MOAT ACADEMY FOR DEVELOPERS WEB APPLICATION DEVELOPMENT TRAINING

HTML TABLE AND FORM

HTML DAY 4

HTML TABLE

If you were to create this webpage for University of Birnin Kebbi?

TABLE

- Sometimes in your web application, you need to create a table which holds data just as you have it in word processing documents:

- A table is a structured set of data made up of rows and columns (**tabular data**).

- A table allows you to quickly and easily look up values that indicate some kind of connection between different types of data.

- It is a combination of nested tags

```
<table>
    <tr>
        <td> data </td>
    </tr>
</table>
```

TABLE

- An HTML table is defined with the <table> tag.

- Each table row is defined with the <tr> tag.

- A table header is defined with the <th> tag (instead of <td>). By default, table headings are bold and centered.

- A table data/cell is defined with the <td> tag.

- The <td> elements are the data containers of the table.

Contents can not be in the <tr> or <table> tag directly!

```
<table>
    <tr>
        <td> data </td>
    </tr>
</table>
```

QUIZ

- The table tag has **border** attribute that makes it look like thus:

- Create a table with the structure below.

- **What do you observe with the width? Any control over this?

Serial	Name	Score
1	John Williams	234
2	Damilola James	267

ATTRIBUTES OF HTML TABLE

- You will notice that the width of the table and each <td> grows with the contents

- The table element is somewhat rigid because the size of one <td> affects the other <td>s below and above it.

- You can make use of the width attribute to control the size of the width;

- Dimensions can be in px or %

- Rather than using <td></td> for the heading, we can separate the look and feel of the headings by replacing <td> with <th>

ATTRIBUTES OF HTML TABLE

- **QUIZ:** A table's dimension has been specified in % as shown below:

- What will be the width of the 'score' column ?

```
<table border="1" width="80%">
    <tr>
        <td width="30%">
            Serial
        </td>
        <td width="40%">
            Name
        </td>
        <td>
            Score
        </td>
    </tr>
</table
```

ATTRIBUTES OF HTML TABLE

- Other table attributes are: cellspace, cellpadding, align (alignment per td), height, bgcolor

- Cellspacing and Cellpadding: attribute of the table (not td)

- **EXERCISE:** Apply any of the above properties on the table you just created

- An optional <thead> element, <tbody> and <tfoot> (one benefit of this is we can apply the same styling to all the rows in the body by merely styling the tbody tag.

SPANNING TABLE ROWS, (ROWPAN)
SPANNING TABLE COLUMNS (COLSPAN)

- Understanding colspan

Name	Telephone	
Abidemi Oni	0803 4545 677	+155577855

- Understanding rowspan

Name:	Abidemi Oni
Telephone:	0803 455 6767
	+155577855

COLSPAN: one <td> occupying many <td> spaces

```
<table border='1'>
    <tr>
      <th>Name</th>
      <th colspan="2">Telephone</th>
    </tr>
    <tr>
      <td>Abidemi Oni</td>
      <td>0803 4545 677</td>
      <td>+155577855</td>
    </tr>
  </table>
```

RAW

```
<table border='1'>
    <tr>
     <th>Name</th>
     <th colspan="2">Telephone</th>
    </tr>
    <tr>
     <td>Abidemi Oni</td>
     <td>0803 4545 677</td>
     <td>+155577855</td>
    </tr>
   </table>
```

HTML TABLE LAYOUT - ROWSPAN

```html
<table border='1' width='100%'>
    <tr>
      <th>Name:</th>
      <td>Abidemi Oni</td>
    </tr>
    <tr>
      <th rowspan="2">Telephone:</th>
      <td>0803 455 6767</td>
    </tr>
    <tr>
      <td>+155577855</td>
    </tr>
  </table>
```

ATTRIBUTES OF HTML TABLE

S/N	Fullname	Email Adress	Phone No	Action
1	Funmi Hades	hades@yahoo.com	+234 8034556778	✎ Edit Details 🗑 Delete Account
2	Tayo Jacob	jacob@yahoo.com	+234 903789087	✎ Edit Details 🗑 Delete Account
3	Tunji Bello	bello@yahoo.com	+234 8056789090	✎ Edit Details 🗑 Delete Account

- A table just as it contains the lists of names can contain all sorts of HTML elements; text, images or links.

- Tables can also be nested; i.e, a table <td> can even contain another table!

- In web applications, a common use of the HTML table is in reporting. For example: we can display the list of all registered users

- **Exercise**: Using HTML table, design something similar to the above.

