



Practical 3. Data Driven GUI Application

* index.html

```
<html>
  <head>
    <title> User Registration </title>
  </head>
  <body>
    <h1>Registration Form </h1>
    <form action = "RegisterUser"
      method = "post" >
      <label for = "name" > Name : </label>
      <input type = "text" name = "name" required />
      <label for = "birthdate" > DOB : </label>
      <input type = "date" name = "birthdate" required />
      <label for = "email" > Email ID : </label>
      <input type = "email" name = "email" required />
      <label for = "phone_no" > Phone Number : </label>
      <input type = "text" name = "phone_no" required />
      <button type = "submit" > Submit </button>
    </form>
  </body>
</html>
```


* RegisterUser.java

```
import java.io.IOException;
import java.sql.*;
import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.*;
import jakarta.servlet.http.HttpServlet;
```

```
@WebServlet("/RegisterUser")
```

```
public class RegisterUser extends HttpServlet {
```

```
    protected void doPost (HttpServletRequest request,
                           HttpServletResponse response)
```

```
        throws ServletException, IOException {
```

```
        String name = request.getParameter ("name");
```

```
        String birthdate = request.getParameter ("birthdate");
```

```
        String email = request.getParameter ("email");
```

```
        String phone_no = request.getParameter ("phone_no");
```

```
        try {
```

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

```
            Connection connection = DriverManager.getConnection
```

```
                ("jdbc:mysql://localhost:3306/servlets",
                 "root", "");
```

```
            String sql = "INSERT INTO users
```

```
                (name, birthdate, email, phone_no)
```

```
                VALUES
```

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




PreparedStatement statement = Connection.

prepareStatement
(sql);

statement.setString (1, name);

statement.setString (2, birthdate);

statement.setString (3, email);

statement.setString (4, phone no);

statement.executeUpdate();

response.sendRedirect ("DisplayUsers");

{ catch (Exception e) {

e.printStackTrace();

}



* DisplayUsers.java

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.*;
import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.*;
```

```
@WebServlet("/DisplayUsers")
```

```
public class DisplayUsers extends HttpServlet {
```

```
    protected void doGet(HttpServletRequest request,
                           HttpServletResponse response)
```

```
        throws ServletException, IOException {
```

```
        response.setContentType("text/html");
```

```
        PrintWriter out = response.getWriter();
```

```
        try {
```

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

```
            Connection connection = DriverManager.getConnection
```

```
                ("jdbc:mysql://localhost:3306/servlets",  
                "root", " ");
```

```
            String sql = "SELECT * FROM users";
```

```
            Statement statement = connection.createStatement();
```

```
            ResultSet resultSet = statement.executeQuery(sql);
```

```
            out.println("<h1>Registered Users </h1>");
```

```
            out.println("<table border = '1' >");
```

```
            out.println("<tr>
```

```
                <th>ID </th>
```

```
                <th>Name </th>
```



```
<th>Birthdate</th>
<th>Email </th>
<th>Phone Number </th>
</tr>" );
while (resultSet.next()) {
    int id = resultSet.getInt ("id");
    String name = resultSet.getString ("name");
    Date birthdate = resultSet.getDate ("birthdate");
    String email = resultSet.getString ("email");
    String phone_no = resultSet.getString ("phone_no");
    out.println ("<tr>");
    out.println ("<td>" + id + "</td>");
    out.println ("<td>" + name + "</td>");
    out.println ("<td>" + birthdate + "</td>");
    out.println ("<td>" + email + "</td>");
    out.println ("<td>" + phone_no + "</td>");
    out.println ("</tr>");
}
out.println ("</table>");
} catch (Exception e) {
    e.printStackTrace();
}
}
```