

# BASIC PROGRAMMING FOR HTML5&CSS

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# html5

[https://www.w3schools.com/html/html5\\_intro.asp](https://www.w3schools.com/html/html5_intro.asp)  
<https://www.html5rocks.com/en>

# HTML5

- HTML5 is the latest and most enhanced version of HTML. Technically, HTML is not a programming language, but rather a markup language. In this class, we will discuss the features of HTML5 and how to use it in practice.

```
<html>
```

```
<head>
```

```
<title>Page title</title>
```

```
</head>
```

```
<body>
```

```
<h1>This is a heading</h1>
```

```
<p>This is a paragraph.</p>
```

```
<p>This is another paragraph.</p>
```

```
</body>
```

```
</html>
```

# HTML5 - Syntax

- HTML 5 authors would use simple syntax to specify DOCTYPE as follows –

```
<!DOCTYPE html>
```

- Character Encoding

```
<meta charset = "UTF-8">
```

- The <script> tag-It's common practice to add a type attribute with a value of "text/javascript" to script elements as follows –

```
<script type = "text/javascript" src = "scriptfile.js"></script>
```

- ✓ HTML 5 removes extra information required and you can use simply following syntax –

```
<script src = "scriptfile.js"></script>
```

# HTML5 - Syntax

- The <link> tag

```
<link rel = "stylesheet" type = "text/css" href = "stylefile.css">
```

or

```
<link rel = "stylesheet" href = "stylefile.css">
```

# HTML5 Elements

- HTML5 **elements** are marked up using **start tags** and **end tags**. Tags are delimited using angle brackets with the tag name in between.
- The difference between **start tags** and **end tags** is that the latter includes a slash before the tag name.
- Following is the example of an HTML5 element –

```
<p>...</p>
```

- HTML5 tag names are case insensitive and may be written in all uppercase or mixed case, although the most common convention is to stick with lowercase. 使用<p>的話則可自動跳到下一段落，也就是中間會空一行。若無，滿一個畫面才會跳下一行


# HTML5 Attributes

- Elements may contain attributes that are used to set various properties of an element.
- Some attributes are defined globally and can be used on any element, while others are defined for specific elements only. All attributes have a name and a value and look like as shown below in the example.
- Following is the example of an HTML5 attribute which illustrates how to mark up a **div** element with an attribute named class using a value of "example" –

```
<div class = "example">...</div>
```

# Code it

```
1  <!DOCTYPE html>
2  ▼ <html>
3  ▼ <head>
4    <meta charset="utf-8">
5    <title>HTML5 class sample program</title>
6  </head>
7  ▼ <body>
8    <h1>I'm headline 1</h1>
9    <h2>I'm headline 2</h2>
10   <h3>I'm headline 3</h3>
11   <h4>I'm headline 4</h4>
12   <h5>I'm headline 5</h5>
13   <h6>I'm headline 6</h6>
14 </body>
15 </html>
```



**ex-0301.html**



# Web Form

# Web Forms

- Web Forms is an extension to the forms features found in HTML4. Form elements and attributes in HTML5 provide a greater degree of semantic mark-up than HTML4 and free us from a great deal of tedious scripting and styling that was required in HTML4.

---

```
<form>
```

```
.
```

```
form elements
```

```
.
```

```
</form>
```

# Web Forms

- The `<input>` element uses the **type** attribute to specify the data type. It provides following types – ex.

Type	Description
<code>&lt;input type="text"&gt;</code>	Defines a one-line text input field
<code>&lt;input type="radio"&gt;</code>	Defines a radio button (for selecting one of many choices)
<code>&lt;input type="submit"&gt;</code>	Defines a submit button (for submitting the form)

# Web Forms

- The `<input>` element uses the **type** attribute to specify the data type. It provides following types –ex.

Type & Description
<b>text</b> A free-form text field, nominally free of line breaks.
<b>password</b> A free-form text field for sensitive information, nominally free of line breaks.
<b>checkbox</b> A set of zero or more values from a predefined list.
<b>radio</b> An enumerated value.
<b>submit</b> A free form of button initiates form submission.
<b>file</b> An arbitrary file with a MIME type and optionally a file name.

