**Introduction to HTML**

**HTML (HyperText Markup Language)** is the standard language for creating web pages, structuring content, and integrating multimedia elements.

**Editors**

* **Text Editors**: Simple editors like Notepad or TextEdit for coding HTML.
* **HTML Editors**: Specialized editors like Visual Studio Code, Sublime Text, and Dreamweaver, offering syntax highlighting and auto-completion.

**Basics**

* **HTML Document Structure**: <!DOCTYPE html>, <html>, <head>, and <body>.
* **Elements**: Building blocks enclosed in tags, e.g., <p>, <h1>, <a>, <div>.
* **Attributes**: Provide additional information to elements, e.g., <img src="image.jpg" alt="image">.

**Headings**

* Defined using <h1> to <h6>. <h1> is the largest heading, <h6> the smallest.

**Paragraphs**

* Defined using <p>. Represents text content broken into paragraphs.

**Styles**

* CSS is used to style HTML elements: inline (<style>), internal (<style> within <head>), or external (linked .css file).

**Formatting**

* **Bold**: <b> or <strong>.
* **Italic**: <i> or <em>.
* **Underline**: <u>.
* **Superscript/Subscript**: <sup>, <sub>.

**Quotations**

* **Blockquote**: <blockquote> for long quotations.
* **Inline Quotes**: <q> for short, inline quotes.

**Comments**

* Comments are added using <!-- Comment here -->.

**CSS (Cascading Style Sheets)**

* Controls the design and layout of HTML pages.
* Selectors like classes (.), IDs (#), and element selectors target HTML elements for styling.

**Links**

* **Anchor tags (<a>)** define hyperlinks: <a href="url">Link Text</a>.
* **Target attribute** controls link behavior (e.g., open in a new tab with \_blank).

**Images**

* Displayed using the <img> tag: <img src="image.jpg" alt="description">.

**Tables**

* Created using <table>, with <tr> for rows, <td> for cells, and <th> for headers.

**Lists**

* **Ordered Lists**: <ol>.
* **Unordered Lists**: <ul>.
* **List Items**: <li>.

**Blocks**

* Block-level elements like <div>, <section>, and <article> control large sections of content.

**Classes and IDs**

* **Class**: Applied to multiple elements: <div class="classname">.
* **ID**: Unique to one element: <div id="unique-id">.

**Frames**

* **Inline Frames (<iframe>)** are used to embed another HTML page within a page: <iframe src="url"></iframe>.

**File Paths**

* Paths for linking files or images: absolute (https://example.com/image.jpg) or relative (images/pic.jpg).

**Head Element**

* Contains meta-information about the page: <meta>, <title>, <link>, <style>.

**Layout**

* Using CSS for layout design, including grids, flexbox, and positioning elements.

**Computer Code**

* <code> for inline code, <pre> for preformatted text, and <kbd> for keyboard input.

**Entities**

* Special characters like &lt; for <, &gt; for >, and &nbsp; for a non-breaking space.

**Symbols**

* Common symbols like &copy; (©), &reg; (®), and &euro; (€).

**Char Set**

* The character encoding is defined in <meta charset="UTF-8">.

**Color and Background of Web Pages**

* Controlled with CSS properties: background-color, color, and background-image.

**Hypertext, Hyperlink, and Hypermedia**

* **Hypertext**: Text linking to other documents.
* **Hyperlink**: Link to another document, controlled by <a>.
* **Hypermedia**: Incorporates multimedia (text, images, videos, etc.) in hyperlinks.

**Anchors and URLs**

* Anchor tags (<a>) link within the same page using href="#sectionID".
* **URLs**: Uniform Resource Locators that point to web resources.

**Links to External Documents**

* External links defined with <a href="url">Link</a> for linking to other websites.

**Different Sections of a Page and Graphics**

* Sections divided using semantic HTML tags: <header>, <footer>, <section>, and <article>.
* Graphics added via <img> tags or as CSS background images.

**Footnote and E-Mailing**

* **Footnotes**: Can be implemented with anchor links (<a href="#footnote1">).
* **Email**: <a href="mailto:example@example.com">Send Email</a> for email links.

**Creating Table, Frame, Form, and Style Sheet**

* **Tables**: <table>, <tr>, <td>, and <th>.
* **Frames**: Embedded content using <iframe>.
* **Forms**: <form> contains input elements like <input>, <select>, <textarea>.
* **Style Sheets**: External CSS files are linked with <link rel="stylesheet" href="style.css">.

These are foundational concepts that enable effective structuring and designing of web pages using HTML and CSS.