Forms and Layouts

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Proper File Structure

You should have a **Web Development** folder on your computer

You should have folders for each class: **class1**, **class2**, and now **class3**

Each class should have a folder for **notes**, and a folder for **practice**

You should have no problem finding/opening any file on your computer

Remember: **SPELLING MATTERS**

Forms

Forms are used to get **user input** in HTML

The data is then handled by **client code**, optionally being sent to a **server**

HTML forms start with the `<form>` tag and contain **form elements**

Form elements are input elements such as: checkboxes, radio buttons, text, submit buttons, etc.

Input elements are specified by the `<input>` tag

Input tags must have a type (`<input type="text">`), types include:
◦ text, normal text
◦ radio, defines radio buttons
◦ submit, a submit button

Practice

Create a basic form with 2 text inputs, 3 radio buttons, and a submit button

See `class3_ex1.html`

Input

Input elements should have a name attribute to let the server know what to do
- `<input type="text" name="firstname">`

Form data can be grouped using a **fieldset**, specified by the `<fieldset>` tag

A fieldset element can have a **legend**, specified by the `<legend>` tag, it defines a caption

Other attributes
- action, what to do after pressing submit (we will learn this later)
- autocomplete, whether the browser should autocomplete the form
- Etc.

Practice

Add names to your previous form

Surround your form inputs with a **fieldset**, and give it a **legend**

See `class3_ex1.html`

Drop-down Lists

The **`<select>`** element defines a **drop-down list**

\<option\> elements defines the options to select

Each option element should have a value attribute (for the server)

`<option value="dogs">Dogs</option>`

A single option element can have the selected attribute, to make it initially selected
- By default, the first one is selected

`<option value="dogs" selected>Dogs</option>`

Practice

Add a dropdown list to your form

See `class3_ex2.html`

Text Area

A text area element is defined by the **`<textarea>`** tag, it is a **multi-line input field**

The number of rows and columns (in characters) are defined by attributes

```
<textarea name="message" rows="20" cols="10">
I like pets
</textarea>
```

Buttons

A **button** is something you can click, defined by **<button>**

Buttons have an onClick (in JavaScript)

```
<button onClick="alert('Hello World!')">Click me!</button>
```

We will learn more JavaScript later

Practice

Put a text area and multiple buttons into your form

See `class3_ex3.html`

Data Lists

A data list element specifies a list of **pre-defined options** for an input, defined by **`<datalist>`**

Items in a data list are defined by the `<option>` tag with a value attribute

The user will see a drop-down list of options as they type

The **list** attribute of the **`<input>`** tag must match the **id** attribute of the **`<datalist>`** element

```
<input list="browsers" name="browser">

<datalist id="browsers">

<option value="Internet Explorer">

<option value="Chrome">

</datalist>
```

Note: Datalists are not supported in Safari or IE9

Practice

Add a datalist to your form

See `class3_ex3.html`

Additional Input Types

checkbox, a simple checkbox

number, a single number, with optional restrictions

color, a single colour

date, a single date

time, a specific time

datetime, a specific date and time

email, an email

url, an URL or link

See `class3_ex4.html`

Practice

Make a new form to get someone to sign up for your new service

Use fields from the "Additional Input Types"

See `class3_ex4.html`

Additional Input Attributes

value – the initial value of an input

readonly – an input that cannot be changed (solo)

disabled – an input that is disabled (solo)

size – size in characters of an input field

maxlength – maximum allowable length of an input field

autocomplete – either "on" or "off", tells the browser whether the field can be autocompleted

min – Minimum value for fields that require values

max – Maximum value for fields that require values

placeholder – Placeholder value for when the user has not entered anything

Practice

Use some of these attributes

See `class3_ex4.html`

HTML5 Layouts

`<header>`, for the **top** of a document or section

`<nav>`, for the **navigation** section of the page

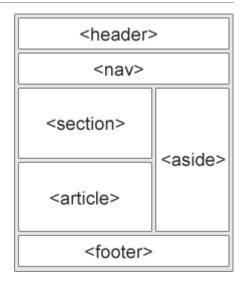`<section>`, a section in a document

`<article>`, an independent, self-contained, article

`<aside>`, content aside from the main content (a sidebar)

`<footer>`, a footer for a document or section

We will learn more about layouts when we learn CSS

See `class3_ex5.html`

Practice

Create a basic layout for a page using only HTML elements

The page can be about anything

The page should have all of the elements in the previous page

Homework

Submit to **@homeworkbot** with the tag **#webdev-class3**

See 3_webdev_homework3.pdf