# Web Forms

**image**

A coordinate, relative to a particular image's size, with the extra semantic that it must be the last value selected and initiates form submission.

**hidden**

An arbitrary string that is not normally displayed to the user.

**select**

An enumerated value, much like the radio type.

**textarea**

A free-form text field, nominally with no line break restrictions.

**button**

A free form of button which can initiates any event related to button.

# 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="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">`

# Code it

```
<!DOCTYPE html>
<html>
<body>

<h2>HTML Forms</h2>

<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>

<p>If you click the "Submit" button, the form-data will be sent to a page called
"/action_page.php".</p>

</body>
</html>
```

## HTML Forms

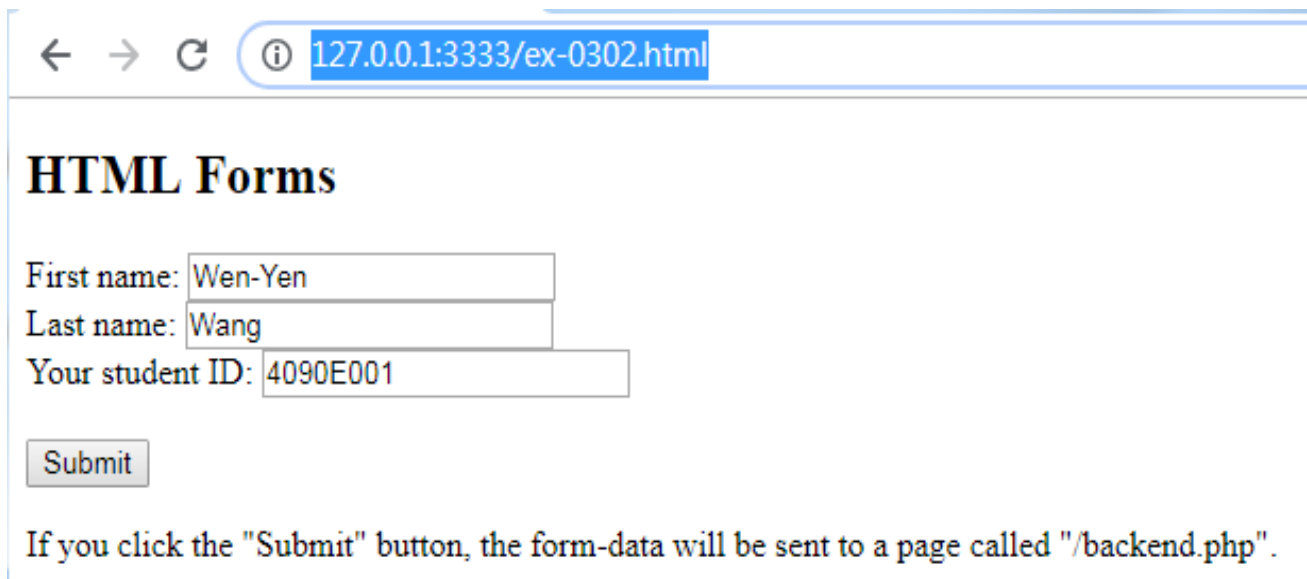
First name:

Last name:

If you click the "Submit" button, the form-data will be sent to a page called "/action\_page.php".

# Exercise it

- Write a html5 to display the results below.



The screenshot shows a web browser window with the address bar displaying "127.0.0.1:3333/ex-0302.html". The page content includes a title "HTML Forms" and a form with three input fields: "First name:" containing "Wen-Yen", "Last name:" containing "Wang", and "Your student ID:" containing "4090E001". Below the fields is a "Submit" button. A paragraph at the bottom states: "If you click the 'Submit' button, the form-data will be sent to a page called '/backend.php'."

