



Last lecture reminder

We talked about:

- <DOCTYPE!> conventional format
- How to build valid HTML tags
- Basic and common HTML tags (<h1>, <p>,
, and more...)



A screenshot of a code editor window titled "html5temp.html". The editor displays a valid HTML5 boilerplate document. The code is as follows:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="utf-8">
5 <title> A Tiny HTML Document </title>
6 <link href="styles.css" rel="stylesheet">
7 <script src="scripts.js"></script>
8 </head>
9
10 <body>
11 <p>Let's rock the browser, HTML5 style.</p>
12 </body>
13 </html>
```

The last line, </html>, is highlighted in yellow.

The List HTML Element

** and →**

The tag defines an unordered (bulleted) list

Use the tag together with the tag to create unordered lists

Use the tag together with the tag to create ordered lists



** →**

The tag defines a list item in an unordered list () and in ordered list ()

In , the list items will usually be displayed with bullet points

In , the list items will usually be displayed with numbers or letters

```
<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>
```



- Coffee
- Tea
- Milk

The Table HTML Element

<table> </table> →

The **<table>** tag defines an HTML table

An HTML table consists of one **<table>** element and one or more **<tr>**, **<th>**, and **<td>** elements in this order:

The **<tr>** element defines a table row

The **<th>** element defines a table header

The **<td>** element defines a table cell

We will use the **<thead>** tag, **<tbody>** tag and **<tfoot>** tag to wrap our **<tr>**, **<th>** and **<td>** elements

Person	Age
Chris	38
Dennis	45
Sarah	29
Karen	47

The Table HTML Element

```
<table>
  <thead>
    <tr>
      <th>Month</th>
      <th>Savings</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>January</td>
      <td>$100</td>
    </tr>
    <tr>
      <td>February</td>
      <td>$80</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td>Sum</td>
      <td>$180</td>
    </tr>
  </tfoot>
</table>
```



Month	Savings
January	\$100
February	\$80
Sum	\$180

Class Exercise - Tables and Lists

Write an HTML file that implement the following:

- Use the conventional `<!DOCTYPE!>` format
- Display the course name on the page tab - "Ecom Fullstack Course"
- Display your full name on a large size heading
- Has a hyperlink to any website that you want, you need to make sure that your user know what is the website he is going to enter
- Has a random image using "unsplash" website (search for it on google)
- Create an unsorted list and put 4 familiar companies names inside of it
- Create a students table and put 3 students info inside of it
 - The table headers will be: First name, Last name, Age, Course
 - Put Ecom Fullstack Course as the name of the course for each student

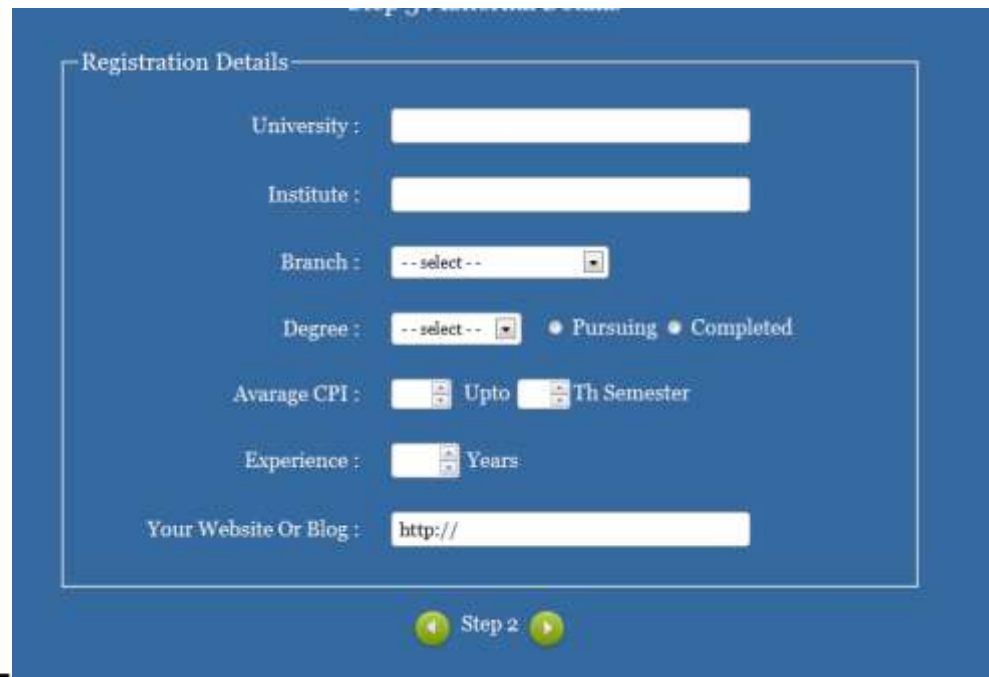
Class Exercise Solution - Tables and Lists

Input Type Form

`<form>` `</form>` →

The `<form>` tag is used to create an HTML form for user input

We can add a lot of HTML elements inside a `<form>` to create the `<form>` that we want for our website, for example: `<input>`, `<button>` `<select>`, `<label>` and more.



The screenshot shows a web form titled "Registration Details" on a blue background. The form contains the following fields and elements:

- University :
- Institute :
- Branch :
- Degree : ☐ Pursuing ☐ Completed
- Avarage CPI : Upto Th Semester
- Experience : Years
- Your Website Or Blog :

At the bottom of the form, there is a progress indicator showing "Step 2" with a left arrow and a right arrow.

Creating a Valid Form

In order to create a valid form we need to understand some basic form attributes and elements:

<label> element → Allow us to append a label to an input. The label will provide the kind of input we want our user to enter. For example: if we want our user to enter his first name we should attach a label that indicate that near the text input.

