

RESTFul ASSIGNMENT Day_3

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1. In the Question-2 of Day 2, If user is available, send a success message to the user otherwise throw a User Defined Exception. Handle the exception using Exception Mapper.

```
package com.rest.assignment03;
import com.rest.entity.LoanDetails;
import com.rest.entity.LoanDetailsDAO;
import javax.ws.rs.*;
import javax.ws.rs.core.MediaType;
import javax.ws.rs.core.Response;
import java.util.HashMap;

@Path("/Day3Q1")
public class Question1 {
    HashMap<Integer, String> hashMap = new HashMap<>();
    public void insertCredentials() {
        hashMap.put(1, "HArshit");
        hashMap.put(2, "Aman");
    }
    @GET
    @Path("/read")
    @Produces(MediaType.TEXT_PLAIN)
    public String getMessage(
        @QueryParam("ID") int customerID,
        @QueryParam("Pass") String password
    ){
        insertCredentials();
        try {
            if (!hashMap.get(customerID).equals(password))
                throw new CustomException();
        } catch (NullPointerException | CustomException e) {
            return e.getMessage() + " : Not Found";
        }
        return "Success.";
    }
}
```

```
package com.rest.assignment03;
import javax.ws.rs.WebApplicationException;
import javax.ws.rs.core.Response;
public class CustomException extends WebApplicationException {
    public CustomException() {
        super(Response.status(420).build());
    }
}
```

2. Till now we were using Postman API to test our Rest service. Create a console-based client application to perform the operations mentioned in Question-3 of day 2.

```
package com.rest.assignment03;
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.net.HttpURLConnection;
import java.net.URL;
import java.util.Scanner;

class getAll{
    public void getByCustomerId() throws IOException {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter Customer ID : ");
        StringBuilder result = new StringBuilder();
        String customerId = sc.next();
        URL url = new

URL("http://localhost:8080/WebServices/rest/Day2Q3/customers/" +
customerId);
        HttpURLConnection conn = (HttpURLConnection) url.openConnection();
        conn.setRequestMethod("GET");
        try (BufferedReader reader = new BufferedReader(
            new InputStreamReader(conn.getInputStream()))) {
            for (String line; (line = reader.readLine()) != null; ) {
                result.append(line);
            }
        }
        System.out.println(result.toString());
    }
    public void getAll() throws IOException{
        StringBuilder result = new StringBuilder();
        URL url = new

URL("http://localhost:8080/WebServices/rest/Day2Q3/customers");
        HttpURLConnection conn = (HttpURLConnection) url.openConnection();
        conn.setRequestMethod("GET");
        try (BufferedReader reader = new BufferedReader(
            new InputStreamReader(conn.getInputStream()))) {
            for (String line; (line = reader.readLine()) != null; ) {
                result.append(line);
            }
        }
        System.out.println(result.toString());
    }
    public void delete() throws IOException{
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter Customer ID for Deletion : ");
        StringBuilder result = new StringBuilder();
        String customerId = sc.next();
        URL url = new

URL("http://localhost:8080/WebServices/rest/Day2Q3/deleteCustomer?custDelId
=" +
        customerId);
        HttpURLConnection conn = (HttpURLConnection) url.openConnection();
        conn.setRequestMethod("DELETE");
        try (BufferedReader reader = new BufferedReader(
            new InputStreamReader(conn.getInputStream()))) {
```

```

        for (String line; (line = reader.readLine()) != null; ) {
            result.append(line);
        }
    }
    System.out.println(result.toString());
}

public class Question2 {
    public static void main(String[] args) throws IOException {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter your option :\n1.Get Data by Customer
ID\n2.Get All Data\n3.Insert Customer\n4.Delete Customer\n5.Exit");
        int option = sc.nextInt();
        if(option == 1){
            getAll obj = new getAll();
            obj.getByCustomerId();
        }
        else if(option == 2){
            getAll obj = new getAll();
            obj.getAll();
        }
        else if(option == 3){
            // getAll obj = new getAll();
            // obj.insert();
            System.out.println("This is beta version, development still in
            process.");
        }
        else if(option == 4){
            getAll obj = new getAll();
            obj.delete();
        }
        else{
            System.exit(0);
        }
    }
}

```

3. Make the client as a Webclient and use JSON and Ajax to call the Rest service from an HTML Page.