1. What is an API?

Answer: An API (Application Programming Interface) is a software intermediary that enables two

applications to communicate with each other. It comprises a number of subroutine definitions, logs,

and tools for creating application software.

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2. What are the main differences between API and Web Service?

Answer:

\* All Web services are APIs but not all APIs are Web services.

\* Web services might not contain all the specifications and cannot perform all the tasks that

APIs would perform.

\* A Web service uses only three styles of use: SOAP, REST, and XML-RPC for communication

whereas API may be exposed in multiple ways.

\* A Web service always needs a network to operate while APIs don’t need a network for operation.

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3. What are the Limits of API Usage?

Answer: Many APIs have a certain limit set up by the provider. Thus, try to estimate your usage

and understand how that will impact the overall cost of the offering. Whether this will be a

problem depends in large part on how data is leveraged.

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4. What are some architectural styles for creating a Web API?

Answer: This is one of the fundamental Web API interview questions. Bellows are four common

Web API architectural styles:

\* HTTP for client-server communication

\* XML/JSON as formatting language

\* Simple URI as the address for the services

\* Stateless communication

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5. Who can use a Web API?

Answer: Web API can be consumed by any clients which support HTTP verbs such as GET, PUT, DELETE,

and POST. Since Web API services do not require configuration, they can be easily used by any client.

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6. What is API documentation?

Answer: API documentation is a set of information that describes how to use and interact

with a software application programming interface (API). It provides details on available endpoints,

methods, request and response formats, parameters, and authentication requirements. API

documentation helps developers understand and effectively use the API in their applications

by providing clear and concise instructions.

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7. What are API documentation templates that are commonly used?

Answer: There are several available API documentation templates that help to make the entire

process simple and straightforward, which could be answered in your API testing interview,

such as:

\* Swagger

\* Miredot

\* Slate

\* FlatDoc

\* API blueprint

\* RestDoc

\* Web service API specification

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8. When writing API document, what must be considered?

Answer:

\* Source of the content

\* Document plan or sketch

\* Delivery layout

\* Information needed for every function in the document

\* Automatic document creation programs

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9. What is API Testing?

Answer: API testing is a kind of software testing that determines if the developed

APIs meet expectations regarding the functionality, reliability, performance, and

security of the application.

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10. What are the advantages of API Testing?

Answer:

1. Test for Core Functionality:

API testing provides access to the application without a user interface.

2. Time Effective:

API testing usually is less time-consuming than functional GUI testing. The web elements

in GUI testing must be polled, which makes the testing process slower.

3. Language-Independent:

In API testing, data is exchanged using XML or JSON. These transfer modes are completely

language-independent, allowing users to select any coding language.

4. Easy Integration with GUI:

API tests enable highly integrable tests, which is particularly useful if you want to perform

functional GUI tests after API testing.

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11. What are the principles of an API test design?

Answer: The five most important principles of an API test design are:

\* Setup: Create objects, start services, initialize data, etc

\* Execution: Steps to apply API or the scenario, including logging

\* Verification: Oracles to evaluate the result of the execution

\* Reporting: Pass, failed, or blocked

\* Clean up: Pre-test state

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12. What are the common API testing types?

Answer: There are certainly specialty tests

Validation Testing

Functional Testing

UI testing

Load testing

Runtime/ Error Detection

Security testing

Penetration testing

Fuzz testing

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13. What is URI?

Answer: A URI, or Uniform Resource Identifier, is a string that uniquely identifies a resource, like a

web page or file, on the internet. It can be a URL indicating its location or a URN giving it a unique name.

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14. What are HTTP status codes?

Answer: HTTP status codes are three-digit numbers returned by a web server to indicate

the success, failure, or other state of a client's request. They convey information about the

outcome of the HTTP request and are categorized into groups, such as 2xx for success,

4xx for client errors, and 5xx for server errors.