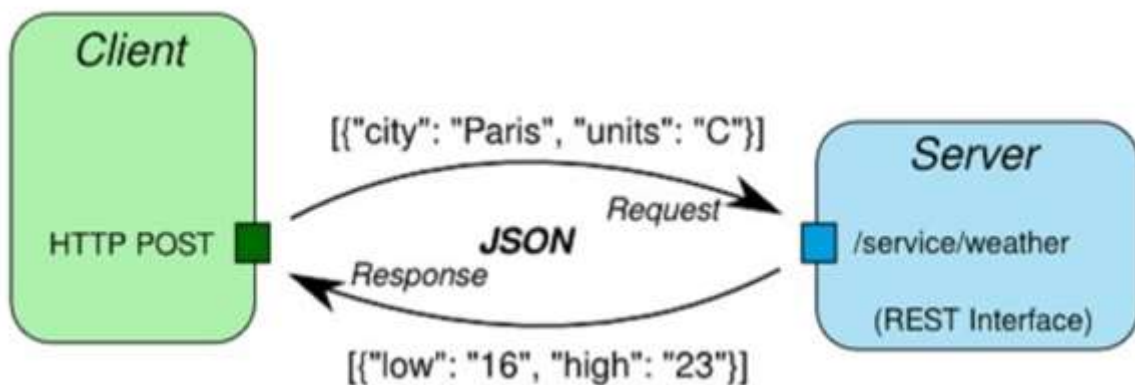This Web Services Using JAVA webinar was organized on the year of 2018-19. It Gives idea about analyse, design and develop of SRS.

RESTful Web Service in Java

Pre-requisites: Nil
Course Type : Audit (Workshop)
Duration : 30 Hours

Course Objectives:

- Develop knowledge-based force to serve the IT industry with the latest technologies.
- To explore methods of capturing, specifying, visualizing and analyzing software requirements.

Learning Outcomes:

- To analyze, design, and develop SRS.
- To design and develop web applications using Spring, AngularJS.

Module	Contents	Duration
Module-1	• Setting Spring environment • Understanding Maven and define POM • Create project using Spring and Understanding Spring Architecture	10 hours
Module-2	• Setting bean in IOC container and understand Dependency Injection • Working with Spring AOP • Access data using JdbcTemplate; CRUD operation	10 hours
Module-3	• Create Spring Boot projects using Spring Initializer • Implement DevTools for rapid application development • Implement application logs using application. Properties	10 hours
	TOTAL	**30 hours**

Dr. Anita Patra, Registrar, CUTM

Convener

A report on
Web Services Using JAVA
Total number of participants: 45
Academic year: 2018-19
Date: 17.10.2018

Web applications are by nature distributed applications, meaning that they are programs that run on more than one computer and communicate through a network or server. Specifically, web applications are accessed with a web browser and are popular because of the ease of using the browser as a user client.

The programme on Web Services using JAVA was offered to the participants to make them learn various problem solving using object-oriented concepts and implement object-oriented programming using Java. Further, the participants were asked to analyze several alternative solutions to determine the best approach.

The programme was based on practical sessions where the participants were expected resolve issues. The followings are a few examples from the programme

To find the sum of any number of integers entered as command line arguments

To find the factorial of a given number
To learn use of single dimensional array by defining the array dynamically.
To learn use of length in case of a two-dimensional array

To convert a decimal to binary number
To check if a number is prime or not, by taking the number as input from the keyboard
To find the sum of any number of integers interactively, i.e., entering every number from the keyboard

Write a java program for reverse a String
Write a java program for creating class and Object
Write a java program for method Overloading

Java Web Services
Java web services tutorial provides concepts and examples of two main java web services api: JAX-WS and JAX-RS. The java web service application can be accessed by other programming languages such as .Net and PHP.

Java web service application perform communication through WSDL (Web Services Description Language). There are two ways to write java web service application code: SOAP and RESTful.

Java Web Services API

There are two main APIs defined by Java for developing web service applications since JavaME 6.

1. JAX-WS: It is mainly for SOAP web services. There are two ways to write JAX-WS application code: by RPC style and Document style.

