Assignment 5

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Batch - Q10

Problem statement -To create simple web service and write any distributed

application to consume the web service.

CODE -

```
package net.codejava.ws;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import java.util.HashMap;
import java.util.Map;
import java.util.*;

import javax.ws.rs.GET;
import javax.ws.rs.Path;
import javax.ws.rs.PathParam;
import javax.ws.rs.Produces;
import javax.ws.rs.core.Context;
import javax.ws.rs.core.MediaType;
import javax.ws.rs.core.*;

import org.json.JSONArray;
import org.json.JSONObject;

@Path("/student")
public class Student {

        @GET
```

```java
@Produces(MediaType.APPLICATION_JSON)
public Response getlist() {

        try{

                List<HashMap<String, String>> obj1 = new ArrayList<HashMap<String, String>>();


                Class.forName("com.mysql.cj.jdbc.Driver");
                Connection con=DriverManager.getConnection(
                "jdbc:mysql://localhost:3306/assignment_login","root","123456");
                //here sonoo is database name, root is username and password
                Statement stmt=con.createStatement();
                ResultSet rs=stmt.executeQuery("select * from students;");
                while(rs.next())
                {

                        HashMap<String, String> obj = new HashMap<>();


                        obj.put("id", rs.getString(1));
                        obj.put("fname", rs.getString(2));
                        obj.put("lname", rs.getString(3));
                        obj.put("course", rs.getString(4));
                        obj1.add(obj);
                }
        con.close();
                System.out.println(obj1);
        return Response
                        .status(200)
                        .header("Access-Control-Allow-Origin", "*")
                .header("Access-Control-Allow-Headers", "origin, content-type, accept, authorization")
                .header("Access-Control-Allow-Credentials", "true")
                .header("Access-Control-Allow-Methods", "GET, POST, PUT, DELETE, OPTIONS, HEAD")
                .header("Access-Control-Max-Age", "1209600")
                .entity(obj1)
                .build();
```

```java
            }catch(Exception e){ System.out.println(e);
             JSONArray obj1 = new JSONArray();
             obj1.put(1,"failure");

            }

            List<HashMap<String, String>> obj1 = new ArrayList<HashMap<String, String>>();
            HashMap<String, String> obj = new HashMap<>();
            obj.put("status", "fail");
            obj1.add(obj);

        return Response
                        .status(200)
                        .header("Access-Control-Allow-Origin", "*")
                .header("Access-Control-Allow-Headers", "origin, content-type, accept, authorization")
                .header("Access-Control-Allow-Credentials", "true")
                .header("Access-Control-Allow-Methods", "GET, POST, PUT, DELETE, OPTIONS, HEAD")
                .header("Access-Control-Max-Age", "1209600")
                .entity(obj1)
                .build();

    }


}
```

OUTPUT -

[{"fname":"Omkar","lname":"Deshpande","course":"Android","id":"1"},{"fname":"John","lname":"Doe","course":"DBMS","id":"2"},{"fname":"Alrik","lname":"Weirdo","course":"Web-Dev","id":"3"},{"fname":"Devesh","lname":"Woodwalker","course":"AI","id":"4"},{"fname":"Shubham","lname":"Daylighter","course":"Mathematics","id":"5"},{"fname":"Atharva","lname":"Fairchild","course":"Accounting","id":"6"}]

My Workspace   New   Import

Collections

APIs

Environments

Mock Servers

Monitors

History

Overview   GET http://192.168.1.9:...   GET http://localhost:80...

No Environment

http://localhost:8080/HelloREST/rest/student   Save

GET   http://localhost:8080/HelloREST/rest/student   Send

Params   Authorization   Headers (8)   Body ●   Pre-request Script   Tests   Settings   Cookies

Query Params

KEY	VALUE	DESCRIPTION	
Key	Value	Description	Bulk Edit

Body   Cookies   Headers (10)   Test Results   Status: 200 OK   Time: 1752 ms   Size: 799 B   Save Response

Pretty   Raw   Preview   Visualize   JSON

```json
 8      {
 9          "fname": "John",
10          "lname": "Doe",
11          "course": "DBMS",
12          "id": "2"
13      },
14      {
15          "fname": "Alrik",
16          "lname": "Weirdo",
17          "course": "Web-Dev",
18          "id": "3"
19      },
20      {
21          "fname": "Devesh",
22          "lname": "Woodwalker",
23          "course": "AI",
```

You don't have any collections

Collections let you group related requests, making them easier to access and run.

Create Collection

Find and Replace   Console   Bootcamp   Runner   Trash

Search   29°C Mostly clear   8:19 PM 5/26/2021