Basic Web Design

HTML

LECTURE - 05

Recap

- HTML Color, Table
- HTML Images, Block & Inline Elements,
- **Homework**: Updating CV with images and tables
- *Class work: Design a html table that present the student list in our training session*

Course Contents

- HTML Links <a>
- HTML Forms

HTML Links <a>

- HTML links are hyperlinks. The HTML <a> tag defines a hyperlink.

- Which are clickable links that navigate the user to another webpage, a different section of the same page, or initiate a file download.

- When you move the mouse over a link, the mouse arrow will turn into a little hand.

- The <a> tag is defined with the href attribute, which specifies the destination URL.

- **Visit EDGE website!**

HTML Links

Visit EDGE website!

Basic Usage of <a> Tag

- Linking to External Websites:
  - Go to Google

- Linking to Internal Pages:
  - About Us

- Linking to a Section on the Same Page:
  - Go to Section 2
  - <h2 id="section2">Section 2</h2>
  - <p>Content for section 2.</p>

Email Links:

Use mailto: to create a link that opens the user's default email client.

Send Email

Telephone Links:

Use tel: to create a link that opens the phone dialer on mobile devices.

Call Us

Attributes of the <a> Tag

- By default, the linked page will be displayed in the current browser window. To change this, you must specify another target for the link.

- The `target` attribute specifies where to open the linked document.

- The `target` attribute can have one of the following values:

  - `_self` - Default. Opens the document in the same window/tab as it was clicked

  - `_blank` - Opens the document in a new window or tab

  - `_parent` - Opens the document in the parent frame

  - `_top` - Opens the document in the full body of the window

  - `_download` -Prompts the user to download a file instead of navigating to the link.

```
<a href="https://www.w3schools.com/" target="_blank">Visit W3Schools!</a>
```

Styling Links <a> Tag

- Default Link Styles - Links are typically underlined and blue by default.

- Customizing Link Styles:

```
1   <style>
2     a {
3       color: red;
4       text-decoration: none;
5     }
6
7     a:hover {
8       text-decoration: underline;
9     }
10  </style>
11  <a href="https://www.example.com">
12    Custom Styled Link</a>
```

Custom Styled Link

HTML Forms

- An HTML form is a section of a webpage that contains interactive controls, such as text fields, checkboxes, radio buttons, and submit buttons, allowing users to enter and submit data to a server.

- Forms are created using the <form> tag, which typically includes various input elements.

- Example:

  - `<form action="/submit-form" method="POST">`
  - `<!-- Form elements go here -->`
  - `</form>`

action: Specifies the URL where the form data will be sent.

method: Defines the HTTP method used to send data (GET or POST).

HTML Form Elements

Tag	Description
<form>	Defines an HTML form for user input
<input>	Defines an input control
<textarea>	Defines a multiline input control (text area)
<label>	Defines a label for an <input> element
<fieldset>	Groups related elements in a form
<legend>	Defines a caption for a <fieldset> element
<select>	Defines a drop-down list
<optgroup>	Defines a group of related options in a drop-down list
<option>	Defines an option in a drop-down list
<button>	Defines a clickable button
<datalist>	Specifies a list of pre-defined options for input controls
<output>	Defines the result of a calculation

HTML Form Input Types

- `<input type="text">` defines a **single-line text input field**

```
<form>
    <label for="fname">First name:</label><br>
    <input type="text" id="fname" name="fname"><br>
    <label for="lname">Last name:</label><br>
    <input type="text" id="lname" name="lname">
</form>
```

First name:

Last name:

- `<input type="password">` defines a **password field**

```
<form>
    <label for="username">Username:</label><br>
    <input type="text" id="username" name="username"><br>
    <label for="pwd">Password:</label><br>
    <input type="password" id="pwd" name="pwd">
</form>
```

Username:

BU CSE

Password:

•••••••

HTML Form Input Types

`<input type="submit">` defines a button for **submitting** form data to a **form-handler**. The form-handler is typically a server page with a script for processing input data.

```
<form action="/action_page.php">
    <label for="fname">First name:</label><br>
    <input type="text" id="fname" name="fname" value="John"><br>
    <label for="lname">Last name:</label><br>
    <input type="text" id="lname" name="lname" value="Doe"><br><br>
    <input type="submit" value="Submit">
</form>
```

First name:

BU

Last name:

CSE

Submit

- `<input type="button">` defines a **button**

```
<input type="button" onclick="alert('Hello World!')" value="Click Me!">
```

Click Me!

www.w3schools.com says

Hello World!