```
<form action="/action_page.php">  
  <label for="username">Username:</label>  
  <input type="text" id="username" name="username" required>  
  <input type="submit">  
</form>
```



Creating a Valid Form

The **id** attribute → The HTML id attribute is used to specify a unique id for an HTML element. You cannot have more than one element with the same id in an HTML document.

The **for** attribute → The for attribute associates the label with a control element

When the label element receives focus (by being clicked on), it passes the focus on to its associated control. In order to associate between the label and the right input we should pass in the for attribute value the right input id.

The **name** attribute → The name attribute specifies a name for an HTML element.

For a <form> element, the name attribute is used as a reference when the data is submitted.

By using the name attribute the Backend service the received this form knows how to get the data from it (The name is the key and the value is what the user submitted).

Input Type Form

<input> →

The <input> tag specifies an input field where the user can enter data.

This element is one of the most important form elements in HTML

The <input> element can be displayed in several ways, depending on the type attribute

<input type="checkbox"> →

The checkbox is shown as a square box that is ticked (checked) when activated.

Checkboxes are used to let a user select **one or more options** of a limited number of choices.

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

Submit

Input Type Form

<input type=text> →

The `<input type="text">` defines a single-line text field. The default width of the text field is 20 characters. When using text type input always add the `<label>` tag for best accessibility practices.

First name:

Last name:

<textarea></textarea> →

The `<textarea>` tag defines a multi-line text input control. This element is often used in a form, to collect user inputs like comments or reviews.

A text area can hold an unlimited number of characters.

Input Type Form

`<input type="radio">` →

Radio buttons are normally presented in radio groups (a collection of radio buttons describing a set of related options). Only one radio button in a group can be selected at the same time.

Please select your age:

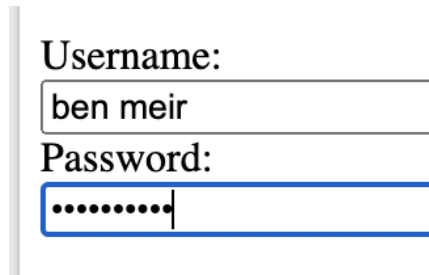
- ☐ 0 - 30
- ☒ 31 - 60
- ☐ 61 - 100

Note: The radio group must have share the same name attribute (the value of the name attribute) to be treated as a group. Once the radio group is created, selecting any radio button in that group automatically deselects any other selected radio button in the same group. You can have as many radio groups on a page as you want, as long as each group has its own name.

Input Type Form

<input type="password"> →

The password type input allow us to add a password text submission. What is important about the password type which is different from other text types is that when the user submit a password it will automatically changed into ********* so no one can see what was entered.



Username:
ben meir

Password:
.....

<input type="number"> →

In a number type input our users could not add anything other then numbers.

It's Defines a numeric input field. You can also set restrictions on what numbers are accepted For example: Allow to enter only numbers between a specific range

Input Type Form

<select></select> →

The <select> element is used to create a drop-down list.

The <option> tags inside the <select> element define the available options in the drop-down list.

