1 How internet works?

The internet is a worldwide computer network that transmits a variety of data and media across interconnected devices. It works by using a packet routing network that follows Internet Protocol (IP) and Transport Control Protocol (TCP)

2.How browser works?
The browser is a rendering engine. Its job is to download a web page and render it in a way that's understandable by a human being.

- DNS resolution
- HTTP exchange
- Rendering
- Rinse and repeat

3.What is Server?

A server is a computer or system that provides resources, data, services, or programs to other computers, known as clients, over a network. In theory, whenever computers share resources with client machines they are considered servers.server, network computer, computer program, or device that processes requests from a client (see client-server architecture). On the World Wide Web, for example, a Web server is a computer that uses the HTTP protocol to send Web pages to a client's computer when the client requests them.

4.What are the types of server available?

- Web Server.
- Database Server.
- Email Server.
- Web Proxy Server.
- DNS Server.
- FTP Server.
- File Server.
- DHCP Server.

5.what is SEO?importance of SEO?

SEO means Search Engine Optimization and is the process used to optimize a website's technical configuration, content relevance and link popularity so its pages can become easily

findable, more relevant and popular towards user search queries, and as a consequence, search engines rank them better.

SEO is crucial because it makes your website more visible, and that means more traffic and more opportunities to convert prospects into customers. Check out the SEO tools you can use for optimal ranking.

6.What is Accessibility?

Accessibility is the practice of making information, activities, and/or environments sensible, meaningful, and usable for as many people as possible. A common example of accessibility that we have all likely encountered, is in the context of architectural design

7.What is Markup Language?.

A markup language is a system of annotating a document to describe its structure and presentation. It uses tags or codes to define elements such as headings, paragraphs, lists, images, links, and more.

8.What is HTML?

HTML stands for Hyper Text Markup Language. HTML is the standard markup language for creating Web pages. HTML describes the structure of a Web page. HTML consists of a series of elements. HTML elements tell the browser how to display the content.

9.What is browser engine?

The underlying software that turns HTML pages into the Web page the user sees. A browser engine includes the programming interface (API) and the rendering engine, which converts HTML and JavaScript into text and images for the screen and printer. Also called a "layout engine," a browser engine is also used by email programs that support HTML (most do), as well as other applications that render Web content. Following is a sampling of popular browsers. See API, HTML, JavaScript, HTML email and render.

10.What is rendering engine?share the available rendering engine?

This component is responsible for rendering a specific web page requested by the user on their screen. It interprets HTML and XML documents along with images that are styled or formatted using CSS, and a final layout is generated, which is displayed on the user interface ,Common rendering engines are Corona renderer, Vray, Redshift, Fstorm, Lumion, Octane or Cycles (proprietary of Blender).

11. What is Javascript Engine?share the available JS engine?Purpose of JS Engine?

A **JavaScript engine** is a software component that executes JavaScript codeJavaScript engines are typically developed by web browser vendors, and every major browser has one. In a browser, the JavaScript engine runs in concert with the rendering engine via the Document Object Model and Web IDL bindings. However, the use of JavaScript engines is not limited to browsers; for example, the V8 engine is a core component of the Node.js runtime system.

Browser	Name of Javascript Engine
Google Chrome	V8
Edge (Internet Explorer)	Chakra
Mozilla Firefox	Spider Monkey

Safari	Javascript Core Webkit

A JavaScript engine is a computer program that executes JavaScript code and converts it into computer understandable language. Let's understand each of them

12 How website works?

A website is a collection of interlinked web pages accessed via the Internet. It delivers information, entertainment, or services to users through a web browser on computers or mobile devices.

13.What is Data structure?

A data structure is a specialized format for organizing, processing, retrieving and storing data. There are several basic and advanced types of data structures, all designed to arrange data to suit a specific purpose. Data structures make it easy for users to access and work with the data they need in appropriate ways.

