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COURSE: BSIT

COURSE UNIT: WEB AND MOBILE APPLICATION DEVELOPMENT

LAB 3 SUMMARY

Part 1: introduction to HTML

What is HTML?

HTML, or HyperText Markup Language, is the standard markup language for creating and designing web pages. It is used to structure content on the web and is essential for building the basic framework of a website. HTML provides a set of elements or tags that define the different parts of a web page, such as headings, paragraphs, links, images, tables, and more.

Why is it important in web development?

1. **Structuring Content:** HTML provides the fundamental structure for organizing content on the web. It allows developers to define the hierarchy of information on a webpage, including headings, paragraphs, lists, and more. This structured content is essential for both users and search engines to understand and navigate a website.

2. **Semantic Markup:** HTML includes semantic elements that convey meaning about the structure of the content. For example, using **<header>**, **<nav>**, **<article>**, **<section>**, and **<footer>** tags provides semantic information about the purpose and role of different sections on a webpage. This not only aids in accessibility but also helps search engines better understand the content.

3. **Linking Resources:** HTML includes elements like **<a>** (anchor) for creating hyperlinks. This enables the connection between different web pages and resources, allowing users to navigate seamlessly across a website or to external content.

4. **Media Integration:** HTML supports the embedding of multimedia elements such as images, audio, and video through tags like **<img>**, **<audio>**, and **<video>**. This allows developers to create rich and engaging user experiences by incorporating various types of media.

5. **Compatibility:** HTML is a standard that browsers understand and interpret uniformly. This ensures that web pages display consistently across different browsers and devices, providing a reliable user experience.

6. **Foundation for Styling (CSS) and Interactivity (JavaScript):** HTML works in tandem with Cascading Style Sheets (CSS) for styling and JavaScript for interactivity. HTML defines the structure and content, while CSS and JavaScript handle presentation and

behavior, respectively. This separation of concerns makes it easier to manage and maintain web projects.

7. **Accessibility:** Properly structured HTML enhances accessibility for users with disabilities. Semantic HTML elements, along with attributes like alt text for images, contribute to creating web content that can be effectively understood and navigated by people using assistive technologies.

8. **Search Engine Optimization (SEO):** Search engines use the HTML structure to index and rank web pages. Well-structured HTML with relevant semantic elements can positively impact a website's search engine visibility and ranking.

Part 2: Creating an HTML Document

Setting up a text editor which is a software application that is used to edit plain text files. There are many different text editors available. Some popular text editors for web development include visual studio code, sublime text and Notepad++

To create a new HTML file, one can simply create a new plain text file and save it with the .html extension

The Basic structure of an HTML document includes the following

HTML

<!DOCTYPE html>

<html>

<head>

<title>my web page</title>

</head>

<body>

</body>

</html>

To add content to your html document, one can use a variety of HTML tags such as <h>,<p> etc

Part 3: Elements and Attributes

1. **Tags:** HTML is composed of elements, which are defined by tags. Tags are enclosed in angle brackets (< >). Elements typically have opening and closing tags, with content between them. Example: **<p>Content goes here</p>**

2. **Attributes:** Attributes provide additional information about HTML elements and are included within the opening tag. They are always written in name/value pairs. Example: **Link**

3. **Nesting:** Elements can be nested inside each other. The hierarchy created by nesting elements defines the structure of the document. Example: **<div><p>Some text</p></div>**

Part 4: Creating a simple web page

To create a link to another web page, one can use the <a> tah which has an Href attribute which specifies the url of the page that you want to link to.

HTML provides a number of tags for creating lists and tables. Some common list and table tags include

 and <li> ordered list tags

 and <li> unordered list tags

<table>,<tr>,<th>,and <td> table tags

It is also important to validate the Html code to ensure that it is free of errors and there a number of online html validation tools available