

### Q1)WHAT IS A WEB SERVICE?

A Web service is a software system designed to support interoperable machine-to-machine interaction over a network.

It has an interface described in a machine-processable format (specifically WSDL). Other systems interact with the Web service

in a manner prescribed by its definition

Web services are platform independent as they use open protocols for description using SOAP messages, typically conveyed

using HTTP with an XML serialization in conjunction with other Web-related standards.

### Q2)EXPLAIN DIFFERENCE BETWEEN WEBSITE AND WEB SERVICE.

#### A)WEB SERVICE:

A web service doesn't have a user interface.

Web services are meant for other applications to be interacted with over the internet.

Web services are platform independent as they use open protocols.

Web services are accessed by HTTP methods – GET, POST, PUT, DELETE, etc.

E.g. Google maps API is a web service that can be used by websites to display Maps by passing coordinates to it.

#### B)WEBSITES:

A website has a user interface or GUI.

Websites are meant for use by humans.

Websites are cross-platform as they require tweaking to operate on different browsers, operating systems, etc.

Websites are accessed by using their GUI components – buttons, text boxes, forms, etc.

E.g. ArtOfTesting.com is a website that has a collection of related web pages containing tutorials.

### Q3)WHAT IS URL?WHAT ARE THE PARTS IN URL?

A URL (Uniform Resource Locator) is a unique identifier used to locate a resource on the Internet.

It is also referred to as a web address. URLs consist of multiple parts -- including a

protocol and domain name -- that tell a web browser how and where to retrieve a resource.

## PARTS OF A URL

Using the URL <https://www.techtarget.com/whatis/search/query?q=URL> as an example, components of a URL can include:

1.The protocol or scheme. Used to access a resource on the internet. Protocols include http, https, ftps, mailto and file.

The resource is reached through the domain name system (DNS) name. In this example, the protocol is https.

2.Host name or domain name. The unique reference the represents a webpage. For this example, [whatis.techtarget.com](https://www.techtarget.com/whatis).

3.Port name. Usually not visible in URLs, but necessary. Always following a colon, port 80 is the default port for web servers,

but there are other options. For example, :port80.

4.Path. A path refers to a file or location on the web server. For this example, [search/query](https://www.techtarget.com/whatis/search/query).

5.Query. Found in the URL of dynamic pages. The query consists of a question mark, followed by parameters. For this example, ?.

6.Parameters. Pieces of information in a query string of a URL. Multiple parameters can be separated by ampersands (&).

For this example, q=URL.

7.Fragment. This is an internal page reference, which refers to a section within the webpage.

It appears at the end of a URL and begins with a hashtag (#).

Although not in the example above, an example could be #history in the URL <https://en.wikipedia.org/wiki/Internet#History>.

#### Q4)WHAT IS A DOMAIN?

A domain is a network of computers and devices that are controlled by one set authority and have specific guidelines.

More specifically, a domain is controlled by one particular company that has its own internet presence and IP address.

The domain is labeled by its domain name, such as Webopedia or webopedia.com.

#### Q5) WHAT IS HOSTING?

Hosting, in its most generic sense, is a service through which storage and computing resources are providing to

an individual or organization for the accommodation and maintenance of one or more websites and related services.

While hosting doesn't need to be IP-based, the vast majority of instances are web-based services that allow a website

or web service to be globally accessible from the Internet.