JSON

(COPY GSON AND OJDBC JAR FILES IN LIB)

Create html

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

<script type=*"text/javascript"*>

**function** getData(){

**var** custTable=document.getElementById("custTable");

xr=**new** XMLHttpRequest();

xr.onreadystatechange=**function**(){

**if**(xr.readyState==4 && xr.status == 200){

**var** obj=JSON.parse(xr.responseText);

//console.log(obj);

**for**(**var** i=0;i<obj.length;i++) {

**var** row=document.createElement("tr");

**var** cell=document.createElement("td");

**var** text=document.createTextNode(obj[i].id);

cell.appendChild(text);

row.appendChild(cell);

cell=document.createElement("td");

text=document.createTextNode(obj[i].name);

cell.appendChild(text);

row.appendChild(cell);

cell=document.createElement("td");

text=document.createTextNode(obj[i].age);

cell.appendChild(text);

row.appendChild(cell);

custTable.appendChild(row);

}

}

}

xr.open("GET", "CustomerListServletJSON", **true**);

xr.send();

}

</script>

</head>

<body>

<form name=*form1*>

<input type=*"button"* value=*"Get All Cust Details"* onclick="getData()" />

</form>

<table id=*"custTable"*></table>

</body>

</html>

Create employee class(in src)

**package** com.verizon.day9;

**public** **class** Employee {

**int** id;

String name;

**int** age;

**public** **int** getId() {

**return** id;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** **int** getAge() {

**return** age;

}

**public** **void** setAge(**int** age) {

**this**.age = age;

}

**public** Employee(**int** id, String name, **int** age) {

**super**();

**this**.id = id;

**this**.name = name;

**this**.age = age;

}

**public** Employee() {

**super**();

}

}

Employeedao

**package** com.verizon.day9.dao;

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**import** java.sql.PreparedStatement;

**import** java.sql.ResultSet;

**import** java.sql.SQLException;

**import** java.util.ArrayList;

**import** java.util.List;

**import** com.verizon.day9.Employee;

**public** **class** EmployeeDAO {

Connection con;

**public** EmployeeDAO() {

**try** {

Class.*forName*("oracle.jdbc.driver.OracleDriver");

con=DriverManager.*getConnection*("jdbc:oracle:thin:@localhost:1521:orcl","hr","Admin");

} **catch** (ClassNotFoundException e) {

e.printStackTrace();

} **catch** (SQLException e) {

e.printStackTrace();

}

}

**public** List<Employee> getAllEmployees()

{

**try**{

PreparedStatement pst=con.prepareStatement("select \* from empl");

ResultSet rs=pst.executeQuery();

List<Employee> empList =**new** ArrayList<>();

**while**(rs.next())

{

Employee e=**new** Employee();

e.setId(rs.getInt(1));

e.setName(rs.getString(2));

e.setAge(rs.getInt(3));

empList.add(e);

}

**return** empList;

}

**catch** (SQLException e) {

e.printStackTrace();

}

**return** **null**;

}

}

Servlet

**package** com.veizon.day9.servlets;

**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;

**import** com.google.gson.Gson;

**import** com.verizon.day9.Employee;

**import** com.verizon.day9.dao.EmployeeDAO;

@WebServlet("/CustomerListServletJSON")

**public** **class** CustomerListServletJSON **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

EmployeeDAO DAO=**new** EmployeeDAO();

**protected** **void** doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

List<Employee> employee=DAO.getAllEmployees();

Gson gson=**new** Gson();

String json=gson.toJson(employee);

System.***out***.println(json);

response.getWriter().append(json);

}

}

Output:Top of Form

Bottom of Form

|  |  |  |
| --- | --- | --- |
|  |  |  |
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|  |  |  |
|  |  |  |
|  |  |  |
| Top of Form  Bottom of Form   |  |  |  | | --- | --- | --- | | 4 | MUKESH | 20 | | 3 | RAJESH | 24 | | 2 | RAMESH | 21 | | 1 | SURESH | 21 | | 5 | AJESH | 23 | |  |  |

