Course: Web Application Development
Lab Instructor: Assoc. Prof. Nguyen Van Sinh
MSc. Nguyen Trung Nghia
Email: nvsinh@hcmiu.edu.vn

Lab 4: Advance HTML and CSS.

Contents:
- o **Objects**
- o **Form**
- o **Bootstrap**
- o **Exercises**

Duration: 3 hours

Part 1: Objects

Textbox

```
<input type="text" name ="T1" size="33">
```

Check-box

```
<input type="checkbox" name="c1" value="ON">Computer Graphic <br>
<input type="checkbox" name="c2" value="ON">Computer Network <br>
<input type="checkbox" name="c3" value="ON">Introduction to Computer<br>
<input type="checkbox" name="c4" value="ON">Web Programming<br>
```

Radio

```
<input type="radio" value="r1" checked name="red">Red
<input type="radio" value="r2" checked name="blue">Blue
<input type="radio" value="r3" checked name="green">Green
```

Button

```
<input type="submit" value="Submit" name="s1">
<input type="reset" value="Reset" name="s2">
```

Combo-box

```
<select name="Type">
    <option value= "Reading">Reading</option>
    <option value= "Reading">Whatching TV</option>
    <option value= "Reading">Studying</option>
    <option value= "Reading">Shoping</option>
    <option value= "Reading">Internet</option>
</select>
```

Text-area

```
<textarea rows="number of rows" name="tr1" cols="number of columns">
</textarea>
```

Part 2: Deploy your web page using GitHub

We can host a static HTML website for free on Github. You can only host static websites (HTML, CSS, JavaScript, including react, angular, bootstrap). You won't be able to upload a web application with a server (python flask/django, ruby on rails, node.js/express, etc).
The steps are as followed:

1. Create a GitHub account and login
2. Create a repository and name it {username}.github.io if it's a personal website; else, name it whatever you like.
3. Upload your web page files to the new repository
4. Go to settings, pages, and click on source. Change 'none' to 'master' or 'main' (or whichever branch you'd like)
5. Your website will have this structure: {username}.github.io/{repository-name}

Part 3: Bootstrap: [Introduction · Bootstrap v4.6 (getbootstrap.com)](#)

Build fast, responsive sites with Bootstrap

Powerful, extensible, and feature-packed frontend toolkit. Build and customize with Sass, utilize prebuilt grid system and components, and bring projects to life with powerful JavaScript plugins.

start bootstrap.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.2/dist/css/bootstrap.min.css">
  <script
src="https://cdn.jsdelivr.net/npm/jquery@3.7.1/dist/jquery.slim.min.js"></script>
  <script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"></script>
  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.2/dist/js/bootstrap.bundle.min.js"></script>
```

```
</head>
<body>

<div class="jumbotron text-center">
  <h1>My First Bootstrap Page</h1>
  <p>Resize this responsive page to see the effect!</p>
</div>

<div class="container">
  <div class="row">
    <div class="col-sm-4">
      <h3>Column 1</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit...</p>
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris...</p>
    </div>
    <div class="col-sm-4">
      <h3>Column 2</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit...</p>
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris...</p>
    </div>
    <div class="col-sm-4">
      <h3>Column 3</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit...</p>
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris...</p>
    </div>
  </div>
</div>