HTML FORM FOR DATA CAPTURE

PERSONAL INFORMATION

Patient Name: (Last) _____ (First)_____ (Middle)_____

Birth date: _____   Sex: M or F   Marital Status: S   M   D   W

Language: _____

Race: ☐ American Indian/Alaska Native   ☐ Asian   ☐ Black/African American
         ☐ Native Hawaiian /Other Pacific Islander   ☐ White   ☐ Choose not to answer

Ethnicity: ☐ Hispanic/Latino   ☐ Not Hispanic/Latino   ☐ Choose not to answer

Address: (Street)_____ (City/State)_____ (Zip)_____

Preferred Phone:_____ Type: Cell or Home or Business   Preferred Method of Contact: Phone   or   US Mail

E-mail: _____   Employment Status: _____

Guarantor Name:_____ Relationship to Guarantor: _____

Guarantor Address: (Street) _____ (City/State) _____ (Zip) _____

Emergency Contact: _____ Phone:_____ Relationship:_____

AKA/Nickname: _____ Patient Needs: _____

Referring Physician: _____ Address: _____

INSURANCE INFORMATION

Primary Insurance Co. Information: (name, address and phone # of person responsible for payment)

Insurance Company Name: _____ Phone: _____

Policy/ID Number: _____ Group #: _____ Effective Date: _____

Subscriber's Name: _____ Relationship to Patient_____

Subscriber's DOB: _____   Subscriber's Sex: _____

Address: _____ Phone: _____

Subscriber's Employer: _____

HTML FORM

- The form is used in capturing data from the users

- It facilitates dynamic contents on your website

- When automating any manual process, converting paper forms to their web equivalence is one of the important tasks you need to do.

- Data captured are sent to a page specified.

- The submit button is used in sending the data to the specified page

The <form> Element

The <form> Element
The HTML **<form>** element defines a form that is used to collect user input:

<form>
.
form elements
.
</form>

The form tag has 2 important attributes namely: **action** and **method** which specifies the destination page and the means of transporting the data to the destination

Name	Value
Name	
Sex	○ Male ⊙ Female
Eye color	green ▾
Check all that apply	☐ Over 6 feet tall ☐ Over 200 pounds
Describe your athletic ability:	
Enter my information	

FORM ELEMENTS

FORM ELEMENTS AT A GLANCE	
input	hidden, text, radio, checkbox, file, date, search, url, email, password, button,submit
textarea	-
label	-
select	multiple select, single select
button	reset, submit, button

- An HTML form contains **form elements**.

- Form elements are different types of input elements in different shapes and for capturing varying sets of data,

- Examples are text fields, checkboxes, radio buttons, submit buttons, and more.

THE input ELEMENT

<input type="text"> defines a one-line input field for **text input**:

Example

```
<form>
  First name:<br>
  <input type="text" name="firstname"><br>
  Last name:<br>
  <input type="text" name="lastname">
</form>
```

This is how it will look like in a browser:

First name:

Last name:

Some attributes of the input text field are: size and maxlength which determines the width and the number of characters it can take respectively
Don't forget the value attribute!

THE input ELEMENT

The <input> Element
The **<input>** element can be said to be the most important form element.
The <input> element can be displayed in several ways, depending on the **type** attribute.

Try out these examples:

Type	Description
<input type="text">	Defines a one-line text input field
<input type="radio">	Defines a radio button (for selecting one of many choices)
<input type="submit">	Defines a submit button (for submitting the form)

THE label TAG

- Pressing a label basically triggers the focus event for the bound input. Interesting thing is that, if it is a file input, it works out as a click event, resulting in opening a file browser.

- <label for="email">Email</label> <input type="text" name="email" id='email'>

- Since the id is the same as the content of for='' as shown above , clicking on the label will place the cursor within the email text field

- **Try it out**

THE RADIO BUTTON

<input type="radio"> defines a **radio button**.

Using the same name attribute , a set of radio button lets a user select ONE of a limited number of choices:

Example

```
<form>
  <input type="radio" name="gender" value="male" checked> Male<br>
  <input type="radio" name="gender" value="female"> Female<br>
  <input type="radio" name="gender" value="other"> Other
</form>
```

This is how the HTML code above will be displayed in a browser:

◉ Male
○ Female
○ Other

Input Type Checkbox

<input type="checkbox"> defines a **checkbox**.
Checkboxes let a user select ZERO or MORE options of a limited number of choices.
The value of a checkbox defines what is submitted

Example

```html
<form>
  <input type="checkbox" name="vehicle1" value="Bike"> I have a bike<br>
  <input type="checkbox" name="vehicle2" value="Car"> I have a car
</form>
```

This is how the HTML code above will be displayed in a browser:

☐ I have a bike
☐ I have a car

INPUT TYPE FILE

- <input> elements with type="file" lets the user choose one or more files from their device storage. Once chosen, the files can be uploaded to a server using some file manipulations (server side or client side)

- The tag can optionally have a boolean attribute, 'multiple' to allow the user enter more than one value in the <input> element

Choose a profile picture:

Browse... No file selected.

