Base Building Assignment

Q1. What is the Internet? Explain in your own words.

The Internet is a global network of connected computers, servers, and other devices that communicate with each other through a standardised system of communication protocols. This network enables the sharing of information and resources such as text, images, audio, and video between devices connected to the Internet, regardless of their physical location. The Internet has become an essential part of modern life, providing a vast array of services and opportunities for communication, entertainment, education, commerce, and more.

Q2. What is a web browser? Explain in your own words.

A web browser is software that enables users to access, view, and interact with the vast array of resources available on the World Wide Web (WWW). The WWW is a collection of interconnected web pages and other content, such as images, videos, and audio files, that are accessible through the Internet. A web browser acts as a client, allowing users to request and receive these resources from servers connected to the Internet. Some examples of popular web browsers include Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge.

In simple terms, a web browser allows users to access the Internet and view web pages, just like how a television allows you to watch shows and movies. With a web browser, you can visit websites, perform online searches, send and receive emails, shop, and much more.

Q3. What is a browser engine? Explain in your own words.

A browser engine is the underlying software component of a web browser that is responsible for rendering web pages and executing JavaScript and other scripts. It acts as an intermediary between the browser's user interface and the network communication stack, interpreting the HTML, CSS, and JavaScript code that make up a web page, and rendering it in a format that can be displayed on a user's device.

In essence, the browser engine is what allows you to see and interact with web pages. It takes the code that makes up a page, interprets it, and then displays the resulting content on your screen. Different web browsers use different browser engines, each with its own strengths and weaknesses, which can impact the performance and behaviour of web pages. Some examples of browser engines

include WebKit (used by Safari), Gecko (used by Firefox), and Blink (used by Chrome).

Q4.What is a static site? Explain in your own words.

A static site is a type of website that contains fixed, unchanging content that is delivered to the user as is, without the need for any server-side processing. This is in contrast to dynamic sites, which generate content on the fly in response to user requests.

Static sites are typically composed of HTML, CSS, and JavaScript files, which are stored on a web server and served to the user's browser when a request is made. The content of a static site does not change unless the site's files are updated and republished, which means that the site is fast, secure, and easy to maintain. However, it also means that dynamic features like user input and database interaction are more difficult to implement.

Static sites are often used for simple brochure-style websites, portfolios, and blogs. They are also popular for their speed, low server requirements, and ease of deployment, as they do not require a database or any server-side scripting.

Q5.What is a dynamic site? Explain in your own words.

A dynamic site is a type of website that generates content on the fly in response to user requests. This means that the content of a dynamic site can change dynamically in real-time, providing a more interactive and personalised experience for the user.

Dynamic sites are typically powered by server-side scripting languages like PHP, Ruby on Rails, or Python, which run on a web server and generate HTML, CSS, and JavaScript code that is sent to the user's browser. This code can include dynamic elements like user input forms, database-driven content, and real-time updates.

Dynamic sites are well-suited for a variety of applications, including e-commerce sites, social networking sites, and complex web applications that require user interaction and data storage. They offer greater flexibility and functionality compared to static sites, but they can also be more complex to set up and maintain, and they may require more resources to run, such as a database and a web server.