XML

New empty project , right click new-xml file

Validate and Right click –open with browser

Right click –new – xmlschema file , go to source

EXAMPLE 1 :

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<schema xmlns=*"http://www.w3.org/2001/XMLSchema"*

targetNamespace=*"http://www.example.org/Note"*

xmlns:tns=*"http://www.example.org/Note"*

elementFormDefault=*"qualified"*>

<element name=*"note"*>

<complexType>

<sequence>

<element name=*"to"* type=*"string"* />

<element name=*"from"* type=*"string"* />

<element name=*"subject"* type=*"string"* />

<element name=*"body"* type=*"string"* />

</sequence>

</complexType>

</element>

</schema>

RIGHT CLICK --NEW XML FILE,create xml from schema

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<tns:note xmlns:tns=*"http://www.example.org/Note"*

xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"*

xsi:schemaLocation=*"http://www.example.org/Note Note.xsd "*>

<tns:to>hey</tns:to>

<tns:from>how</tns:from>

<tns:subject>are</tns:subject>

<tns:body>you</tns:body>

</tns:note>

EXAMPLE 2:

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<schema xmlns=*"http://www.w3.org/2001/XMLSchema"*

targetNamespace=*"http://www.example.org/Note"*

xmlns:tns=*"http://www.example.org/Note"*

elementFormDefault=*"qualified"*>

<complexType name=*"noteType"*>

<sequence>

<element name=*"to"* type=*"string"* />

<element name=*"from"* type=*"string"* />

<element name=*"subject"* type=*"string"* />

<element name=*"body"* type=*"string"* />

</sequence>

</complexType>

<element name=*"eNote"* type=*"tns:noteType"*/>

<element name=*"pNote"* type=*"tns:noteType"*/>

<element name=*"note"*>

<complexType>

<sequence>

<element ref=*"tns:eNote"*></element>

<element ref=*"tns:pNote"*></element>

</sequence>

</complexType>

</element>

<element name=*"memo"*>

<complexType>

<sequence>

<element ref=*"tns:eNote"*></element>

<element ref=*"tns:pNote"*></element>

</sequence>

</complexType>

</element>

</schema>

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<tns:eNote xmlns:tns=*"http://www.example.org/Note"* xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xsi:schemaLocation=*"http://www.example.org/Note Note.xsd "*>

<tns:to>heyy</tns:to>

<tns:from>yym</tns:from>

<tns:subject>yy</tns:subject>

<tns:body>yyy</tns:body>

</tns:eNote>

Example 3:

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<schema xmlns=*"http://www.w3.org/2001/XMLSchema"*

targetNamespace=*"http://www.example.org/NoteSchema2"*

xmlns:tns=*"http://www.example.org/NoteSchema2"*

elementFormDefault=*"qualified"*>

<element name=*"note"*>

<complexType>

<sequence>

<element name=*"to"* type=*"string"* minOccurs=*"1"* maxOccurs=*"20"* ></element>

<element name=*"from"* type=*"string"* />

<element name=*"heading"* type=*"string"* />

<element name=*"body"* type=*"string"* />

<element name=*"confirm"* type=*"boolean"* default=*"true"* />

<element name=*"font"* type=*"string"* fixed=*"arial"* />

<element name=*"time"*>

<complexType>

<simpleContent>

<extension base=*"dateTime"*>

<attribute name=*"zone"* type=*"string"* use=*"required"* />

</extension>

</simpleContent>

</complexType>

</element>

</sequence>

</complexType>

</element>

</schema>

Xml file :

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<tns:note xmlns:tns=*"http://www.example.org/NoteSchema2"* xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xsi:schemaLocation=*"http://www.example.org/NoteSchema2 NoteSchema2.xsd "*>

<tns:to>tns:to</tns:to>

<tns:from>tns:from</tns:from>

<tns:heading>tns:heading</tns:heading>

<tns:body>tns:body</tns:body>

<tns:confirm>true</tns:confirm>

<tns:font>arial</tns:font>

<tns:time zone=*""*>2001-12-31T12:00:00</tns:time>

</tns:note>