```
<select name="cars" id="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="mercedes">Mercedes</option>
  <option value="audi">Audi</option>
</select>
```

Choose a car

Submit

Click the "Submit" button and

✓ Volvo
Saab
Opel
Audi

Input Type Form

<input type="range"> →

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 and max attributes

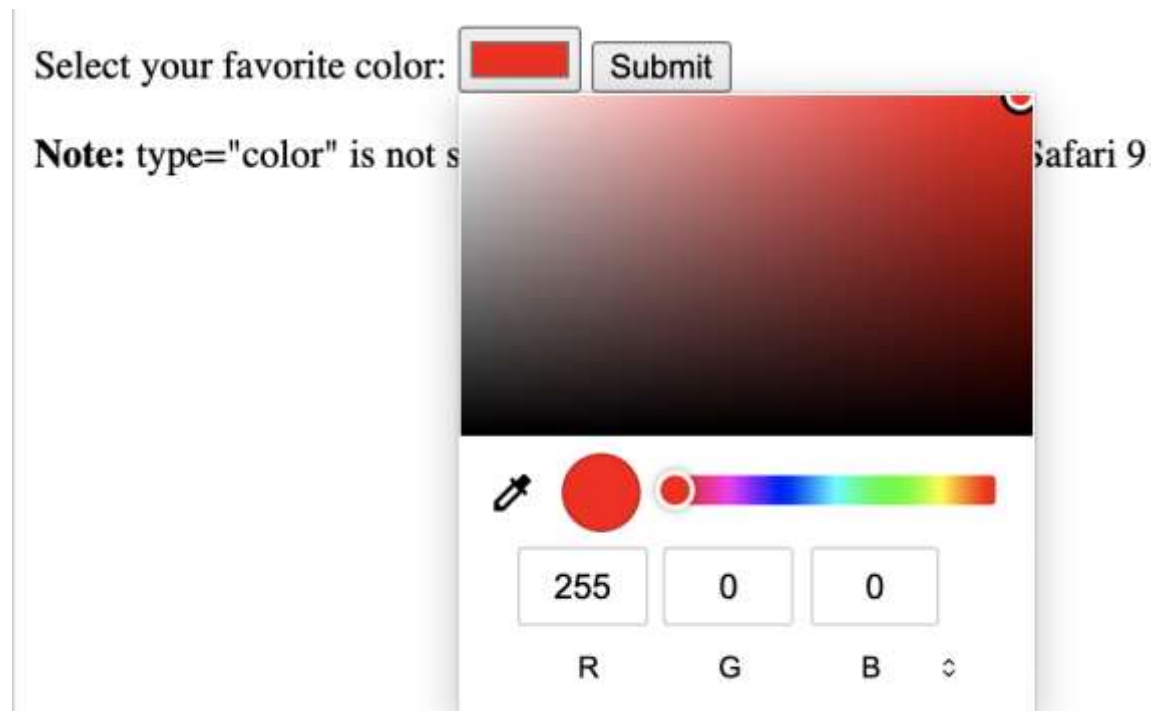
Volume (between 0 and 50):

Input Type Form

`<input type="color">` →

The `<input type="color">` is used for input fields that should contain a color.

The Chrome browser is supporting a color picker that will be shown in the input field.

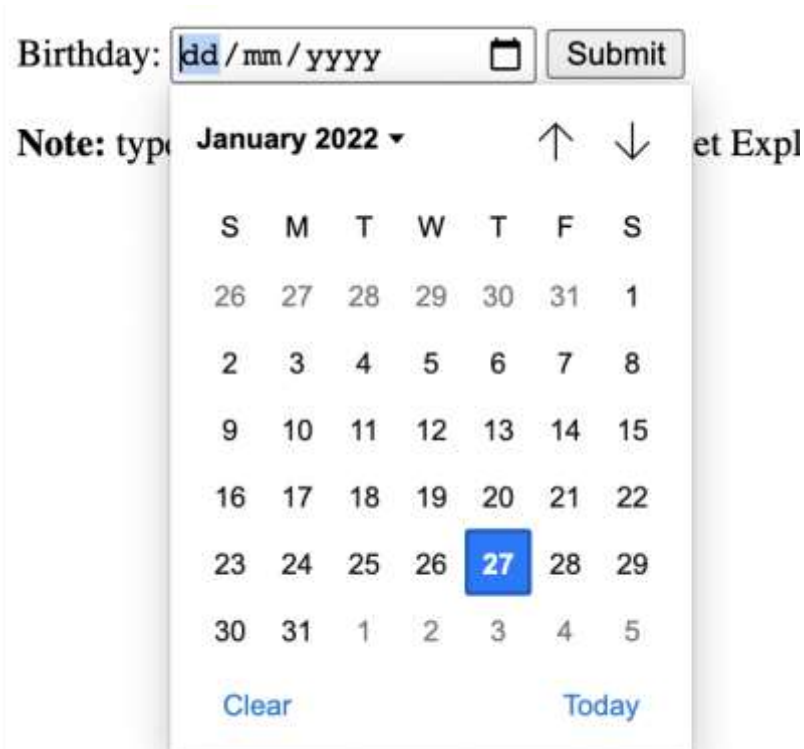


Input Type Form

<input type="date"> →

The `<input type="date">` is used for input fields that should contain a date.

The Chrome browser is supporting a date picker that will be shown in the input field.



The screenshot shows a web form with a "Birthday:" label and an input field containing the placeholder text "dd/mm/yyyy". To the right of the input field is a calendar icon and a "Submit" button. Below the input field, the text "Note: type" is visible. A date picker calendar is open, showing "January 2022". The calendar has a grid of days from 1 to 31. The day "27" is highlighted in blue. Above the grid are navigation arrows (up and down) and the text "et Expl". At the bottom of the calendar are "Clear" and "Today" buttons.

S	M	T	W	T	F	S
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Input Restrictions

In a lot of cases we will want to **restrict** the input that we will get from our users.

For example: Allowing to choose only a number between a specific range or limited the size of text input to not exceed a specific number of characters.

In HTML we can simply do that by adding the relevant restrict attribute name to our input element.

Example for a valid input restriction HTML code:

