Creating REST Services

INTRODUCTION

Sekhar Srinivasan

@sekharonline4u www.sekhartheguru.net

Overview

What is REST API?

Create REST Service using Spring REST

Consume Spring REST Service

Understanding REST API

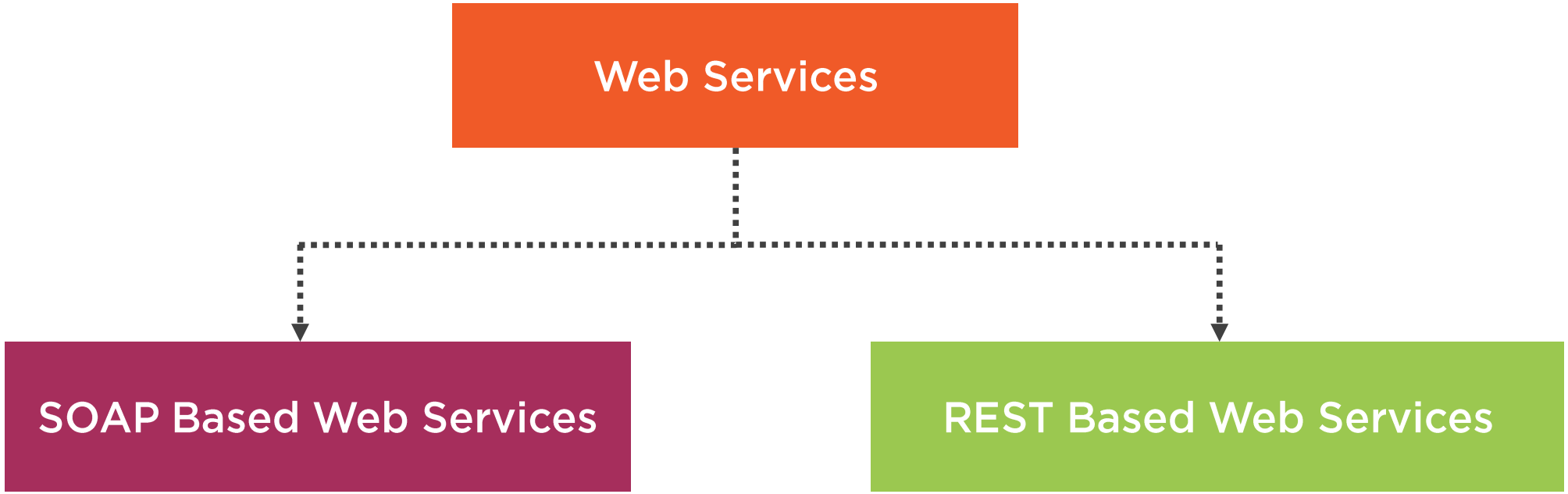
Overview

1. What is Web Service?
2. SOAP Based vs. REST Based Web Services
3. Understand REST API

What is Web Service ?

Web Service can be considered as a Software System designed to support interoperability between machine-to-machine interaction over a network.

Web Service


Web Services
SOAP Based Web Services
REST Based Web Services

Simple
Object
Access
Protocol

RE presentative

S tate

T ransfer

SOAP vs REST

Simple
Object
Access
Protocol

SOAP Based Web Services

- Language, Platform and Transport Independent
- Distributed Enterprise Environments
- Standardized
- Pre-built Extensibility
- Built-in Error Handling
- Automation
- Uses XML for all messages

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REST Based Web Services

- No Expensive Tools
- Smaller Learning Curve
- Efficient
- Fast
- Closer to other Web Technologies
- Uses HTTP
- Assumes point-to-point communication

REST Services

Architectural style for designing loosely coupled web services

Used to develop

- Light Weight
- Fast
- Scalable
- Easy to maintain Web Services

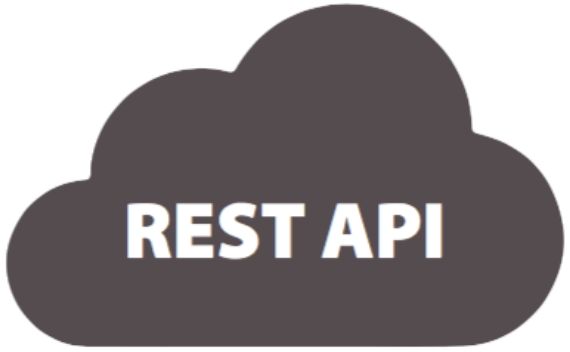
Uses HTTP as the means of Communication

Defines the Web as a Distributed Hypermedia Application

Understanding REST API Services

Fundamental elements of the Web Platforms
For ex.:
http://AccountService/Account/101

<Account>
<AccountNo>101</AccountNo>
<Name>Sekhar </Name>
<Balance>10000 </Balance>
</Account>



GET: Retrieve an existing resource
POST: Create a new entry of resource
PUT: Modify an existing resource
DELETE: Remove an existing resource

{
“AccountNo” : “101”,
“Name” : “Sekhar” ,
“Balance” : 10000
}

Creating REST API Using @ResponseBody

Jackson is a multi-purpose Java library for processing JSON data format

Creating REST API using @RestController

PostMan is a complete toolchain for API developers, Postman makes working with API's faster and also easier

Consuming REST API Service

SUMMARY

What is REST Service?

Create a REST Service using Spring REST

Consume Spring REST Service