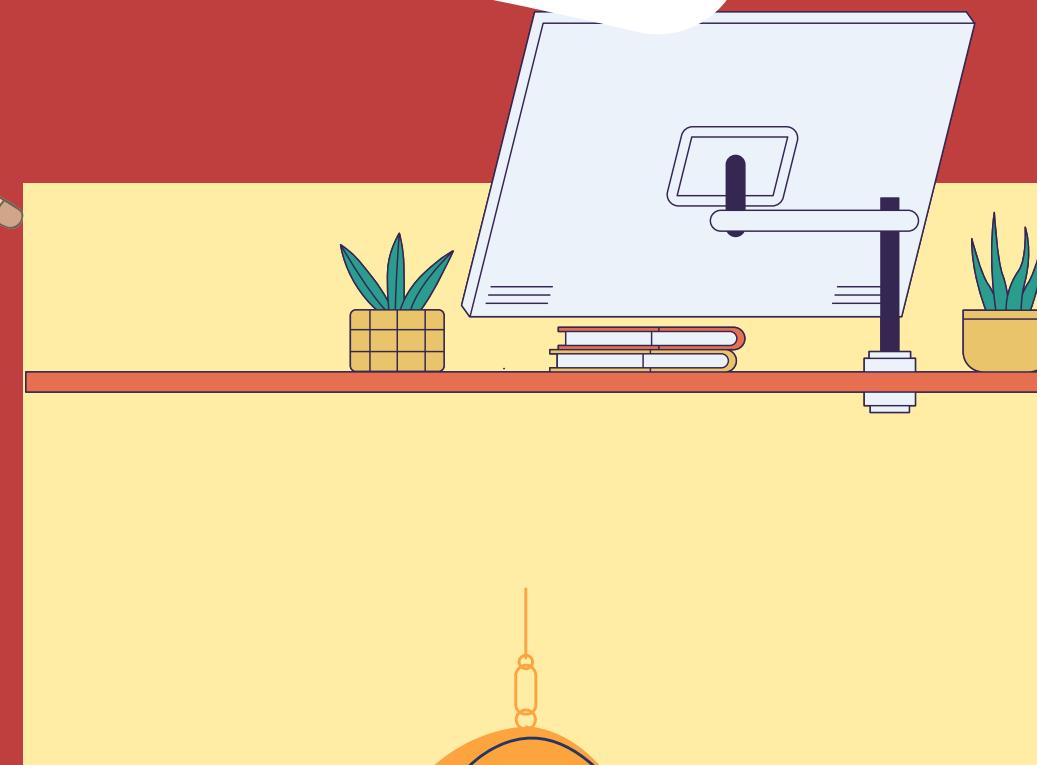
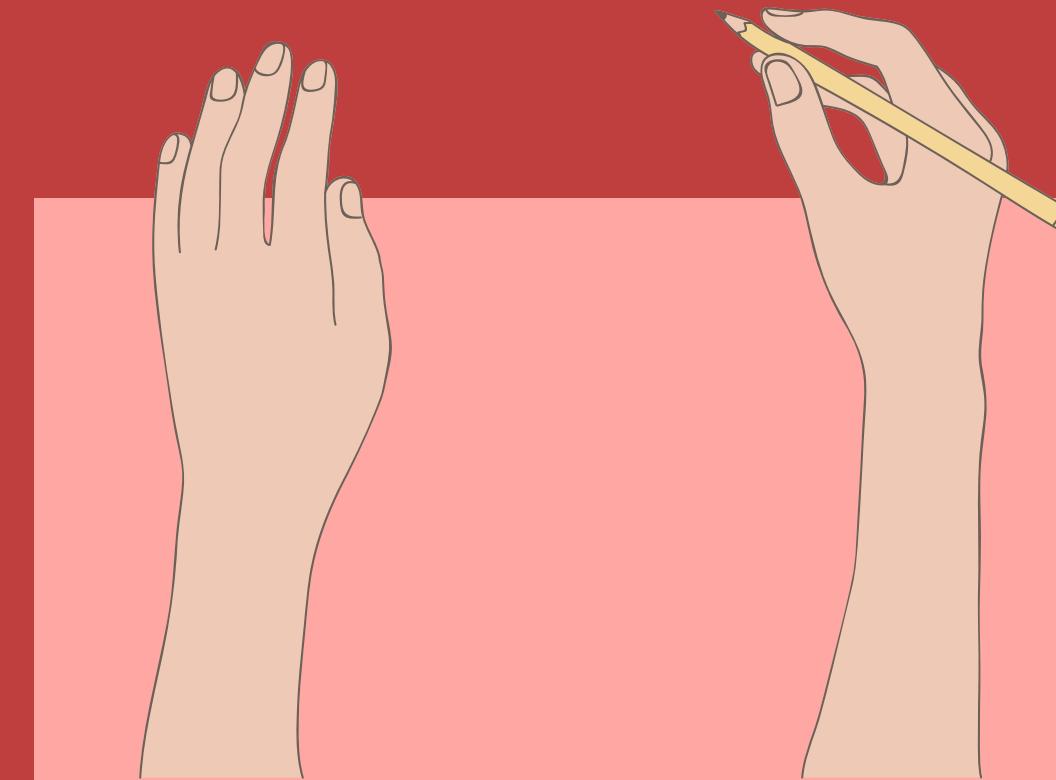
