

HTML Forms

HTML Forms

- An HTML form is used to collect user input. The user input is most often sent to a server for processing.

Example

First name:

Last name:

The <form> Element

- The HTML <form> element is used to create an HTML form for user input.
- The <form> element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.

```
<form>
.
form elements
.
</form>
```

The <input> Element

- The HTML <input> element is the most used form element.
- An <input> element can be displayed in many ways, depending on the type attribute.

| Type | Description |
|-------------------------|--|
| <input type="text"> | Displays a single-line text input field |
| <input type="radio"> | Displays a radio button (for selecting one of many choices) |
| <input type="checkbox"> | Displays a checkbox (for selecting zero or more of many choices) |
| <input type="submit"> | Displays a submit button (for submitting the form) |
| <input type="button"> | Displays a clickable button |

Text Fields

- The `<input type="text">` defines a single-line input field for text input.

A form with input fields for text:

```
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname">
</form>
```

First name:

Last name:

The <label> Element

- Notice the use of the <label> element in the example above.
- The <label> tag defines a label for many form elements.
- The <label> element is useful for screen-reader users, because the screen-reader will read out loud the label when the user focus on the input element.
- The <label> element also help users who have difficulty clicking on very small regions (such as radio buttons or checkboxes) - because when the user clicks the text within the <label> element, it toggles the radio button/checkbox.
- The for attribute of the <label> tag should be equal to the id attribute of the <input> element to bind them together.

Radio Buttons

- The `<input type="radio">` defines a radio button.
- Radio buttons let a user select **ONE** of a limited number of choices.

A form with radio buttons:

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

Male
 Female
 Other

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Checkboxes

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

A form with checkboxes:

```
<form>
  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
  <label for="vehicle1"> I have a bike</label><br>
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
  <label for="vehicle2"> I have a car</label><br>
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
  <label for="vehicle3"> I have a boat</label>
</form>
```

| | |
|--------------------------|---------------|
| <input type="checkbox"/> | I have a bike |
| <input type="checkbox"/> | I have a car |
| <input type="checkbox"/> | I have a boat |

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The Submit Button

- The **<input type="submit">** defines a button for submitting the form data to a form-handler.
- The form-handler is typically a file on the server with a script for processing input data.
- The form-handler is specified in the form's action attribute.
- [Try it Yourself »](#)

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe"><br><br>
  <input type="submit" value="Submit">
</form>
```

| | |
|---------------------------------------|-----------------------------------|
| First name: | <input type="text" value="John"/> |
| Last name: | <input type="text" value="Doe"/> |
| <input type="button" value="Submit"/> | |

The Name Attribute for <input>

- Notice that each input field must have a name attribute to be submitted.
- If the name attribute is omitted, the value of the input field will not be sent at all.
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HTML Form Attributes

The Action Attribute

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

On submit, send form data to "action_page.php":

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe"><br><br>
  <input type="submit" value="Submit">
</form>
```

The Target Attribute

- The target attribute specifies where to display the response that is received after submitting the form.
- The target attribute can have one of the following values:

| Value | Description |
|------------------|--|
| _blank | The response is displayed in a new window or tab |
| _self | The response is displayed in the current window |
| _parent | The response is displayed in the parent frame |
| _top | The response is displayed in the full body of the window |
| <i>framename</i> | The response is displayed in a named iframe |

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The Autocomplete Attribute

- The **autocomplete** attribute specifies whether a form should have autocomplete on or off.
- When autocomplete is on, the browser automatically complete values based on values that the user has entered before.
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HTML Form Elements

- This chapter describes all the different HTML form elements.
-

The HTML <form> Elements

- The HTML <form> element can contain one or more of the following form elements:
 - <input>
 - <label>
 - <select>
 - <textarea>
 - <button>
 - <fieldset>
 - <legend>
 - <datalist>
 - <output>
 - <option>
 - <optgroup>

The <input> Element

- One of the most used form element is the <input> element.
- The <input> element can be displayed in several ways, depending on the type attribute.

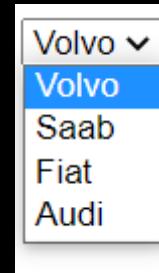
```
<label for="fname">First name:</label>
<input type="text" id="fname" name="fname">
```

First name:

The <select> Element

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

```
<label for="cars">Choose a car:</label>
<select id="cars" name="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
```