14.Explain Tree Data structure?

A tree data structure is defined as a collection of objects or entities known as nodes that are linked together to represent or simulate hierarchy. A tree data structure is a non-linear data structure because it does not store in a sequential manner.

15.What is user agent?Share the list and its purpose?

A user agent is a relatively short bit of text that (attempts to) describe the Software/Browser (the "Agent") that is making the request to a website. Web browsers include the user agent string in the requests they make to websites. The User Agent often includes descriptions of the Operating System and Device Type that the Browser/Agent is running on. retrieving and facilitating end-user interaction with Web content.

16.what is Hypertest?

Hypertext is text which is not constrained to be linear.

Hypertext is text which contains links to other texts. The term was coined by Ted Nelson around 1965 (see History).

HyperMedia is a term used for hypertext which is not constrained to be text: it can include graphics, video and sound , for example. Apparently Ted Nelson was the first to use this term too.

Hypertext and HyperMedia are concepts, not products.

17.What is HTML Tages?

<html> Tag	The <html> tag is the root element of an HTML document. It encapsulates the entire content of the page.
<head> Tag	The <head> tag contains meta-information about the HTML document, such as the title, links to stylesheets, and character set declaration.
<body> Tag	The <body> tag encloses the main content of the HTML document, including text, images, links, and other elements.

Heading Tags <h1> to <h6>	Heading tags are used to define headings in HTML, ranging from <h1> as the largest to <h6> as the smallest.
Paragraph Tag <p>	The <p> tag is used to define paragraphs of text.
Anchor Tag <a>	The <a> tag creates hyperlinks. The href attribute specifies the URL of the linked page.
Image Tag <img>	The <img> tag is used to embed images. The src attribute specifies the image file.
List Tags , ,	HTML supports both unordered lists ( ) and ordered lists ( ), with list items ( ) defining each list item.
bold Tag <b>	The bold tag in HTML is used to specify the bold text without any extra importance.

18.What is HTML Attributes?

- HTML attributes are special words which provide additional information about the elements or attributes are the modifier of the HTML element.
- Each element or tag can have attributes, which defines the behaviour of that element.
- Attributes should always be applied with start tag.
- The Attribute should always be applied with its name and value pair.

19.what is HTML Elements?

An HTML file is made of elements. These elements are responsible for creating web pages and define content in that webpage. An element in HTML usually consist of a start tag <tag name>, close tag </tag name> and content inserted between them. **Technically, an element is a collection of start tag, attributes, end tag, content between them**.

20.How do convert elements to tree?

Define the Structure: Decide on the structure of your tree. A basic tree structure consists of nodes where each node can have children nodes (subtrees).Identify Root: Determine the root node of your tree. This is typically the top-most element or the starting point of your hierarchy.Represent Nodes: Each element you want to convert into the tree becomes a node. Nodes usually contain some data and a list of child nodes.Establish Parent-Child Relationships: For each element/node, identify its parent (if any) and its children. This creates the hierarchical structure.Construct the Tree: Build the tree by connecting nodes based on their parent-child relationships. You can do this iteratively or recursively depending on your preference and the nature of your data.

21.What is DOCTYPE?

HTML Doctypes declared at the beginning of HTML documents, inform browsers about the document type and version, ensuring correct rendering. They aren't HTML tags but provide essential information. The most common doctype is **<!DOCTYPE html>**

22.What are the the ways we can save html file?

- To save the file is saved in its current location with its current name, do one of the following:
- On the main menu, click File > Save. On the HTML editor toolbar, click the Save icon . Press CTRL+S. Right-click within the HTML document, click File > Save.

23.what is charset?why we need to use this?