2. JAX-RS: It is mainly for RESTful web services. There is mainly 2 implementations currently in use for creating JAX-RS application: Jersey and REST easy.

Types of Web Services

There are mainly two types of web services.

SOAP web services.
RESTful web services.
types of web services
Web Service Features
XML-Based
Web services use XML at data description and data transportation layers. Using XML exclude any networking, operating system, or platform binding. Web services-based operation is extremely interoperable at their core level.

Loosely Coupled
A client of a web service is not fixed to the web service directly. The web service interface can support innovation over time without negotiating the client's ability to communicate with the service. A tightly coupled system means that the client and server logic are closely tied to one another, indicating that if one interface changes, then another must be updated. Accepting a loosely coupled architecture tends to make software systems more manageable and allows more straightforward integration between various systems.

Coarse-Grained
Object-oriented technologies such as Java expose their functions through individual methods. A specific process is too fine an operation to provide any suitable capability at a corporate level. Building a Java program from scratch needed the creation of various fine-grained functions that are then collected into a coarse-grained role that is consumed by either a client or another service.

Dr. Anita Patra, Registrar, CUTM

Convener

List of Participants:

Name of Event: Web Services Using JAVA
Organized by: Centurion University of Technology and Management
Date: 17 October 2018

This Web Services Using JAVA webinar was organized in the year of 2018-19. It Gives idea about analyse, design and develop of SRS.

List of Participants:

S. No.	Name	Reg. No.	Presence/Absent
1	A SUDHANSHU SEKHAR	180415140014	Present
2	BIGHNESHWAR NATH	180415140020	Present
3	BEDA PRAKASH DASH	180415140021	Present
4	RAHUL NAG	180415140022	Present
5	PINMAYA BISWAL	180415140023	Present
6	P. SHEETAL KUMARI	180415140024	Present
7	ROHAN MEHER	180415140007	Present
8	N DIKSHA	180415140008	Present
9	BISHAKHA NAIK	180415140009	Absent
10	ZAFIRA KHAN	180415140031	Present
11	SWASTIKA RANI SAHU	180415140032	Present
12	SRIDATTA MISHRA	180415140033	Present
13	SUMIT KUMAR KAND	180415140034	Present
14	ABHIJIT SARANGI	180415140015	Present
15	MEKA PRAMILA	180415140016	Present
16	ARPITA DHIR SAMANTA	180415140017	Present
17	ASHISH TRIPATHY	180415140018	Present
18	AMIT KUMAR PALEI	180415140019	Present
19	MD. NASIRUL ISLAM	180415140041	Present
20	RAHUL KUMAR SABAT	180415140042	Absent
21	AVISEK PANDA	180415140043	Present
22	ROSHAN KUMAR SAHOO	180415140044	Present
23	VIHANG SAHOO	180415140045	Present
24	HIMANI PATEL	180415140025	Present
25	DAYALDAS MAHANTO	180415140026	Present
26	SATYAJIT SWAIN	180415140027	Present
27	CHIRANJEEB PRADHAN	180415140028	Present
28	M. RAJESH PATRA	180415140029	Present
29	MEHEK BISWAL	180415140030	Present
30	SUBHASHREE PATTNAIK	180415140010	Present
31	AMIT KUMAR MAHARANA	180415140011	Present

32	PRAVEEN BAXLA	180415140013	Absent
33	RAJESH SAHA	180415140035	Present
34	RAHUL KUMAR SAHOO	180415140036	Present
35	PRASANTA GOUD	180415140037	Present
36	SACHIN KUMAR SAHU	180415140038	Present
37	CHANDRA PRAKASH PANDA	180415140039	Present
38	SOMIYA RANJAN PRADHAN	180415140040	Present
39	MANISHA CHAURASIA	180415140046	Absent
40	RAKESH KUMAR LENKA	180415140001	Present
41	MOHIT KUMAR SAHU	180415140002	Present
42	GYANANJAYA BEHERA	180415140003	Present
43	AMISH KUMAR KHADANGA	180415140004	Present
44	SIMRAN AGARWAL	180415140005	Present
45	RASHMITA SAHOO	180415140006	Present

Dr. Anita Patra, Registrar, CUTM

Convener