

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>
```

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

- [Try it Yourself »](#)

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:

John

Last name:

Doe

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
<code>_blank</code>	The response is displayed in a new window or tab
<code>_self</code>	The response is displayed in the current window
<code>_parent</code>	The response is displayed in the parent frame
<code>_top</code>	The response is displayed in the full body of the window
<code>framename</code>	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.

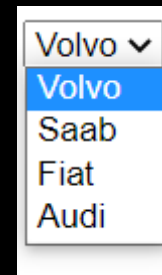
```
<label for="fname">First name:</label>  
<input type="text" id="fname" name="fname">
```

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>` element 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
- [Try it Yourself »](#)

```
<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>
```

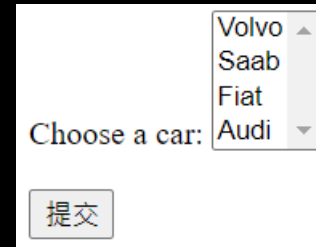
Choose a car:

Volvo	▲
Saab	■
Fiat	▼

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>
```



Choose a car:

- Volvo
- Saab
- Fiat
- Audi

提交

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>
```

A rectangular box with a thin border representing a text area. It contains the text "The cat was playing in the garden." on the first line, followed by several empty lines, illustrating the multi-line nature of the element. A small cursor icon is visible in the bottom right corner of the box.

```
<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>
```

The cat was playing in the garden.

提交

The <button> Element

- The <button> element defines a clickable button.

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

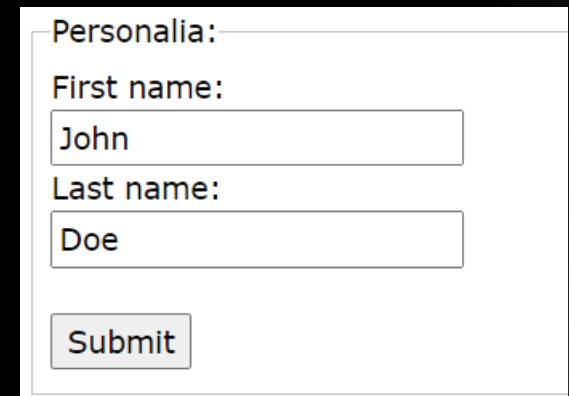
A rectangular button with a light gray border and a light gray background. The text "Click Me!" is centered on the button in a dark gray font.

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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>
```



Personalia:

First name:
John

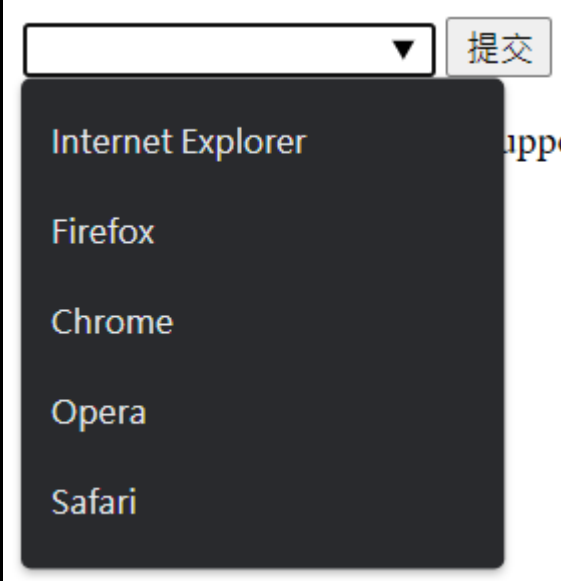
Last name:
Doe

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.

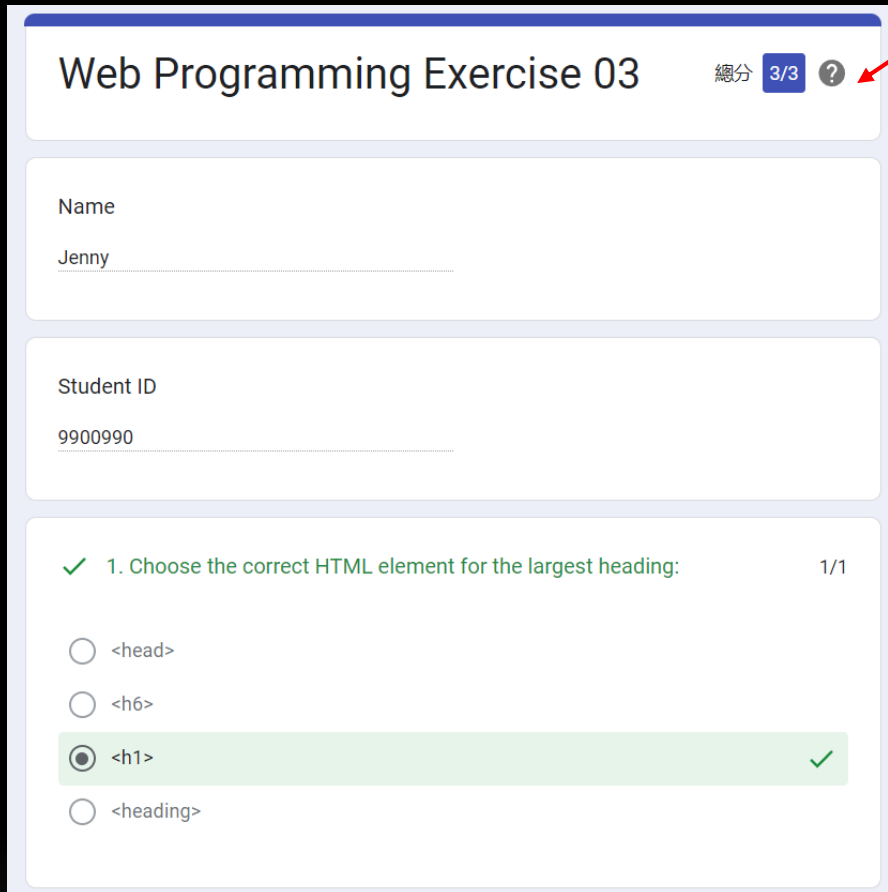
```
<form action="/action_page.php">  
  <input list="browsers" name="browser">  
  <datalist id="browsers">  
    <option value="Internet Explorer">  
    <option value="Firefox">  
    <option value="Chrome">  
    <option value="Opera">  
    <option value="Safari">  
  </datalist>  
  <input type="submit">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



A screenshot of a web form. It features a dropdown menu with a downward arrow icon. The dropdown is open, showing a list of browser names: Internet Explorer, Firefox, Chrome, Opera, and Safari. To the right of the dropdown is a submit button with the Chinese characters "提交" (Submit).

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 ***