exception: " + e.getMessage());
        e.printStackTrace();
    }
    %>
        <div class="container">
            <h1>
                Congratulations <%= name %> !!!! <br>
                You have successfully registered to the courses: <%= selectedCourses %>.
            </h1>
        </div>
</body>
</html>
```

OUTPUT SCREEN SHOT

Course Registration

Name:

Shabari

Email:

shabari@student.tce.edu

Phone:

8667270714

Gender:

🔘 Male

⚪ Female

⚪ Other

Date of Birth:

01/13/2004

Courses:

☑ Web Development

☐ Data Science

☑ Cybersecurity

☐ Prompt Engineering

Duration:

	id	name	email	phone	gender	dob	courses	duration
▶	1	Shabari	shabariprakashsv@gmail.com	8667270714	male	2024-03-14	web-development, data-science, prompt-engin...	4-weeks
	2	Shaye	shaye@student.tce.edu	9080386876	female	2024-03-23	web-development, cybersecurity	2-weeks
	3	Shabari	shabari@student.tce.edu	8667270714	male	2004-01-13	web-development, cybersecurity	4-weeks
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Record inserted successfully!

Congratulations Shabari !!!!
You have successfully registered to the courses: web-development, cybersecurity.

RESULT:

Thus, we have successfully implemented the course registration with DB connectivity using JSP.