OK

HTML Form Input Types

`<input type="radio">` defines a **radio button**. Radio buttons let a user select ONLY ONE of a limited number of choices

```html
<form>
  <input type="radio" id="html" name="fav_language" value="HTML">
  <label for="html">HTML</label><br>
  <input type="radio" id="css" name="fav_language" value="CSS">
  <label for="css">CSS</label><br>
  <input type="radio" id="javascript" name="fav_language" value="JavaScript">
  <label for="javascript">JavaScript</label>
</form>
```

○ HTML
○ CSS
◉ JavaScript

`<input type="checkbox">` defines a **checkbox**. Checkboxes let a user select ZERO or MORE options of a limited number of choices.

```html
<form>
  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
  <label for="vehicle1"> I have a bike</label><br>
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
  <label for="vehicle2"> I have a car</label><br>
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
  <label for="vehicle3"> I have a boat</label>
</form>
```

☐ I have a bike
☐ I have a car
☐ I have a boat

HTML Form Input Types

The `<input type="dropdown">` defines a select from options.

```
<label for="country">Country:</label>
<select id="country" name="country">
  <option value="us">United States</option>
  <option value="ca">Canada</option>
  <option value="uk">United Kingdom</option>
</select>
```

Country: [United States ⌄]
United States
Canada
United Kingdom

The `<input type="search">` is used for search fields (a search field behaves like a regular text field).

```
<form action="/action_page.php">
  <label for="gsearch">Search Google:</label>
  <input type="search" id="gsearch" name="gsearch">
  <input type="submit" value="Submit">
</form>
```

Search Google: [_____] [Submit]

HTML Form Input Types

The `<input type="file">` defines a file-select field and a "Browse" button for file uploads.

```
<p>Show a file-select field which allows a file to be chosen for upload:</p>
<form action="/action_page.php">
  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile"><br><br>
  <input type="submit" value="Submit">
</form>
```

Show a file-select field which allows a file to be chosen for upload:

Select a file: [Choose File] No file chosen

[Submit]

The `<input type="date">` is used for picking date month year

```
<label for="date">Select a date:</label>
<input type="date" id="date" name="date">
```

Select a date: [mm/dd/yyyy 📅]

HTML Form Validation

Client-Side Validation:

HTML5 provides built-in validation attributes such as required, minlength, maxlength, and pattern to ensure users enter valid data.

Example:

```
<label for="email">Email:</label>
<input type="email" id="email" name="email" required>
```

Custom Validation Messages:

You can provide custom error messages using the title attribute or JavaScript.

Example:

```
<label for="password">Password (at least 8 characters):</label>
<input type="password" id="password" name="password" minlength="8" required title="Password must be at least 8 characters long">
```

HTML Form Submission Methods

GET Method:

Appends form data to the URL as query parameters.

Suitable for non-sensitive data and when bookmarking or sharing the form's results is useful.

POST Method:

Sends form data in the body of the HTTP request.

Used for sensitive data or when a large amount of data is being submitted.

Example:
- <form action="/submit-form" method="GET"> ... </form>
- <form action="/submit-form" method="POST"> ... </form>

Homework

Student Data

Name [Enter Your name]

Roll [   ]

Email [   ]

Gender ○ Male ○ Female ○ Other

date fo Birth [dd/mm/yyyy 📅]

Skills ☐ HTML ☐ CSS ☐ Bootstrap

[Insert]

End of Lecture

THANK YOU