HTML & CSS Detailed Revision Notes

# Detailed HTML Explanation

HTML (HyperText Markup Language) is used to create the structure of web pages.

It consists of a series of elements represented by tags. Each tag has a specific purpose.

1. <!DOCTYPE html>: Declares the document type and version of HTML (HTML5 in this case).

<!DOCTYPE html>

2. <html>: Root element of the HTML document. It wraps all the content.

<html lang="en">  
 ...  
</html>

3. <head>: Contains meta-information about the document, such as title and linked stylesheets.

<head>  
 <meta charset="UTF-8">  
 <title>Page Title</title>  
</head>

4. <body>: Contains all the content that appears on the web page, like text, images, etc.

<body>  
 <h1>Hello</h1>  
</body>

5. Headings: <h1> to <h6> tags define headings from most to least important.

<h1>Main Heading</h1>  
<h2>Subheading</h2>

6. <p>: Paragraph tag. Used for blocks of text.

<p>This is a paragraph.</p>

7. <a>: Anchor tag used for hyperlinks. 'href' specifies the link.

<a href="https://example.com">Visit Site</a>

8. <img>: Embeds images. Uses 'src' for image path and 'alt' for alternate text.

<img src="image.jpg" alt="Description" width="300">

9. Lists: <ul> for unordered and <ol> for ordered lists. <li> defines list items.

<ul>  
 <li>Item 1</li>  
 <li>Item 2</li>  
</ul>

10. Forms: Used to collect user input. Contains form controls like input fields and buttons.

<form action="/submit" method="post">  
 <input type="text" name="name">  
 <input type="submit">  
</form>

11. <div>: Generic container for grouping content. Useful with CSS for layout.

<div class="container">  
 <p>Content here</p>  
</div>

12. <span>: Inline container used to style parts of text.

<span style="color:red">Red Text</span>

# Detailed CSS Explanation

CSS (Cascading Style Sheets) is used to style HTML content.

It controls layout, colors, fonts, spacing, and more.

1. Syntax: A CSS rule-set consists of a selector and a declaration block.

selector {  
 property: value;  
}

2. Applying CSS:  
- Inline: directly in HTML tag  
- Internal: inside <style> tag in <head>  
- External: in separate .css file

<p style="color: red;">Inline styled text</p>

<style>  
p { color: blue; }  
</style>

<link rel="stylesheet" href="style.css">

3. Selectors: Target HTML elements for styling.  
- Tag selector  
- .class selector  
- #id selector

p { font-size: 16px; }  
.highlight { background: yellow; }  
#main { padding: 10px; }

4. Box Model: Every element is a box with content, padding, border, and margin.

div {  
 width: 100px;  
 padding: 10px;  
 border: 1px solid #000;  
 margin: 20px;  
}

5. Flexbox: A layout model for flexible responsive designs.

.container {  
 display: flex;  
 justify-content: space-around;  
}

6. Common Properties:  
- color, background-color  
- font-family, font-size  
- padding, margin, border  
- width, height, display

h1 {  
 color: navy;  
 background-color: lightgray;  
 padding: 10px;  
}