https://www.guru99.com/soap-simple-object-access-protocol.html

Basic API Questions

1. What is API? – Application programming interface

Whenever we need to communicate between 2 applications we need API. API testing is done as soon as the development is completed , manual and automation will start after API testing is done.

1. Why is API testing required?

-API testing is required to check if proper data flow is taking place.

-To reduce downward flow of defect after development

-Reduce time to fix the defect.

1. What does api explain?

The software that needs to access information(i.e., X hotel room rates for certain dates) or functionality (i.e., a route from point A to point B on a map based on a user’s location) from another software, calls its API while specifying the requirements of how data/functionality must be provided. The other software returns data/functionality requested by the former application.And the interface by which these two applications communicate is what the API specifies.

1. Difference between API and web services

Webservices are set of API’s , which are used only on the webapplication.

1. Why is Web Service testing required?

**Web Services Testing** is a type of software testing that validates Web services. The purpose of Web Services Testing is to check the functionality, reliability, performance, and security of an API(Application Program Interface).

1. What are HTTP methods?

It’s a mandatory component is HTTP request header. Those are POST , PUT , PATCH, GET , DELETE which are more commonly used methods while perforing API tesing.

1. Difference between put and patch? When should we go for a put and when for patch?
2. Difference between XML & JSON language
3. What is all the crud operation done in your project?
4. Difference between Soap Web Service & Rest Web Service
5. Which tool you have used for API testing.
6. What is SOAP api and How are they exposed?
7. What is Rest Assured and How are the exposed in your project?
8. Difference between soap and rest API? Write syntax for getting response?
9. Write the api which you have used in your project?
10. What are all the tools you have used in API Testing?
11. What exactly you verify in Web service API testing
12. What is Caching? Advantages and Disadvantages
13. What are cookies? Advantages and Disadvantages
14. What are the different status code?
15. When you get status 200 and 201?
16. Explain about 503 Status Code.

The HyperText Transfer Protocol (HTTP) 503 Service Unavailable server error response code indicates that **the server is not ready to handle the request**. Common causes are a server that is down for maintenance or that is overloaded.

1. Explain about 404 Status Code.
2. If you get status code as 400 series what might go wrong?
3. If you get status code as 500 series what might be the reason?
4. How do you do authentication?
5. Why do we pass query parameters in the header only?
6. Even now there are so many companies using soap why?
7. What and all you done in api? How much experience in api?

PostMan

1. What is Postman?
2. what is collection in postman.
3. How to create Suite/ collection?
4. Supported http method in Postman
5. Difference between put /patch
6. What is the use of Environment variables in Postman?
7. If want what to change base Uri for multiple test cases...how you’ll do at one place
8. How to create Request in POSTMAN, what is request & response parameter
9. what are the parameter being used in request? and how to set path and query parameter?
10. Types of variables in postman?
11. Types of Authentication supported by postman
12. How do you send file in request in Postman
13. What all the response validation you have used in PostMan
14. How to run the collection in command line
15. How to generate html report using Newman

RestAssured Questions

1. How to test rest API
2. what is rest assured
3. Why rest Assured is popular?
4. Rest Assured supported languages?
5. Advantages of Rest Assured?
6. What is use of Rest Assured class in rest Assured?
7. What is JSON & what is the Advantages
8. What is URI?
9. What is the syntax of URL & explain?
10. What is Base URI & End Point & Port number
11. What all the CRUD operation in restAssured?
12. Types of parameters available in Rest Assured?
13. Difference between PATH, Query, Form , PARAM parameters in RestAssured?
14. Where will you pass the content type?
15. What is all the authentication you know?
16. Types of Authentication available in RestAssured?
17. Difference between BasicAuth, Token, OAUTH-1.0, Oauth-2.0 Authentication in  RestAssured?
18. Tell me the difference between preemptive and digestive auth in rest assured
19. What is the Query parameter & why is it required?
20. What are the properties of the HttpRequest?
21. What is the parameter of the HttpResponseResponse?
22. How to check CRUD operation supported by API?
23. What is payload?
24. How many ways we can create a post Request in RestAssured ?
25. How to handle/post Huge Request body In RestAssured?
26. How to validate the response in RestAssured?
27. How to use BDD feature in RestAssured?
28. What is the use given(), when() , then() in RestAssured?
29. What is jsonpath() in RestAssured?
30. How to validate a huge json response body in RestAssured?
31. How to capture specific data form JSON response body ?
32. How to traverse in JSON response body
33. What is the use of Response API in restAssured;
34. What is Rest Web Service, which parser is being used to develop REST web Service?
35. Which unit testing tool you have used in the framework?
36. Which Framework have you used in API Testing?
37. What is the use of RequestSpecification API in restAssured?
38. What is the use of RequestSpeBuilder API in restAssured?
39. What is the use of ResponseSpeBuilder API in restAssured?
40. What is the use of ValidatbaleResponse API in restAssured?
41. If you perform any CRUD operation in Rest Assured and suppose that you get the result in the form of HTML instead of JSON and the status code is 200. What will your approach be to extract the data from the result and validate the same?

Scenario Based Questions

1. What tool are you using for backend automation?
2. what are the parameter are there ...and how to set path and query parameter and Can you set both at the same time
3. For designing the API framework what resources we need.?
4. Why do most of the companies prefer Soap web services. Which u want to prefer? and why?
5. what are the status code (explain which you got in your app)
6. How to set precondition in postman?
7. If you want to change base uri for multiple test cases...how you’ll do at one place
8. what and all you done in api? How much experience in api?
9. What are all validations you perform on the response body?
10. Have you performed end to end API testing?
11. how will you pass one response data into another API request?
12. What are all API's you tested?
13. How will you post data for login page details on request?
14. If you perform any CRUD operation in RestAssured and suppose that you get the result in the form of HTML instead of JSON and the status code is 200. What will your approach be to extract the data from the result and validate the same?
15. If you encounter 503 status code and if the server is up and running, what approach do you use to debug the issue?
16. Have you encountered 400 series status code, according to you what went wrong?
17. Scenario: if we have a new api with resource id, what all your approaches to test it, need to validate the database.
18. Why do we get internal server errors and how you will debug the logs?
19. In a post request you will always get status code as 201 only, not 200?
20. How do you put validation for response time in rest assured?