```
<form>
  <label for="quantity">Quantity (between 1 and 5):</label>
  <input type="number" id="quantity" name="quantity" min="1" max="5">
</form>
```



Input Restrictions

Here is a list with all the common input restrictions

Attribute	Description
checked	Specifies that an input field should be pre-selected when the page loads (for type="checkbox" or type="radio")
disabled	Specifies that an input field should be disabled
max	Specifies the maximum value for an input field
maxlength	Specifies the maximum number of character for an input field
min	Specifies the minimum value for an input field
pattern	Specifies a regular expression to check the input value against
readonly	Specifies that an input field is read only (cannot be changed)
required	Specifies that an input field is required (must be filled out)
size	Specifies the width (in characters) of an input field
step	Specifies the legal number intervals for an input field
value	Specifies the default value for an input field

Input Important Attributes

- **autofocused** → The autofocus attribute is a **boolean** attribute.

When present, it specifies that an <input> element should automatically get focus when the page loads. Meaning that the user could start typing or interact with that input without action from him (like clicking that input manually)

- **placeholder** → The placeholder attribute specifies a short hint that describes the expected value of an input field (For example: A mock first name and last name in a name input).

The short hint is displayed in the input field before the user enters a value (It's not an actual value).

Enter a phone number:

Input Important Attributes

- **value** → The value attribute specifies the default value of an input field.

By providing this attribute our user will see this value placed inside the input field.

Note: Unlike placeholder the value attribute provides a real value that the user can submit.

First name:

Last name:

- **required** → Specifies that an input field must be filled out before submitting the form.

If the user will try to submit the form without providing a value for all the required inputs the browser will notify him.

Username:

! Please fill out this field.



Buttons Inside HTML Form



<button></button> →

The <button> tag defines a clickable button. Always specify the type attribute for a <button> element, to tell browsers what type of button it is.

Note: In HTML we have 3 types of buttons: button, reset, submit

For submitting a form we will use the “submit” button type

For reset a form we will use the “reset” button type

