WEB PROGRAMMING (3160713)

VVP
ENGINEERING
COLLEGE

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Assignment 1

To Study WWW, HTTP Protocol & Web Design Issues.

You need to explain WWW, How HTTP Works and various web design issues.

1. World Wide Web (WWW):

The World Wide Web, commonly known as the web, is an information space where documents and other web resources are identified by Uniform Resource Locators (URLs) and can be accessed via the internet. It is a system of interlinked hypertext documents that are accessed through the internet using web browsers.

Key Components:

- HTML (Hypertext Markup Language): The standard markup language for creating web pages and web applications.
- URL (Uniform Resource Locator): A reference or address used to access resources on the internet.
- Web Browsers: Software applications that retrieve and display web content.

2. HTTP (Hypertext Transfer Protocol):

HTTP is the foundation of data communication on the web. It is an application-layer protocol that allows web browsers to communicate with web servers. Here's a simplified explanation of how HTTP works:

-Client-Server Model: The web operates on a client-server model, where the client (web browser) makes requests, and the server responds.

-Request-Response Cycle:

1. Client Request: The client sends an HTTP request to the server to retrieve a particular resource (e.g., a web page).
2. Server Processing: The server processes the request and retrieves the requested resource.
3. Server Response: The server sends the resource back to the client as an HTTP response.
4. Client Rendering: The client (web browser) renders the received resource for the user.

- Stateless Protocol: HTTP is stateless, meaning each request from a client to a server is independent, and the server doesn't retain information about previous requests.

3. Web Design Issues:

Web design involves creating and maintaining websites. Several issues need attention to ensure a positive user experience:

-Responsiveness: Websites should be designed to be accessible and usable on various devices and screen sizes.

- User Interface (UI) and User Experience (UX):** Design elements and interactions should be intuitive, and the overall experience should be pleasant for users.

-Performance Optimization: Web pages should load quickly, and performance should be optimized to provide a seamless user experience.

-Accessibility: Websites should be designed to be accessible to users with disabilities, ensuring that everyone can use and navigate the site.

-Security: Implementing secure practices to protect user data and prevent unauthorized access is crucial.

-Cross-Browser Compatibility: Ensuring that websites function correctly across different web browsers.

-Search Engine Optimization (SEO): Designing and structuring the website in a way that makes it easily discoverable by search engines.

-Content Management: Efficient organization and management of content, ensuring it's up-to-date and relevant.

-Scalability: Designing websites that can handle increased traffic and content growth.

Understanding and addressing these issues contribute to the development of successful and user-friendly websites on the World Wide Web.