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Q1: What Is URL?

A URL, Which Stands For Uniform Resource Locator, Is A Web Address Used To Locate Resources On The Internet. It Specifies The Protocol For Accessing The Resource (E.G., HTTP Or HTTPS), The Domain Or IP Address Of The Server, And The Path To The Specific Resource, Such As A Web Page Or A File. In Simple Terms, A URL Is The Address You Type Into A Web Browser To Visit A Website Or Access A Web Resource.

Q2: Difference Between HTTP And HTTPS:

HTTP (Hypertext Transfer Protocol) And HTTPS (Hypertext Transfer Protocol Secure) Are Both Communication Protocols Used For Transmitting Data Over The Internet, But They Differ In Terms Of Security.

- **HTTP:** It Is The Standard Protocol For Transmitting Data Between A Web Server And A Web Browser. Data Transferred Over HTTP Is Not Encrypted, Making It Susceptible To Eavesdropping And Data Tampering. It Is Suitable For Non-Sensitive Information.
- **HTTPS:** It Is A Secure Version Of HTTP. It Uses Encryption Mechanisms Like SSL/TLS To Ensure That Data Exchanged Between The Web Server And The Browser Is Encrypted And Secure. This Makes HTTPS Essential For Protecting Sensitive Information, Such As Personal Data And Financial Transactions, On The Web. Websites Using HTTPS Are Indicated By A Padlock Icon In The Browser's Address Bar.

In Summary, The Key Difference Is That HTTP Is Not Secure, While HTTPS Adds A Layer Of Security Through Encryption, Making It Safer For Transmitting Sensitive Data Online.

Q3: What Is DOM?

The Document Object Model (DOM) Is A Programming Interface For Web Documents. It Represents The Structure Of An HTML Or XML Document As A Tree-Like Structure, Where Each Element In The Document Is Represented As A Node In The Tree. This Tree Structure Allows Developers To Interact With And Manipulate The Content And Structure Of A Web Page Using Programming Languages Like Javascript. In Essence, The DOM Enables Dynamic

And Interactive Web Page Functionality By Allowing Developers To Access, Modify, Or Create Elements And Content On A Web Page, Making It A Fundamental Part Of Web Development.

Q4: What Are Meta-Tags?

Meta Tags Are HTML Elements That Provide Metadata About A Web Page. They Are Placed Within The ``<Head>`` Section Of An HTML Document And Are Not Visible To Users When They View The Web Page. Instead, They Serve Various Purposes:

- **Title:** `<Title>` Tag Defines The Title Of The Web Page, Which Appears In The Browser's Title Bar Or Tab.
- **Description:** `<Meta Name="Description" Content="...">` Provides A Brief Summary Or Description Of The Page's Content. Search Engines Often Use This For Search Results.
- **Keywords:** `<Meta Name="Keywords" Content="...">` Used To Specify Keywords Or Phrases Relevant To The Page's Content. However, Search Engines Rely Less On This Tag Today.
- **Character Encoding:** `<Meta Charset="UTF-8">` Specifies The Character Encoding Used On The Page, Typically Set To UTF-8 For Universal Compatibility.
- **Viewport:** `<Meta Name="Viewport" Content="Width=device-width, InitialScale=1">` Is Essential For Responsive Design, As It Controls How The Page Is Displayed On Different Devices.
- **Author:** `<Meta Name="Author" Content="...">` Attributes Are Used To Identify The Author Of The Page.
- **Robots:** `<Meta Name="Robots" Content="...">` Tells Search Engine Crawlers How To Handle The Page, Such As Indexing Or Following Links.

Meta Tags Help With SEO, Improve How Your Page Appears In Search Results, And Provide Essential Information For Browsers And Other Web Services To Understand And Render The Content Correctly.

Q5: What Is W3C?

The World Wide Web Consortium (W3C) Is An International Standards Organization That Develops And Maintains The Technical Standards And Guidelines For The World Wide Web. Founded In 1994 By Sir Tim Berners-Lee, The Inventor Of The World Wide Web, W3C Plays A Crucial Role In Ensuring The Interoperability And Long-Term Viability Of The Web.

It Is Responsible For Defining Web Technologies And Standards, Including HTML, CSS, And Many Other Web-Related Specifications, To Ensure Consistency And Compatibility Across Different Web Browsers And Platforms. W3C's Work Helps Shape The Web's Evolution And Accessibility, Making It An Essential Organization In The Field Of Web Development And Standardization.

Q6: Names Of The Different Doctypes Of Different Versions Of HTML:

The Names Of Doctypes For Different Versions Of HTML Without The Full Declarations:

- **HTML5**
- **XHTML 1.0 Strict**
- **HTML 4.01 Strict**
- **HTML 4.01 Transitional**
- **XHTML 1.1**
- **XHTML 1.0 Transitional**
- **HTML 3.2**
- **HTML 2.0**