```
<button type="submit" value="Submit">Submit</button>  
<button type="reset" value="Reset">Reset</button>
```



Block elements vs inline elements

Every HTML element has a default display value, depending on what type of element it is. There are two display values: **block** and **inline**.

Block Element → A block-level element always starts on a new line, and it will always takes

up the full width available (stretches out to the left and right as far as it can)

Here are the block-level elements in HTML:

<address>	<article>	<aside>	<blockquote>	<canvas>	<dd>	<div>	<dl>	<dt>	<fieldset>
<figcaption>	<figure>	<footer>	<form>	<h1>-<h6>	<header>	<hr>		<main>	<nav>
<noscript>		<p>	<pre>	<section>	<table>	<tfoot>		<video>	

Block elements vs inline elements

Inline Element → An inline element does not start on a new line and will only takes up as much width as necessary

Here are the block-level elements in HTML:

<address>	<article>	<aside>	<blockquote>	<canvas>	<dd>	<div>	<dl>	<dt>	<fieldset>
<figcaption>	<figure>	<footer>	<form>	<h1>-<h6>	<header>	<hr>		<main>	<nav>
<noscript>		<p>	<pre>	<section>	<table>	<tfoot>		<video>	

div & span HTML Elements

<div></div> →

The <div> tag is used as a **container** for HTML elements - which is then styled with CSS or manipulated with JavaScript. The <div> tag is easily styled by using the “class” or “id” attribute. Any sort of content can be put inside the <div> tag

**** →

The tag is an **inline container** used to mark up a part of a text, or a part of a document. The tag is easily styled by CSS or manipulated with JavaScript using the “class” or “id” attribute. The tag is much like the **<div>** element, but <div> is a block-level element and is an inline element

Entities in HTML

There are some characters in HTML that are reserved, which mean that by using them we can create symbols that the HTML syntax is not currently supporting.

Character entities are used to display reserved characters in HTML

A character entity looks like this:



&entity_name;

Examples for common entities:

Less than sign (<): **<**

Greater than sign (>): **>**

Non-breaking space: ** **

Copyright: **©**



Class Exercise - Building A Form

Create the following sign up form using only HTML :

Note: categories for the “Select Age”: “Under 18”, “18-35”, “35-46”, “46+”
terms of service - will be a link to a different HTML page that you created

Create an Account

Email:

Password:

Age:

Tell us a little about yourself:

☐ I agree to the [terms of service](#)

Class Exercise Solution - Building A Form

Congratulations ! You are now know HTML!



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