</body>
</html>
```

Now check out by yourself the Bootstrap compone and try to apply it [Bootstrap 4 Tutorial (w3schools.com)](#) or [Examples · Bootst+rap v4.6 (getbootstrap.com)](#)

Exercise 1 (15 pt): Deploy the personal web pages you which do on previous lab to the github.io and submit the link via your report.

Deployment Requirements

- GitHub account created and accessible - **2 points**
- Repository properly named (username.github.io or project name) - **3 points**
- All necessary files uploaded to repository (HTML, CSS, images) - **4 points**
- GitHub Pages enabled in repository settings - **3 points**
- Website accessible via provided GitHub Pages URL - **2 points**
- Link submitted in report and working correctly - **1 point**

Tutorial: [How to Host a Website On Github Pages (youtube.com)](#)

Exercise 2 (30 pt): You create a form like this:

Bonus: Applying Bootstrap to your form.

Checklist

Functionality Requirements (12 points)

- All required text input fields present (First Name, Last Name, Email, Date of Birth) - **3 points**
- Radio buttons work correctly for "How did you hear about us?" - **3 points**
- Checkboxes function properly for announcements preferences - **3 points**
- Dropdown/select menu implemented for contact method - **2 points**
- Submit button is present - **1 point**

HTML Structure & Semantics (8 points)

- Proper HTML5 document structure (DOCTYPE, html, head, body) - **2 points**

- Correct use of form elements and attributes (name, type, value) - **4 points**
- Appropriate input types used (text, email, date, radio, checkbox) - **2 points**

Visual Design & Layout (5 points)

- Form matches the design shown in the example - **2 points**
- Logo/header image displayed correctly - **1 point**
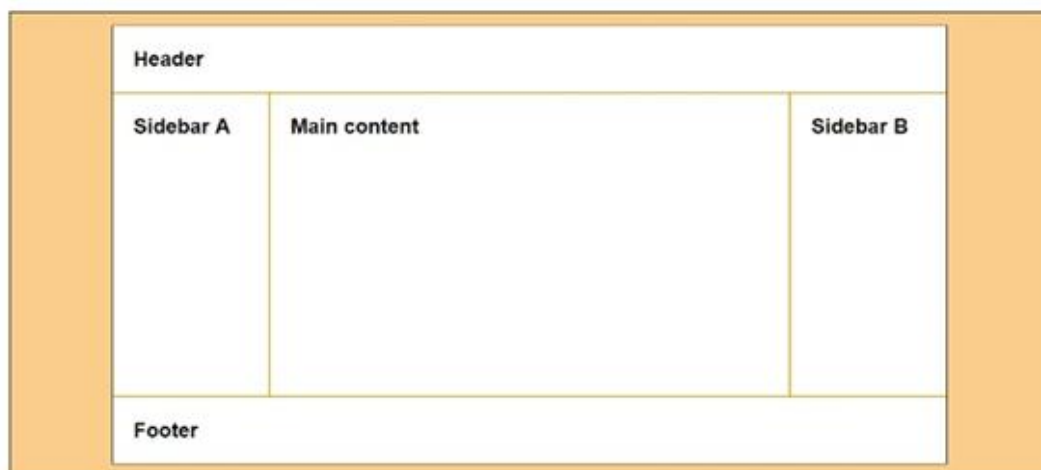- Proper spacing and alignment of form elements - **2 points**

Bootstrap Integration (Bonus - 5 points)

- Bootstrap CSS properly linked in document - **1 point**
- Bootstrap classes applied to form elements appropriately - **3 points**
- Responsive design works on different screen sizes - **1 point**

Subtotal: 30 points (+ 5 bonus)

Check BB to get source HTML code

Exercise 3: Implement the page here using Flexbox in a 3-column, fixed-width layout (20 point)

Checklist

Flexbox Implementation (10 points)

- Flexbox container properly defined (display: flex) - **2 points**
- Three columns created using Flexbox - **4 points**
- Fixed-width layout implemented correctly - **3 points**
- Columns maintain proper proportions - **1 point**

Layout Structure (6 points)

- Header section properly positioned and spans full width - **2 points**
- Sidebar A, Main content, and Sidebar B correctly arranged - **3 points**
- Footer section spans full width - **1 point**

Code Quality (4 points)

- Clean, semantic HTML structure - **2 points**
- Proper CSS flexbox properties used (flex-direction, justify-content, etc.) - **2 points**

Subtotal: 20 points

Exercise 4 (35 pt): Implement following pages using CSS, HTLM and applying Flexbox to layout the pages

Checklist

Layout Implementation (12 points)
- Flexbox used for overall page layout - **5 points**
- Two-column layout structure (main content + sidebar) correctly implemented - **4 points**
- Header section properly implemented with logo and title - **3 points**

Content & Elements (12 points)
- Logo and title ("San Joaquin Valley Town Hall") displayed correctly - **2 points**
- "This season's guest speakers" list formatted properly with names - **3 points**
- "Lecture notes" section included with all required details - **3 points**
- "Looking for a unique gift?" section present - **2 points**
- Contact information included - **2 points**

Styling & Visual Design (8 points)
- Orange/yellow header background color implemented - **2 points**
- Typography properly styled (fonts, sizes, colors) - **2 points**
- Borders and spacing match the design - **2 points**
- Overall color scheme matches specification - **2 points**

Code Quality (3 points)
- Clean, well-organized CSS - **2 points**
- Semantic HTML elements used appropriately - **1 point**

Subtotal: 35 points

Part 4: Homework
Implement following pages using HTML, CSS, and flexbox How to submit your work to BB

Navigation Bar (15 points)

- All navigation links present (Home, Speakers, Luncheons, Tickets, About Us) - **8 points**
- Navigation styled with proper colors and hover effects - **7 points**

Sidebar Navigation (20 points)

- Guest speakers list with photos - **10 points**
- "Our Mission", "Our History", "Board of Directors", etc. links present - **10 points**

Main Content Area (25 points)

- "Speaker of the Month" section properly formatted - **10 points**
- Featured speaker content with image and description - **10 points**
- "Our Ticket Packages" section included - **5 points**

Layout & Flexbox (25 points)

- Overall page uses Flexbox for layout - **10 points**
- Proper three-column structure (left sidebar, main content, right sidebar if applicable) - **10 points**
- Header and footer span full width - **5 points**

Styling & Visual Fidelity (15 points)

- Color scheme matches the design (orange/brown tones, burgundy navigation) - **5 points**
- Typography and font sizes appropriate - **5 points**
- Overall appearance closely matches the provided screenshot - **5 points**

For each exercise, hold your source code in separate folder. Capture your page, your code in the pdf report.

--- The end ---