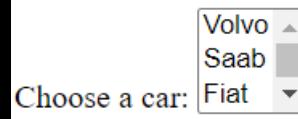
- The <option> elements defines an option that can be selected.
- By default, the first item in the drop-down list is selected.
- To define a pre-selected option, add the selected attribute to the option
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```
<option value="fiat" selected>Fiat</option>
```

Visible Values

- Use the size attribute to specify the number of visible values

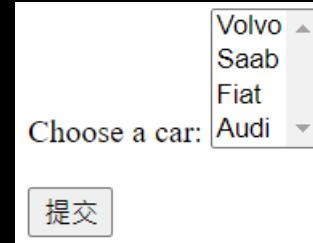
```
<label for="cars">Choose a car:</label>
<select id="cars" name="cars" size="3">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
```



Allow Multiple Selections:

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

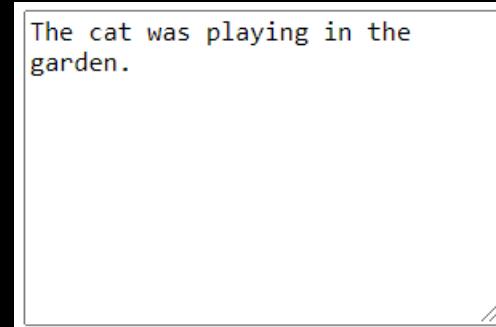
```
<label for="cars">Choose a car:</label>
<select id="cars" name="cars" size="4" multiple>
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
```



The <textarea> Element

- The <textarea> element defines a multi-line input field (a text area).
- The rows attribute specifies the visible number of lines in a text area.
- The cols attribute specifies the visible width of a text area.

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



The cat was playing in the
garden.

```
The cat was playing in the  
garden.
```

```
<form action="/action_page.php">  
  <textarea name="message" style="width:200px; height:600px;">The cat was playing  
the garden.</textarea>  
  <br>  
  <input type="submit">  
</form>
```

提交

The <button> Element

- The <button> element defines a clickable button.

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

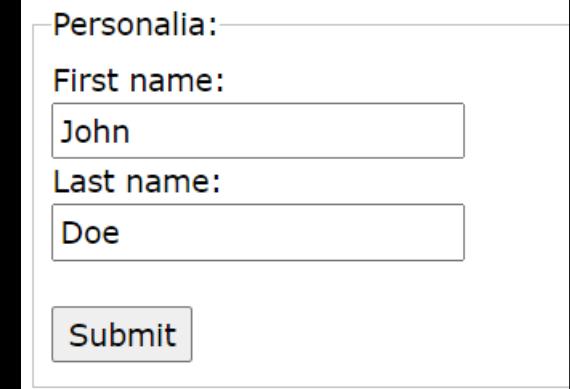
Click Me!

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The <fieldset> and <legend> Elements

- 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>Personalia:</legend>
    <label for="fname">First name:</label><br>
    <input type="text" id="fname" name="fname" value="John"><br>
    <label for="lname">Last name:</label><br>
    <input type="text" id="lname" name="lname" value="Doe"><br><br>
    <input type="submit" value="Submit">
  </fieldset>
</form>
```

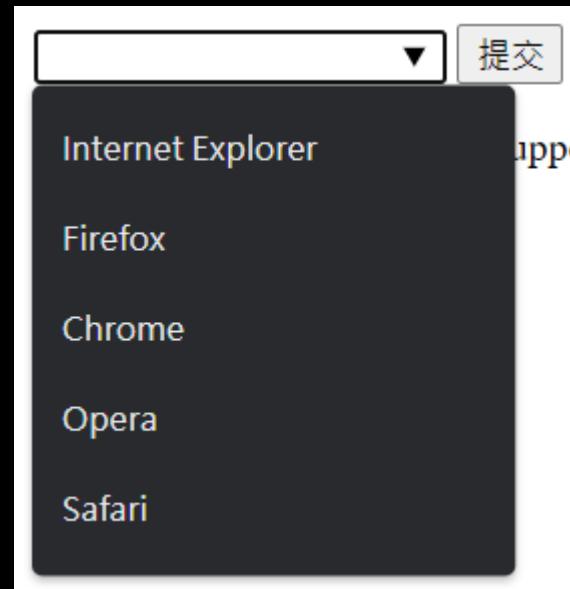


A screenshot of a web browser displaying a form. The form contains a fieldset with a legend labeled "Personalia:". Inside the fieldset, there are two text input fields: one for "First name" containing "John" and another for "Last name" containing "Doe". Below the fieldset is a submit button labeled "Submit".

The <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" name="browser">
  <datalist id="browsers">
    <option value="Internet Explorer">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Opera">
    <option value="Safari">
  </datalist>
  <input type="submit">
</form>
```



Exercise 08

- <https://reurl.cc/O4ZR3R>

Web Programming Exercise 03 總分 3/3 ?

Name
Jenny

Student ID
9900990

✓ 1. Choose the correct HTML element for the largest heading: 1/1

<head>
 <h6>
 <h1>
 <heading>

Just show that you are all correct!

*** Upload this image to YZU portal ***