Mule ESB Introduction:

- What is ESB and how it helps to resolve the existing problems
- What is Mule and it's Features?
- Introduction in to Anypoint Studio and Anypoint Platform
- Testing Tools (Postman, RestClient and SoapUI)

Mule Basics:

- Mule Project structure
- What is Mule Flow?
- What is Mule Event and Event Processor?
- What is private Flow and sub flow?
- What is Variable and Global Elements?
- Debugging a mule flow
- Structure of a Mule Event in detail
- Track the event Data in and out of a Mule application
- Data Weave expressions in detail
- Embedded mule server in detail
- Mule Request processing in Detail

API-Lead Connectivity:

- Identify the problems in current design
- Modern API' to resolve the problems
  I. System API
  II. Process API
  III. Experienced API
- API Lead connectivity in any point platform

API Design:

- Introducing RAML
- Define APIs Using API Designer
- Mocking API's
- Creating API portals
- Adding API's to Exchange
- Resource Types and Traits
- Libraries and Securities
- Best Practises in RAML.

API' Implementation:

- Implementation API's using Any point Studio.
- Consuming Restful web service using HTTP Connector

- Consuming SOAP web service using web service Consumer and HTTP Connector
- Inserting Records in to database using DB Connector
- Inserting and Retrieving Records in to database using DB Connector
  I. Bulk Insert into Database
  II. Creating data Source
  III. XA Transactions and Local Transactions
  IV. Calling Stored procedures
- Scatter-Gather router to concurrent processing
- Encapsulate global elements in a separate configuration file
- Exception Handling:
  I. Explore default error handling
  II. Handle errors at the application level
  III. Handle specific types of errors
  IV. Handle errors at the flow level
  V. Handle errors at the processor level
- Auditing the Request and response in to DB using DB Connector
- Send Error Notification to Administer using SMTP Server
- Externalizing the properties file Base on the Environment- Dev., SIT, UAT, PROD
- Secure properties place holder: password encryption
- Mule Domain: Configure here resource to be shared within the domain

On Premises Deployment:

- Install and start a customer-hosted Mule runtime
- Deploy a Mule application to a Mule runtime
- Manage Mule runtime licenses
- Edit a Mule runtime's configuration files
- Verifying the logs files and increasing the log file size.
- Deploy a Mule domain project to a Mule runtime
- Register a customer-hosted Mule runtime with Runtime Manager
- Use Runtime Manager to deploy a Mule application to a Mule runtime
- Creating clusters and Groups to deploy applications
- Providing securities to the resources

Cloud Deployment:

- Deploy a Mule application to a Cloud Environment
- Creating proxies for API
- Providing security to API
  I. Throttling
  II. Rate limiting
  III. Http Basic authentication
  IV. Secure Using OAuth etc...

Data Weave data transformation Language:

- Create transformations with the Transform Message component
- Transform basic JSON, Java, and XML data structures
- Transform complex data structures with arrays
- Define and use custom data types
- Use Data Weave functions
- Organize DataWeave code with variables and functions
- Coerce and format strings, numbers, and dates
- Match DataWeave types and conditions
- Add and remove data from objects and arrays

- Operate on array elements using the dw::core::Arrays module
- Extract parts of an object using the dw::core::Objects module
- Construct objects using object constructor curly braces
- Select keys, values, attributes, and namespace from an object
- Join reference data with message data using map operators
- Build an object from another object using the mapObject operator
- Shuffle the order of child elements of an object.
- Accumulate transformations of array elements using a reduce operator

Triggering Flows:

- Trigger a flow when a new file is added to a directory
- Trigger a flow when a new record is added to a database and use automatic watermarking
- Schedule a flow and use manual watermarking
- Publish and listen for JMS messages

Processing Records:

- Process items in a collection using the For Each scope.
- Process items in a collection using parallel For Each scope.
- Process records using the Batch Job scope
- Use filtering and aggregation in a batchstep
- Message Enrichment
- Error handling in Batch Processing

Project Agile Methodology:

- **Interview Questions**
- **Resume preparation**
- **Dev ops Tools –**
  - Jenkins
  - Maven
  - Jira
  - Github