THE BUTTON TAG

<input type="button"> defines a **button**: Javascripts can be further applied to input of type button to make it perform some interactive functions (this will be covered in subsequent modules)

```
<input type="button" value="Cancel">
```

The Submit Button

<input type="submit"> defines a button for **submitting** the form data to a **form-handler**.
The form-handler is typically a server page with a script for processing input data.
The form-handler is specified in the form's **action** attribute:

```
<form action="action_page.php">
  First name:<br>
  <input type="text" name="firstname" value="Mickey"><br>
  Last name:<br>
  <input type="text" name="lastname" value="Mouse"><br><br>
  <input type="submit" value="Submit">
</form>
```

This is how the HTML code above will be displayed in a browser:

First name:

Mickey

Last name:

Mouse

Submit

TEXT AREA

- The <textarea> tag defines a multi-line text input control.

- The <textarea> element is often used in a form, to collect user inputs like comments or reviews.

- The size of a text area is specified by the *cols* and *rows* attributes

HTML FORM – THE BUTTON TAG

- HTML 5 Supports the <button> tag, <button> Submit </button>

- It has an attribute **type** which tells the type of button it is: button, submit and reset

- If the type attribute is not specified, the default is **submit**

SELECT DROP DOWN

▪The basic select drop down is used to collect users input choosing one options out of many options presented with option tag

▪NOTE: The option tag must be within a select tag

```
<select name="country">
  <option value="Nigeria">Nigeria</option>
  <option value="Ghana">Ghana</option>
  <option value="Senegal">Senegal</option>
  <option value="Gambia">Gambia</option>
</select>
```

Other HTML5 Input Types

- color
- date
- datetime
- datetime-local
- email
- month
- number
- range
- search
- tel
- time
- url
- week

- The input of type number defines a **numeric** input field and can have the following attributes: min, max , step which defines the minimum, maximum number and the number of steps it generates when you make use of the arrow keys

- The <input type="range"> defines a control for entering a number whose exact value is not important (like a slider control). Default range is 0 to 100. However, you can set restrictions on what numbers are accepted with the min, max, and step attributes

- The type = url, email and the above restrictions automatically helps you validate the input field when submitting the form

SUBMITTING FORM DATA

1. Action attribute

2. Method attribute

3. Form elements name attribute and value attribute

QUIZ

What is the difference between the anchor tag and the submit of a form?

Anchor tag takes us to another page/place without taking data along while the form submit submits data to the specified action page

The <form> Element

The Action Attribute

The **action** attribute defines the action to be performed when the form is submitted.
Normally, the form data is sent to a web page on the server when the user clicks
on the submit button. In the example above, the form data is sent to a page on the server
called "action_page.php". This page contains a server-side script that
handles the form data:

```
<form action="action_page.php">
```

If the action attribute is omitted, the action is set to the current page.

The <form> Element

The Method Attribute

The **method** attribute specifies the HTTP method (**GET** or **POST**) to be used when submitting the form data:

```html
<form action="action_page.php" method="get">
```

or

```html
<form action="action_page.php" method="post">
```

The <form> Element

When to Use GET?

The default method when submitting form data is GET.
However, when GET is used, the submitted form data will be **visible in the page address field**:

```
action_page.php?firstname=Mickey&lastname=Mouse
```

When to Use POST?

Always use POST if the form data contains sensitive or personal information. The POST method does not display the submitted form data in the page address field.
POST has no size limitations, and can be used to send large amounts of data.

The <form> Element

The Name Attribute

▪Each input field must have a **name** attribute to be submitted.

▪If the name attribute is omitted, the data of that input field will not be sent at all.

▪This example will only submit the "Last name" input field:

▪**value** attribute can be defined explicitly or supplied by the user (where the user can type in values)

```html
<form action="action_page.php">
  First name:<br>
  <input type="text" value="Mickey"><br>
  Last name:<br>
  <input type="text" name="lastname" value="Mouse"><br><br>
  <input type="submit" value="Submit">
</form>
```

ASSIGNMENT

Design a Contact Us Form, your form should capture the following elements:

1. Email Address, with the use of input type email

2. Names, with the use of input type text

3. Gender, with the use of input type radio

4. Home Address, with the use of textarea

5. Country, with the use of Select - Drop Down

6. Checkbox to indicate you want to get a feedback via phone call, Fax

7. Submit button

8. Reset Button