Part One - HTML Basics

01 – Concepts Related to Webpages

1. **URL (Uniform Resource Locator)**: The address we enter in the browser.
2. **Webpage**: Each individual page displayed by the browser.
3. **Website**: A collection of multiple webpages forming a single site.
4. **Web Standards**:

02 – A Taste of HTML

1. Step 1: Right—click => New => Text Document => Enter the following content and save.

```
<details>
    <summary>The secret to mastering programming:</summary>
    Subscribe to Codex and Start Coding Today!
</details>
```

2. Step 2: Change the file extension to `.html` , then double—click to open it.

The file extension `.htm` can also be used here, but the more standard `.html` is recommended.

3. Programmers write **source code**, which is handed over to the browser for rendering.

4. To view a webpage's **source code** using the browser, follow these steps:

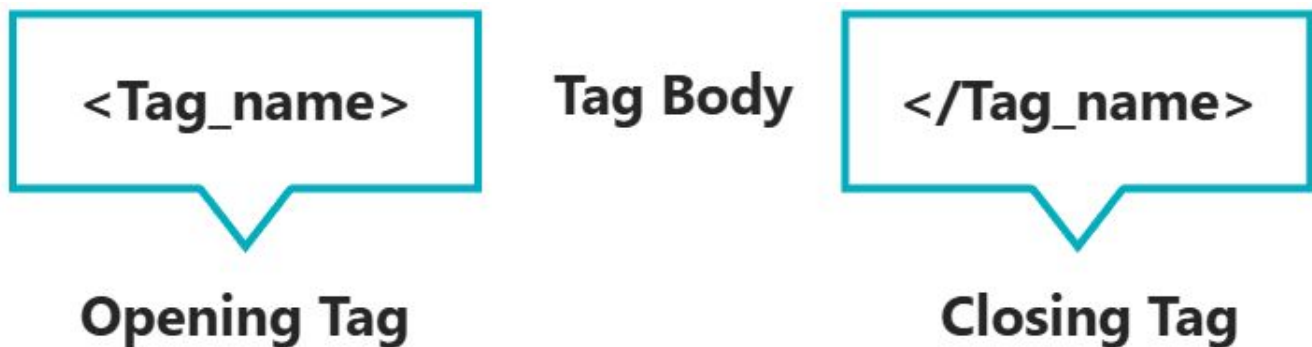Right—click on a blank area of the webpage => Select **View Page Source**.

03 – HTML Tags

1. **Tags,** also known as **elements**, are the basic building blocks of HTML.
2. Tags are categorized into: **paired tags** and **self—closing tags** (the vast majority are paired tags).
3. Tag names are **case—insensitive,** but lowercase is recommended as it is more standard.
4. **Paired tags**:

Example Code:

```
▼ <details>
      <summary>The secret to mastering programming:</summary>
      Subscribe to Codex and Start Coding Today!
  </details>
```

5. **Self–closing Tags:**

Note: The / in self-closing tags can be omitted
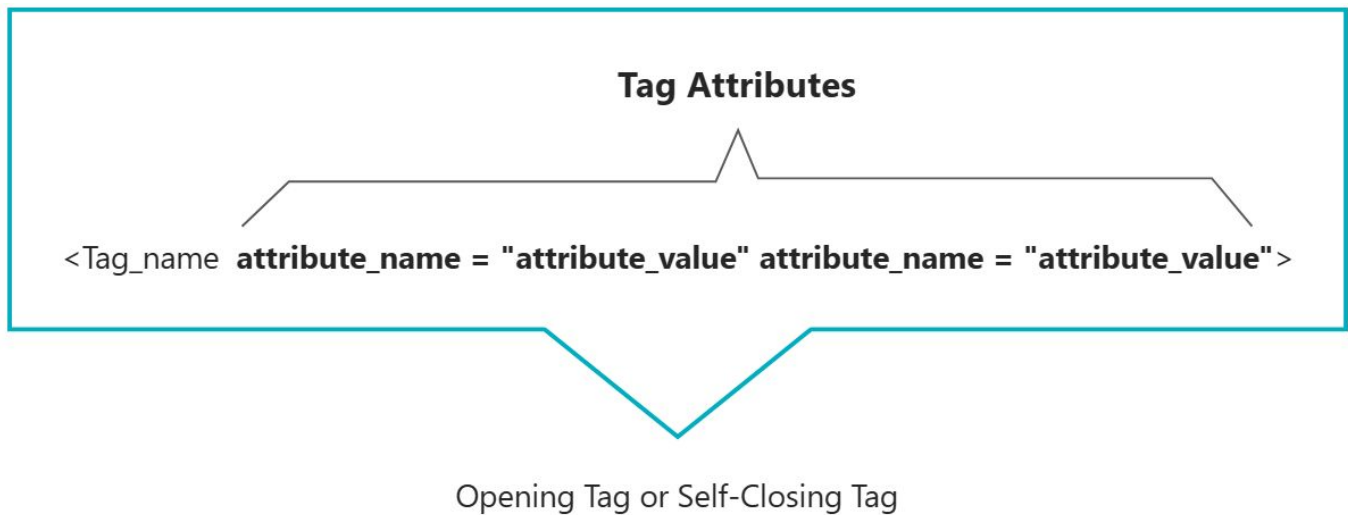
Example Code:

```
<input>
```

6. The relationships between tags: **parallel relationship** and **nested relationship**. Indentation can be done using the **Tab key:**

```
▼ <details>
    <summary>The secret to mastering programming:</summary>
    Subscribe to Codex and Start Coding Today!
    <input>
  </details>
  <input>
```

04 – HTML Tag Attributes

1. Used to provide **additional information** to tags.

2. Can be written in the **opening tag** or **self−closing tag**, as follows:

Tag Attributes

```
<Tag_name attribute_name = "attribute_value" attribute_name = "attribute_value">
```

Opening Tag or Self-Closing Tag

Example Code:

```
<progress value="45" max="100"> 45% </progress>
<input type="password">
```

3. Some special attributes do not have an attribute name, only an attribute value, such as:

```
<input disabled>
```

4. Points to Note:

1. Different tags have different attributes; there are also some common attributes (which can be written in any tag, to be summarized in detail later).

2. Attribute names and values should not be written arbitrarily, as they are defined by W3C.

3. Attribute names and values are case−insensitive, but lowercase is recommended.

4. Double quotes can be written as single quotes, or even omitted, but double quotes are still recommended.

5. Do not use the same attribute name multiple times within a tag, as the later ones will take effect. For example:

```
<input type="text" type="password">
```