## WhatsApp Automation – Design & Data Model

As we discussed in Session, Prepare rest api documentation and data models used in you project.

Rest Api documentation should be mentioned all API's end points and request and response object use for it.

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# API- An Application Programming Interface

An Application Programming Interface (API) allows two systems to communicate with one another. Just like a webpage is rendered, APIs can use HTTP requests to get information from a web application or web server.

### **REST API**

APIs are typically categorized as either SOAP or REST and both are used to access web services. SOAP relies solely on XML to provide messaging services, while REST offers a more lightweight method, using URLs in most cases to receive or send information. REST uses four different HTTP 1.1 verbs (GET, POST, PUT, and DELETE) to perform tasks. You can find REST-based Web services that output the data in Command Separated Value (CSV), JavaScript Object Notation (JSON) and Really Simple Syndication (RSS). The point is that you can obtain the output you need in a form that's easy to parse within the language you need for your application.

# **API Endpoints**

An endpoint is one end of a communication channel. When an API interacts with another system, the touchpoints of this communication are considered endpoints. For APIs, an endpoint can include a URL of a server or service. Each endpoint is the location from which APIs can access the resources they need to carry out their function. APIs work using 'requests' and 'responses.' When an API requests information from a web application or web server, it will receive a response. The place that APIs send requests and where the resource lives, is called an endpoint.

# **API in Whatsapp Automation Project**

Following are the api endpoints included:-

#### 1. http://localhost:4200/login

This will call the login function and will display the form for user login.

- # Request: Login Credentials in parameters.
- # Response: Login after verification else will display error message.
- # Methods: POST

#### 2. http://localhost:4200/features

This endpoint will display page where user can see all the features for automation.

- # Request: Features request in parameters.
- # Response: Will Return page with feature options like send\_message, send\_image, play youtube videos, text\_to\_handwritten, send\_mail, etc and one history page option.
- # Method: GET

3. http://localhost:4200/features/send\_message

For sending automatic message on provided time.

- # Request: Will display form for details.
- # Response: Display confirmation message.
- # Method: GET
- 4. http://localhost:4200/features/send\_image

For sending automatic image on groups or individual contact.

- # Request: Will display form for details.
- # Response: Display confirmation message.
- # Method: GET and POST
- 5. http://localhost:4200/features/play\_ytvideo For playing videos.
  - # Request: Will display form for details.
  - # Response: Display confirmation message.
  - # Method: GET and POST

6. http://localhost:4200/features/text\_to\_handwritten

For converting text to handwritten font.

# Request: Will display form for details.

# Response: Display confirmation message.

# Method: GET and POST

#### 7. http://localhost:4200/features/send\_mail

For sending mails with html code.

# Request: Provide space for uploading file or text area for writing text.

# Response: Display converted text.

# Method: GET and POST

#### 8. http://localhost:4200/features/history

This endpoint will display all the activities performed by user.

# Request: Username in parameters

# Response: Display activity performed by user.

# Method: GET And POST

## **Data Models**

- Login : For storing login details
- 2. User\_History: For storing user activity history.
- 3. Message\_Details: For storing details like timing, contact number, message etc.
- 4. Mail\_Details: recipient details, text etc.
- 5. Store\_Text\_To\_Convert: storing text.