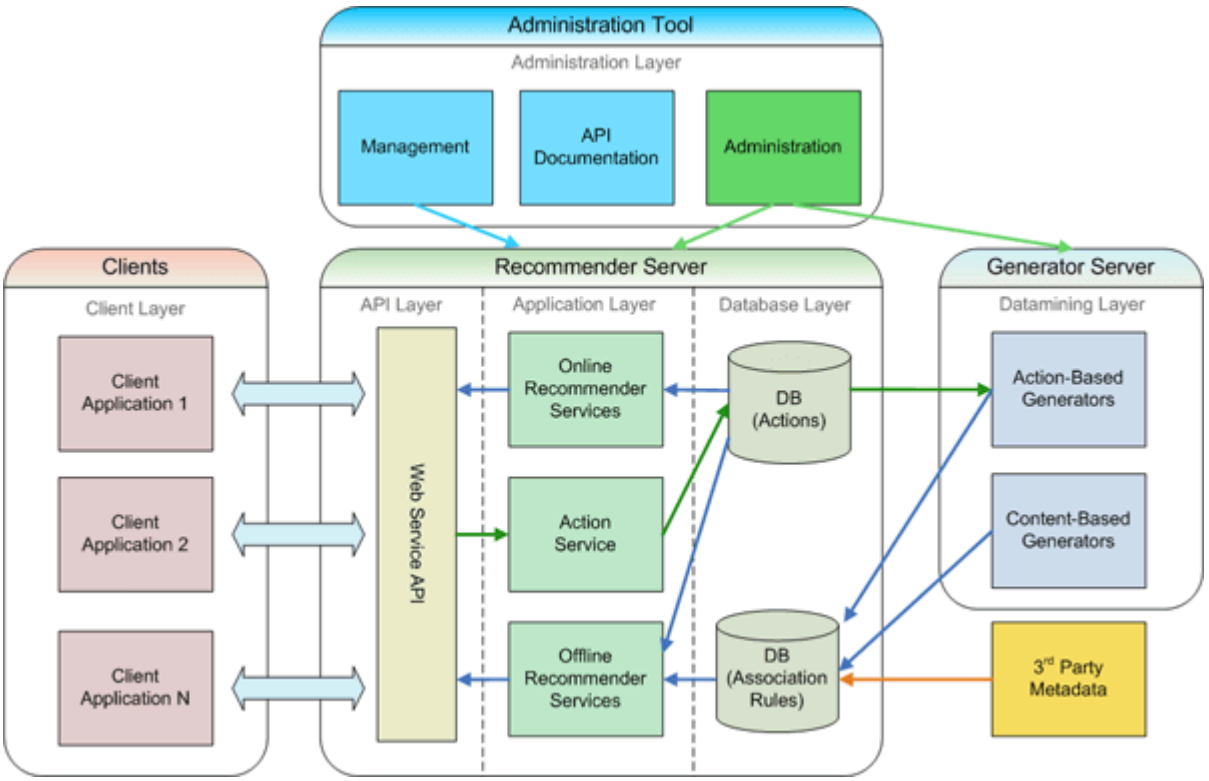
The charset attribute specifies the character encoding for the HTML document. The HTML5 specification encourages web developers to use the UTF-8 character set, which covers almost all of the characters and symbols in the world

24.What is meta data?what is the purpose of it?

Metadata is defined as the information that describes and explains data. It provides context with details such as the source, type, owner, and relationships to other data sets. So, it can help you understand the relevance of a particular data set and guide you on how to use it.

25.Explain Web Application Architecture?

The clearest example of the use of this type of architecture is eCommerce. In this type of website, the information on the site is hierarchized into levels. In total a structure of 3 or 4 levels.


Administration Tool
Administration Layer
Management
API Documentation
Administration
Clients
Client Layer
Client Application 1
Client Application 2
Client Application N
Recommender Server
API Layer
Application Layer
Database Layer
Web Service API
Online Recommender Services
Action Service
Offline Recommender Services
DB (Actions)
DB (Association Rules)
Generator Server
Datamining Layer
Action-Based Generators
Content-Based Generators
3rd Party Metadata