

Assignment - B7

Title:- study & demonstrate the use of encoding & decoding JSON object using Java.

Problem Statement :-

Study & demonstrate the use of encoding & decoding JSON objects using Java.

Objective :- To understand & implement encoding & decoding of JSON object

S/W & H/W :- Eclipse, Java, 64 bit OS, Fedora,

Theory:-

JSON extension is bundled with PHP by default from version 5.2.0 so there is no need of any special environment.

JSON Functions :-

- 1) JSON encode :- It returns the JSON representation of a value.
- 2) JSON decode :- It decodes a JSON String.

3) JSON_last_error : It returns the last error occurred

Encoding :-

json_encode() Function is used for encoding which returns JSON-representation of a value.

Syntax

string json_encode (\$value [, \$options])

The value parameter specifies value being specified it works only with UTF-8 encoded data.

Decoding :-

json_decode() function is used for decoding JSON object to php.

Syntax :-

json_decode (\$json [, \$assoc = false [, \$depth = 5,] [, \$options = 0]])

Parameter :-

json_string : It is encoded string which must be UTF-8 encoded data.

assoc It is boolean type parameters when set to true, returned objects will be converted into associated arrays.

depth:- It is an integer type parameter -r which specifies recursion depth.

options :- It is an integer type bit-mask of json decode suppresser Json string.

Conclusion :-

We have studied & demonstrated the use of encoding & decoding object using Java.

```
import org.json.JSONArray;
import java.util.*;

import org.json.simple.JSONObject;

public class EncodeObj {

    public static void main(String[] args) {

        try {

            Scanner sc = new Scanner(System.in);

            System.out.println("Enter a Employee ID :");
            int id=sc.nextInt();

            System.out.println("Enter a Name :");
            String name =sc.next();

            System.out.println("Enter a Salary :");
            double sal=sc.nextDouble();


            System.out.println("Enter a City :");
            String city =sc.next();

            System.out.println("Enter a state :");
            String state =sc.next();

            System.out.println("Enter a Country :");
            String country =sc.next();


            JSONObject obj = new JSONObject();
            obj.put("Emp_id", new Integer(id));
            obj.put("Emp_name",name);
            obj.put("Salary",new Double(sal));


            JSONObject address=new JSONObject();
            address.put("city",city);
            address.put("State",state);
            address.put("Country",country);

            obj.put("address",address);

            System.out.println(obj.toJSONString());

            int id1=(int) obj.get("Emp_id");
            String name1 = (String) obj.get("Emp_name");
            double sal1=(double) obj.get("Salary");
            String city1 = (String) address.get("city");
```

```
String state1 = (String) address.get("State");  
String country1 = (String) address.get("Country");
```

```
System.out.println();  
System.out.println("Emp_id : "+id1);  
System.out.println("Emp_name : "+name1);  
System.out.println("Salary : "+sal1);  
System.out.println("City : "+city1);  
System.out.println("state : "+state1);  
System.out.println("Country : "+country1);
```

```
} catch (Exception e)  
{  
    e.printStackTrace();  
}
```

```
}
```

```
}
```

Output:

Enter a Employee ID :

101

Enter a Name :

Shubham

Enter a Salary :

50000

Enter a City :

Pune

Enter a state :

Maharastra

Enter a Country :

India

{"Emp_id":101,"Salary":50000.0,"address":{"city":"Pune","State":"Maharastra","Country":"India"},"Emp_name":"Shubham"}

Emp_id : 101

Emp_name : Shubham

Salary : 50000.0

City : Pune

state : Maharastra

Country : India