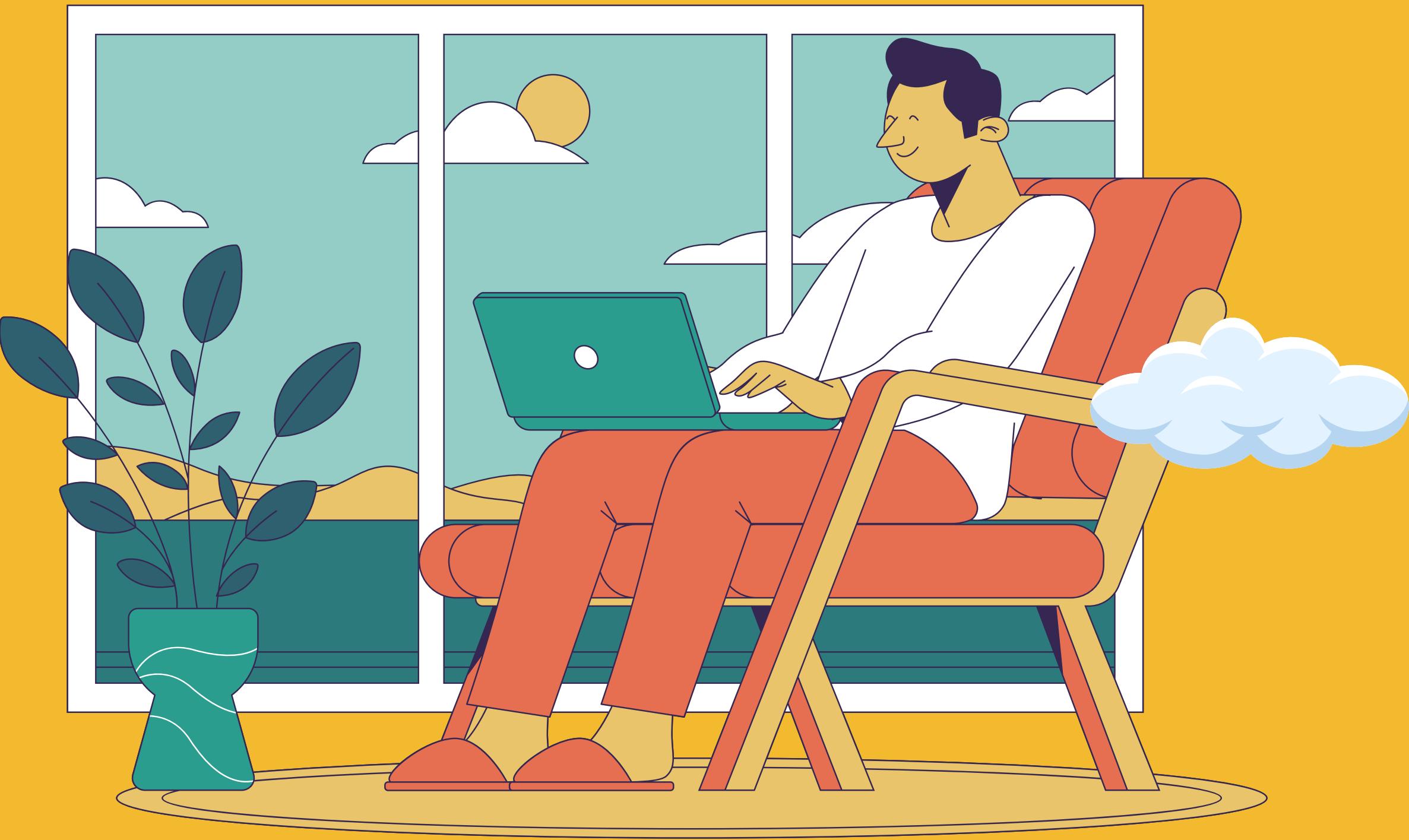


