Lab 2: Introduction to HTML Language (Part 1/2)

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1   Objectives

- Understand structural tags.

- Apply color formatting.

- Use character formatting tags.

- Implement block formatting tags.

- Format images, audio, and video.

- Create hyperlinks.

2   Setting Up the Code Editing Environment

2.1   Specifying Language

Add the appropriate attribute to the `<html>` tag to specify that the websites language is English.

```
1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <title>My first website</title>
5      </head>
6      <body>
7          My Site Contents
8      </body>
9  </html>
```

2.2 Declaring the Web Page Title

To complete this challenge, fulfill the following requirements:

1. Specify that the web page uses the UTF-8 character encoding.

2. Add a title to the web page with the content: `My Website`.

Hint:

- Create a standard HTML structure as learned.

- Specify UTF-8 character encoding.

- The `<meta charset>` tag should be declared first within the `<head>` tag.

- The `<title>` tag should contain the required content.

2.3 Heading Tags

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Below is the outline for a guide on installing Laravel (ignore the name; its just an example).

Outline:

- Installation
  - Meet Laravel
    - Why Laravel?
      - A Progressive Framework
      - A Scalable Framework
  - Your First Laravel Project
  - Laravel & Docker
    - Getting Started On macOS
    - Getting Started On Windows
    - Getting Started On Linux
    - Choosing Your Sail Services

When implemented, the article includes additional text as shown below. Observe and recreate the entire article in HTML.

Content:

- **Installation**

- **Meet Laravel**

  Laravel is a web application framework with expressive, elegant syntax.

- **Why Laravel?**

  There are a variety of tools and frameworks available to you when building a web application.

- **A Progressive Framework**

  We like to call Laravel a progressive framework. By that, we mean that Laravel grows with you.

- **A Scalable Framework**

  Laravel is incredibly scalable. Thanks to the scaling-friendly nature of PHP and Laravels built-in support for fast, distributed cache systems like Redis, horizontal scaling with Laravel is a breeze.

- **Your First Laravel Project**

  Before creating your first Laravel project, you should ensure that your local machine has PHP and Composer installed.

- **Laravel & Docker**

- **Getting Started On macOS**

  If youre developing on a Mac and Docker Desktop is already installed, you can use a simple terminal command to create a new Laravel project.

- **Getting Started On Windows**

  Before we create a new Laravel application on your Windows machine, make sure to install Docker Desktop.

- **Getting Started On Linux**

  If youre developing on Linux and Docker Compose is already installed, you can use a simple terminal command to create a new Laravel project.

- **Choosing Your Sail Services**

  When creating a new Laravel application via Sail, you may use the `with` query string variable to choose which services should be configured in your new applications `docker-compose.yml` file.

```
1  <!DOCTYPE html>
2  <html lang="en">
```

```
3 <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="width=device-width, initial-
         scale=1.0">
6     <title>Installation</title>
7 </head>
8 <body>
9
10 </body>
11 </html>
```

Hint:

- Use <h1> for the main title.

- Use <h2> for secondary headings.

- Use <h3> for tertiary headings.

- Use <h4> for quaternary headings.

- Use <p> for paragraph text.

3 Practical Exercises

3.1 Exercise 1: Create MyFirstWeb.html

Write a web page named MyFirstWeb.html.
Title: My first web
Content:
Hello world

Instructions:

- Save the file as MyFirstWeb.html.

- Open MyFirstWeb.html in a browser using Live Server mode.

3.2 Exercise 2: Create ThongTin.html

Create a web page named ThongTin.html with:
Title: Personal Information
Content:

```
Full Name: Nguyen Van An
Year of Birth: 1990
Student ID: 123456789
```

Instructions:

- Save the file.

- Open `ThongTin.html` in a browser using Live Server mode.

Hint: Use the `<pre>` tag to preserve the formatting of the content as it appears during editing.

3.3   Exercise 3: Modify to ThongTin1.html

Modify `ThongTin.html` to create `ThongTin1.html` with:
Title: Personal Information
Content:

```
Full Name: Nguyen Van An
Year of Birth: 1990
Student ID: 123456789
Hobbies: traveling, singing, and liking all sorts of things...
```

Instructions:

- Save the file.

- Open `ThongTin1.html` in Internet Explorer using Live Server mode.

Hint: Explore the following tags:

- `<u>`: Underlines text.

- `<s>`: Strikes through text.

- `<b>`: Bolds text.

3.4   Exercise 4: Modify to ThongTin2.html

Modify `ThongTin1.html` to create `ThongTin2.html` with:
Title: Personal Information
Content:

```
Full Name: Nguyen Van An
Year of Birth: 1990
Student ID: 123456789
Hobbies: traveling, singing, and liking all sorts of things...
Really hate cold people like icy glaciers below 0řC.
Love drinking lots of water (H2O)
```

Instructions:

- Save the file.

- Open `ThongTin2.html` in a browser.

Hint: Explore the following tags:

- `<sub>`: Creates small text positioned below the baseline.

- `<sup>`: Creates small text positioned above the baseline.

Note: Color Formatting in HTML Before proceeding to Exercise 5, understand the methods to change text color in HTML:

- **Inline**: CSS is written in the `style` attribute of an HTML element.

- **Internal**: CSS is included within the HTML document, inside a `<style>` block.

- **External**: CSS is in a separate file (usually with a `.css` extension), linked to the HTML using the `<link>` tag.

