

- ❖ **Introduction to Webservices and API**
  - What is Webservice
  - Why we need Webservice based Architecture
  - Type Of WebServices
  - What is SOAP
  - What is REST Full Webservice
  - REST vs SOAP Webservice
  
- ❖ **Introduction and Basics of REST API**
  - What is Client and Server in Webservice based Architecture
  - What is Request and Response
  - Type of HTTP response codes
  - What is REST API and why it is better than SOAP
  
- ❖ **REST API Rules and important terminology**
  - What are the basic rules of REST API
  - What is URI
  - What is methods in REST api
  - Types of REST api methods- GET,POST,PUT,DELETE etc
  - When and Why we use these methods in REST api
  
- ❖ **API Testing Basics**
  - Why we need api testing .
  - What we verify in API testing.
  - Way of performing API testing.
  
- ❖ **Introduction to JSON and XML**
  - What is XML
  - What is JSON
  - How to Parse XML file
  - How to parse JSON file

- ❖ **Introduction to POSTMAN**
  - **Installation of POSTMAN**
  - **Understanding POSTMAN UI**
  - **Sending the first Request**
  - **Sending different type of REST API using POSTMAN**
  - **POSTMAN Collections**
  - **Creating the first Collection**
  - **Variables**
  - **Manage environments in POSTMAN**
  - **Manage Variables in POSTMAN**
  - **Introduction to scripts**
  - **Pre-request scripts**
  - **Test Scripts**
  - **Running a Collection**
  - **Using environments in collection runs**
  - **Reading test data from external files**
  - **Integration with Jenkins**
  
- ❖ **Introduction to Jackson library**
  - **Parsing Json file with jackson**
  - **Converting complex JSON into Map**
  - **Converting Json into POJO**
  
- ❖ **Introduction to GIT and GItHUB**
  - **Introduction to GIT**
  - **GIT commands**
  - **Different stage in GIT**
  - **How to commit a file in GIT**
  - **Introduction to GITHUB**
  - **Connecting GIT with GITHUB**
  - **Pushing files to Remote repo(GITHUB)**
  - **Rollback of Files**
  - **Pull, Merge,Clone,Checkout command**
  - **Resolving merge conflicts in GIT**

- ❖ **Introduction to Rest-Assured API**
  - **Understanding Rest-Assured API**
  - **Making GET request using Rest\_assured**
  - **Making POST request using Rest\_assured**
  - **Making PUT request using Rest\_assured**
  - **Making DELETE request using Rest\_assured**
  - **Extracting response .**
  - **Asserting status code from Response**
  - **Asserting response schema**
  - **Asserting Response body**
  
- ❖ **Advance Features and framework designing with RestAssured**
  - **Introduction to TestNG**
  - **Basic annotations of TestNG and their use**
  - **Assertions on test cases**
  - **Framework designing with Rest-assured**
  - **Excel reader for Test data parsing**
  - **Integration of test data files with Framework**
  - **Running Test cases using testng.xml**
  - **Running Test Suite using Maven command**
  - **Integration with Jenkins**
  
- ❖ **Advance Reporting using Extent Report library**
  - **Introduction to Extent report**
  - **Basics of Extent report**
  - **Integration of Extent report with rest-assured framework**
  - **Generating Extent Report after Test Suite Run**
  
- ❖ **Introduction to SOAP UI**
  - **Basics of SOAP webservice**
  - **Understating of WSDL**
  - **Understanding of UDDI**
  - **Installation of SOAP UI**
  - **Understanding basics of SOAP UI**
  - **Hierarchy and flow in SOAP UI**
  - **Writing First Test case in SOAP UI**
  - **Use Properties in SOAP UI**
  - **Assertions in SOAP UI**
  - **Introduction to Groovy**
  - **Basics of Groovy**
  - **Use of Groovy scripts in SOAP UI**
  - **Data driven testing in SOAP UI**
  - **REST API Testing in SOAP UI**

❖ **Introduction to JEnkins**

- **Installation of Jenkins**
- **Basics of Jenkins**
- **Creating first Project in Jenkins**
- **Creating Maven project in Jenkins**
- **Integration of Rest-Assured framework with Jenkins**
- **Integration of GIT with Jenkins**
- **Sending Mail through Jenkins**
- **Continuous Integration with Jenkins**
- **Integration of Extent Report with Jenkins**
- **Creating User Profiles in Jenkins**
- **Assigning roles to users in Jenkins**

❖ **Introduction to BDD and Cucumber**

- **Introduction to BDD.**
- **Introduction to Cucumber**
- **Integration of Rest-Assured with Cucumber**
- **Generation Extent Report in Cucumber based framework**
- **Integration with Jenkins**