SALESFORCE REST API INTEGRATION



“
Move forward.
Good Things are
Up Ahead.



TODAY'S AGENDA



Introduction to
Integration

Types of API

Introduction to HTTP

Testing tools



WHAT IS INTEGRATION

Integration is a process of connecting two or more applications. Enterprise system uses many applications, many or most of which are not designed to work with one another out of the box. Each application can have data, business logic, presentation, and security layers, all of which are possible targets for integration.



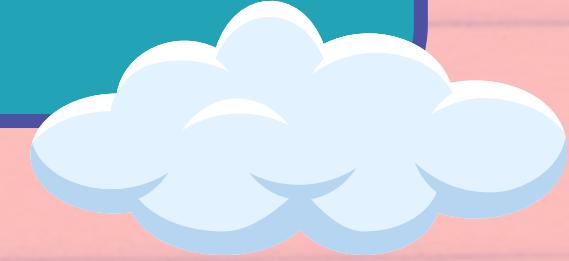
WHAT IS WEBSERVICES?

Web service is a standardized medium to propagate communication between the client and server applications on the World Wide Web. Web services provide a common platform that allows multiple applications built on various programming languages to have the ability to communicate with each other. Webservices are functionality or code which helps us to do integration. Web services are open standard (XML, SOAP, HTTP, etc.) based web applications that interact with other web applications for the purpose of exchanging data.

Type of Web Service

- There are mainly two types of web services.
 - SOAP web services.
 - RESTful web services

DIFFERENCE BETWEEN JSON VS XML



- JavaScript Object Notation has a type like String, number, Object, Boolean
- It is a way of representing objects
- Retrieving value is easy
- It does not provide any support for namespaces.
- It is less secured

- Extensible markup language is type less, and should be string
- It is a markup language and uses tag structure to represent data items
- Retrieving value is difficult
- It supports namespaces.
- It is more secure than JSON



WHAT IS REST API

- A REST API is also known as RESTful API. REST API is an application programming interface (API) that conforms to the constraints of REST architectural style and allows for interaction with RESTful web services.
- RESTful API is an interface that two computer systems use to exchange information securely over the internet. REST API has a lightweight request and response framework. It is a simple, easy-to-use, and powerful web service based on RESTful principles. REST API supports both XML and JSON. Rest resource is referenced using URI, abstraction of information, and access using HTTP methods.

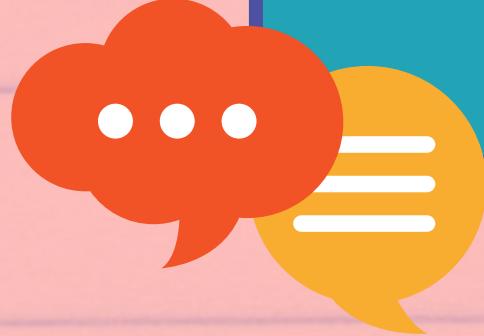


WHAT IS SOAP API

SOAP is the Simple Object Access Protocol, a messaging standard defined by the World Wide Web Consortium and its member editors. SOAP uses an XML data format to declare its request and response messages, relying on XML Schema and other technologies to enforce the structure of its payloads.

- It uses a Web Services Description Language (WSDL) file to rigorously define the parameters for accessing data through the API.
-
- Because SOAP API uses the WSDL file as a formal contract between the API and consumer, it's great for writing server-to-server integrations.
- SOAP API supports XML only.

DIFFERENCE BETWEEN REST API VS SOAP API XML

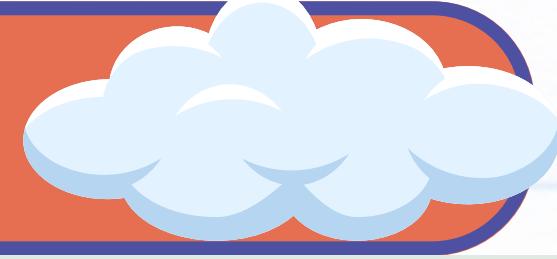
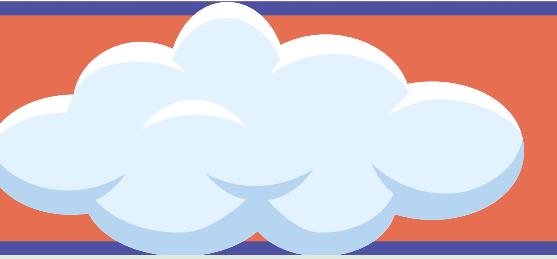


- Relies on REST architecture using HTTP
- Transports data in JSON or XML
- Less structured? Less bulky data
- Works well with JavaScript
- Designed with mobile devices in mind

- Relies on SOAP protocol
- Transports data in XML
- Highly structured/ typed
- Handles large data loads
- Designed with large enterprise application in mind



HTTP REQUESTS



Connect REST API uses HTTP methods to send and receive JSON and XML content, so it's easy to build client applications using the tool or the language of your choice.

GET is used to retrieve information, such as basic resource summary information.

POST is used to create a new item, such as a feed item or a comment or like, or subscribe to a group.

PATCH is used for partial updates to an item, for example, renaming a file.

PUT is used for whole updates to an item, for example, marking a conversation as read.

DELETE is used to delete an item, such as a feed element, or to unsubscribe from a group.

HEAD is used to retrieve resource metadata. It's similar to using GET but doesn't return a response body. You can use HEAD to test the availability of a resource.

Testing Tools

Workbench

Postman

THAT'S A WRAP!
THANK YOU!



Dhananjay Aher