Reference: `https://xuanthulab.net/css-la-gi-cach-nhung-ma-css-vao-html.html`

3.5 Exercise 5: Create NguoiBan.html

Create a web page named `NguoiBan.html` with:
Background Color: Blue
Text Color: Yellow
Title: Friend Information
Content:

```
Full Name: Ly Thi Bong Hoa
Year of Birth: 1990
Likes people who are kind, honest, and courageous.
Really hates deceitful, weak people.
```

Hint:

- Background color: `background-color: "blue"`

- Text color: `color: "yellow"`

3.6   Exercise 6: Modify to NguoiBan1.html

- Find a `*.jpg` image file on your computer.

- Copy the image to the folder containing your web pages.

- Rename the image to `AnhNen.jpg`.

- Modify `NguoiBan.html` to create `NguoiBan1.html`:

  – Keep the content and title unchanged.

  – Remove the background color.

  – Set `AnhNen.jpg` as the background image.

Hint:

- Create a dedicated folder for images to manage them better.

- Use `background-image: url("path/to/folder/AnhNen.jpg")` within the `body` tag.

3.7   Exercise 7: Create ThongTin3.html and NguoiBan2.html

- Modify `ThongTin2.html` to create `ThongTin3.html`:

  – Add a link to `NguoiBan2.html` at the end of the page with the hypertext Friends Page.

- Modify `NguoiBan1.html` to create `NguoiBan2.html`:

  – Add a link to `ThongTin3.html` at the end of the page with the hypertext Information Page.

- Open `ThongTin3.html` in a browser and test navigation between the pages.

Hint:

- The `<a>` tag creates hyperlinks to web pages, files, emails, etc. a stands for anchor.

- Usage: `<a href="link">Clickable text</a>`

- Example:

```
1        You can <a href ="https :// it - global . net / " > click here </a>
            to visit Tancools website .
```

3.8 Exercise 8: Using the <img> Tag

The `<img>` tag displays images on a web page. img stands for image. Images are widely used for logos, avatars, banners, and product images on e-commerce sites.

Usage:

```
1 <img src =" image_link " />
```

Example:

```
1 <img src =" https :// public - images /62 cfddba4e934 . png " />
```

3.8.1 Task 1: Display an Image

Display the following image in a browser:

https://online.vlu.edu.vn/Content/logo/banner-yersin.jpg

```
1 <!DOCTYPE html >
2 <html lang ="en">
3 <head >
4     <meta charset ="UTF -8">
5     <meta http - equiv ="X-UA - Compatible " content ="IE=edge ">
6     <meta name =" viewport " content =" width = device - width , initial -
           scale =1.0">
7     <title >Document </title >
8 </head >
9 <body >
10
11 </body >
12 </html >
```

3.8.2 Task 2: Display an Image with Specific Size

Choose an image URL and display it at a size of 100x100 pixels.

Requirements:

- Use the provided image URL.

- Set the image size to 100x100 pixels.

3.8.3 Task 3: Display an Image with Alternate Text

Given an image URL, display it in a browser with alternate text: `itvlu`.

3.9 Exercise 9: Using <ul> and <li> Tags

The `<ul>` and `<li>` tags create unordered lists, commonly used in article content. ul stands for unordered list, and li stands for list item.

Usage:

```
1  <ul>
2      <li>Content 1</li>
3      <li>Content 2</li>
4      <li>Content 3</li>
5  </ul>
```

Complete the code to create a list as follows:
Three languages that web browsers understand:

- HTML

- CSS

- Javascript

3.10 Exercise 10: Using <ol> and <li> Tags

Similar to `<ul>` and `<li>`, the `<ol>` and `<li>` tags create ordered lists with numbered items. ol stands for ordered list.

Usage:

```
1  <ol>
2      <li>Content 1</li>
3      <li>Content 2</li>
4      <li>Content 3</li>
5  </ol>
```

Create an `<ol>` tag containing 10 `<li>` tags, each with the content `Item`.

3.11   Exercise 11: Modify to ThongTin4.html

Modify `ThongTin3.html` to create `ThongTin4.html`:

- Add a link to `http://tuoitre.vn` at the end of the page with the hypertext Tuoi Tre Newspaper.

- Add a link to send an email to `abc@domain.com` with the hypertext Send Email.

Hint:

- Use the `<a>` tag with `href` to link to the two addresses.

- Explore the `target` attribute: `_blank`, `_parent`.

3.12   Exercise 12: Create BangBieu.html

Write a web page named `BangBieu.html` to create a table with 2 rows and 3 columns:

A	B	C
D	E	F

Note:

- `<td>`: Defines a cell in a table row.

- `<tr>`: Defines a table row.

- `align`: Aligns text in `<tr>` with values `left`, `right`, `center`.

- `cellspacing`: Sets the space between columns.

- `cellpadding`: Sets the space between cell borders and content.

- These tags are nested within `<table>` tags.

3.13   Exercise 13: Create BangBieu1.html

Copy `BangBieu.html` to create `BangBieu1.html` with the same table but with a border thickness of 1 pixel.

Hint:

- Use `border="1px"`.

References:

- `https://quantrimang.com/hoc/bang-bieu-trong-html-151504`

- `https://webcoban.vn/html/danh-sach-tat-ca-cac-the-trong-html-theo-the-loai.html`

4 General Requirements

- Use a text editor (e.g., VS Code) to create and edit HTML files.

- Follow the folder structure:

  ```
  Lab2/
   MyFirstWeb.html
   ThongTin.html
   ThongTin1.html
   ThongTin2.html
   ThongTin3.html
   ThongTin4.html
   NguoiBan.html
   NguoiBan1.html
   NguoiBan2.html
   BangBieu.html
   BangBieu1.html
   images/
       AnhNen.jpg
  ```

5 Submission

- Combine all files into a folder named: `LAB2_StudentID_FullName`.

- Create a `.docx` file, paste screenshots of your exercise results, and include it in the folder.

- Upload the folder to GitHub following the instructions from Lab 1.