LAB 3: INTRODUCTION TO HTML FORMS

What is HTML Forms

The HTML `<form>` element defines a form that is used to collect user input. Form elements are different types of input elements, like text fields, checkboxes, radio buttons, submit buttons, and more.

The <input> Element

The `<input>` element is the most important form element.
The `<input>` element can be displayed in several ways, depending on the **type** attribute. Here are some 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)

Text Input

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

Example

<!DOCTYPE html>

<html>

```
<body>

<h2>Text Input</h2>

<form>

  First name:<br>

  <input type="text" name="firstname">

  <br>

  Last name:<br>

  <input type="text" name="lastname">

</form>

<p>Note that the form itself is not visible.</p>

<p>Also note that the default width of a text input field is 20 characters.</p>

</body> </html>
```

Radio Button Input

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

Radio buttons let 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>
```

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>
```

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 Target Attribute

The `target` attribute specifies if the submitted result will open in a new browser tab, a frame, or in the current window.

The default value is "`_self`" which means the form will be submitted in the current window.

To make the form result open in a new browser tab, use the value "`_blank`":

Example

`<form action="/action_page.php" **target="_blank"**>`

The Method Attribute

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

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

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

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.** 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. It has no size limitations, and can be used to send large amounts of data.

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:

```
<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>
```

Grouping Form Data with <fieldset>

The <fieldset> element is used to group related data in a form.

The <legend> element defines a caption for the <fieldset> element.

```
<form action="/action_page.php">
  <fieldset>
    <legend>Personal information:</legend>
    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">
  </fieldset>
</form>
```

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

Personal information:First name:

| Mickey |

Last name:

| Mouse |

| Submit |

The <input> Element

The most important form element is the `<input>` element.

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

Example

```
<input name="firstname" type="text">
```

The <select> Element

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

Example

```
<select name="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
```

Visible Values:

Use the `size` attribute to specify the number of visible values:

Example

```html
<select name="cars" size="3">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
```

Allow Multiple Selections:

Use the `multiple` attribute to allow the user to select more than one value:

Example

```html
<select name="cars" size="4" multiple>
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
```

The <textarea> Element

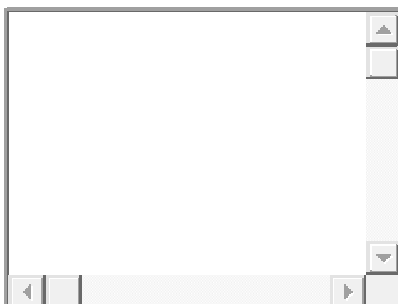The `<textarea>` element defines a multi-line input field (**a text area**):

Example

```html
<textarea name="message" rows="10" cols="30">
The cat was playing in the garden.
</textarea>
```

The `rows` attribute specifies the visible number of lines in a text area.

The `cols` attribute specifies the visible width of a text area.

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

You can also define the size of the text area by using CSS:

```
<textarea name="message" style="width:200px; height:600px;">
The cat was playing in the garden.
</textarea>
```

The <button> Element

The `<button>` element defines a clickable **button**:

```
<button type="button" onclick="alert('Hello World!')">Click
Me!</button>
```

HTML5 <datalist> Element

The `<datalist>` element specifies a list of pre-defined options for an `<input>` element.

Users will see a drop-down list of the pre-defined options as they input data.

The `list` attribute of the `<input>` element, must refer to the `id` attribute of the `<datalist>` element.

```
<form action="/action_page.php">
  <input list="browsers">
  <datalist id="browsers">
    <option value="Internet Explorer">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Opera">
    <option value="Safari">
  </datalist>
</form>
```

HTML Form Elements

Tag	Description
<form>	Defines an HTML form for user input
<input>	Defines an input control
<textarea>	Defines a multiline input control (text area)
<label>	Defines a label for an <input> element
<fieldset>	Groups related elements in a form
<legend>	Defines a caption for a <fieldset> element
<select>	Defines a drop-down list
<optgroup>	Defines a group of related options in a drop-down list
<option>	Defines an option in a drop-down list
<button>	Defines a clickable button
<datalist>	Specifies a list of pre-defined options for input controls

<output>	Defines the result of a calculation

HTML Input Types

Here are the different input types you can use in HTML:

- `<input type="button">`
- `<input type="checkbox">`
- `<input type="color">`
- `<input type="date">`
- `<input type="datetime-local">`
- `<input type="email">`
- `<input type="file">`
- `<input type="hidden">`
- `<input type="image">`
- `<input type="month">`
- `<input type="number">`
- `<input type="password">`
- `<input type="radio">`
- `<input type="range">`
- `<input type="reset">`
- `<input type="search">`
- `<input type="submit">`
- `<input type="tel">`
- `<input type="text">`
- `<input type="time">`
- `<input type="url">`
- `<input type="week">`

The value Attribute

The `value` attribute specifies the initial value for an input field:

Example

```
<form action="">
  First name:<br>
  <input type="text" name="firstname" value="John">
</form>
```

The readonly Attribute

The `readonly` attribute specifies that the input field is read only (cannot be changed):

```
<form action="">
  First name:<br>
  <input type="text" name="firstname" value="John" readonly>
</form>
```

The disabled Attribute

The `disabled` attribute specifies that the input field is disabled.

A disabled input field is unusable and un-clickable, and its value will not be sent when submitting the form:

```
<form action="">
  First name:<br>
  <input type="text" name="firstname" value="John" disabled>
</form>
```

The size Attribute

The `size` attribute specifies the size (in characters) for the input field:

```
<form action="">
  First name:<br>
  <input type="text" name="firstname" value="John" size="40">
</form>
```

The maxlength Attribute

The `maxlength` attribute specifies the maximum allowed length for the input field:

```
<form action="">
  First name:<br>
  <input type="text" name="firstname" maxlength="10">
</form>
```

The autocomplete Attribute

The `autocomplete` attribute specifies whether a form or input field should have autocomplete on or off.

When autocomplete is on, the browser automatically completes the input values based on values that the user has entered before.

Tip: It is possible to have autocomplete "on" for the form, and "off" for specific input fields, or vice versa.

The `autocomplete` attribute works with `<form>` and the following `<input>` types: text, search, url, tel, email, password, datepickers, range, and color.

For a complete list of all available HTML tags, visit our HTML Tag Reference.

EXO1: Reproduce this form

EXO2: Reproduce this form

Veuillez saisir vos coordonnées dans le formulaire ci-dessous
○ M. ○ Mme ○ Mlle

Nom : [   ]   Prénom : [   ]   Société : [   ]

N° et rue : [   ]

Code Postal : [   ]   Ville : [   ] | France ▼ |
                                                              | Angleterre |
                                                              | Allemagne |
                                                              | Australie |
                                                              | France |
                                                              | Italie |
                                                              | Japon |
                                                              | USA |
                                                              | Autre |

Votre Message [   ]

Adresse E-Mail [   ]   [Valider] [Effacer]

EXO3: Complete the form below as follows:

1. Mutually exclusive radio buttons

2. Limit the Postal No entry to 4 characters and with a predefined value Lausanne

3. A Country menu with a Swiss pre-selection

4. Platform check boxes with several possible choices

5. An Applications menu with several possible choices with <ctrl-clic> or <maj-clic>

Client

Civilité	○ Mademoiselle ● Madame ○ Monsieur
Nom / Prénom	
Adresse	Rue No Boîte postale
No postal / Localité	Lausanne
Pays	Suisse ▾
Plateforme(s)	☑ Windows ☑ Macintosh ☐ Unix
Applications(s)	Bureautique DAO Statistiques SGBD Internet

Soumettre formulaire   Effacer