

# **Module-6**

**Name** : Kotadiya Amisha K.

**College** : Government Engineering College, Rajkot

**Branch** : Computer Engineering

## **Understanding**

## ➤ **Building Web API**

- Understanding HTTP Verbs
- Implement GET, POST, PUT, DELETE
- Understanding JSON Structure

## ➤ **Understanding HTTP Verbs**

- ✓ HTTP verbs tell the server what to do with the data identified by the URL.
- ✓ The HTTP method is supplied in the request line and specifies the operation that the client has requested.
- ✓ If you're going to follow the REST architecture and the HTTP protocol, you must choose from the verbs available in that protocol, the primary or most-commonly-used HTTP verbs are POST, GET, PUT, and DELETE.
- ✓ These correspond to create, read, update, and delete (or CRUD) operations.
- ✓ HTTP provides the following main verbs.
  - I. Get
  - II. Post
  - III. Put
  - IV. Delete

## ➤ **Implement GET, POST, PUT, DELETE**

### **HTTP Get**

- ✓ This verb is used to get existing data from the database.
- ✓ In HttpGet, data travels in the URL only.
- ✓ To use the HttpGet method, we use HttpGet attribute on the Action method.
- ✓ It is also the default HTTP verb.

### **HTTP Post**

- ✓ This verb is used while we have to create a new resource in the database.
- ✓ In HttpPost, data travels in the URL and body.
- ✓ To use HttpPost method, we use HttpPost attribute on the Action method.

### **HTTP Put**

- ✓ This verb is used while we have to update an existing resource in the database.
- ✓ In HttpPut, the data travels in the URL and body.
- ✓ To use HttpPut method, we use HttpPut attribute on the Action method.

### **HTTP Delete**

- ✓ This verb is used while we have to delete the existing resources in the database.
- ✓ In HttpDelete, data travels in the URL and body.
- ✓ To use HttpDelete, we use HttpDelete attribute on the Action method.

## ➤ **Understanding JSON Structure**

- ✓ JSON stands for JavaScript Object Notation.
- ✓ JSON is a text-based data exchange format derived from JavaScript that is used in web services and other connected applications.
- ✓ JSON is used to send JavaScript to a server and to also retrieve back the JSON in the form of JavaScript Object from the server.
- ✓ JSON is open-standard document format for human-readable and machineunderstandable serialization ad deserialization of data.
- ✓ Simply, it is used for data-interchange.
- ✓ Applications are created using different programming languages and run in very different environments. JSON is suited to this scenario because it is an open standard, it is easy to read and write, and it is more compact than other representations.

### **JSON Object:**

- ✓ An object starts and ends with '{' and '}'.
- ✓ Between them, a number of string value pairs can reside.
- ✓ String and value is separated by a ':' and if there are more than one string value pairs, they are separated by ','.

Ex.

```
{  
  "firstName": "Pinal",  
  "lastName": "Pambhar",  
  "age": 21  
}
```

### **JSON Array:**

- ✓ An Array starts and ends with '[' and ']'.
- ✓ Between them, a number of values can reside.
- ✓ If there are more than one values reside, they are separated by ','.

Ex.

```
[100, 200, 300, 400]
```