← → ↻ ⓘ 127.0.0.1:3333/ex-0302.html

## HTML Forms

First name:

Last name:

Your student ID:

If you click the "Submit" button, the form-data will be sent to a page called "/backend.php".



# Exercise it

- Write a html5 code that connects to a `css` file to display the results below.



## HTML Forms

First name:

Last name:

Your student ID:

If you click the "Submit" button, the form-data will be sent to a page called `"/backend.php"`.

# Exercise it



## HTML Forms

First name:

Last name:

Your student ID:

☒ Male  
☐ Female  
☐ Other

If you click the "Submit" button, the form-data will be sent to a page called `"/backend.php"`.

**ex-0304.html**

# Exercise it

- Design a html5 code to show the result as below.

Enter email :

# The <select> Element

```
<form action="/action_page.php">
  <select name="cars">
    <option value="op1">TV</option>
    <option value="op2">Android phone</option>
    <option value="op3">iPhone</option>
    <option value="op4">Bike</option>
  </select>
  <br><br>
  <input type="submit">
</form>
```



# Select option

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <h2>The select Element</h2>
6  <p>The select element defines a drop-down list:</p>
7
8  <form action="/action_page.php">
9    <select name="goods">
10      <option value="op1">TV</option>
11      <option value="op2">Android phone</option>
12      <option value="op3">iPhone</option>
13      <option value="op4">Bike</option>
14    </select>
15    <br><br>
16    <input type="submit">
17  </form>
18
19 </body>
20 </html>
```

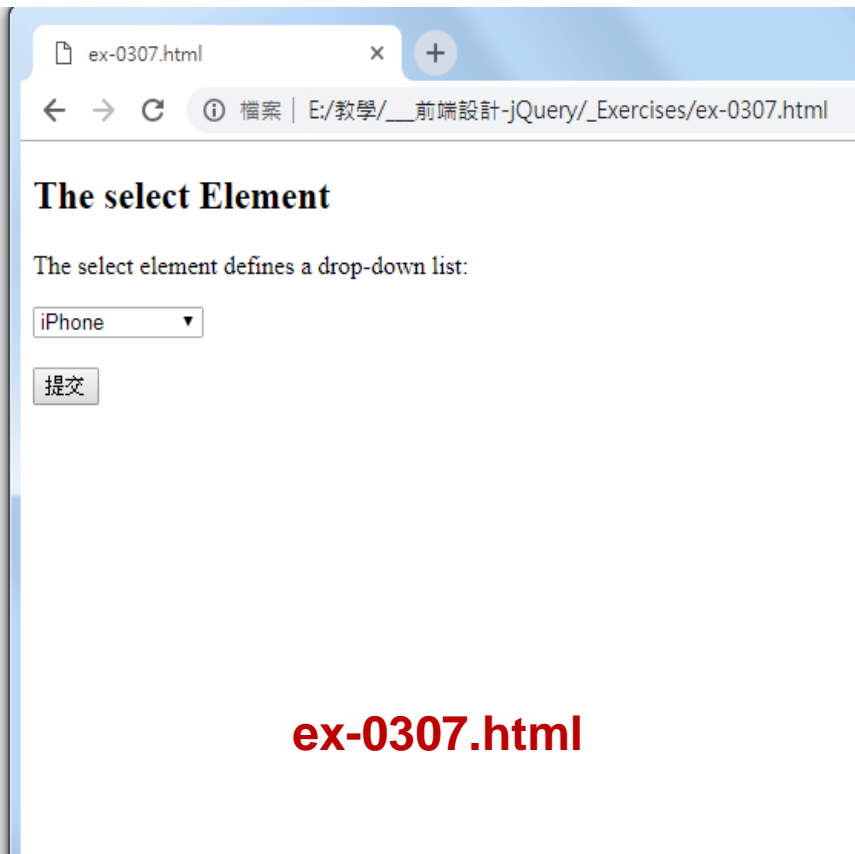


ex-0306.html

# Pre-selected option

- 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:

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <h2>The select Element</h2>
6 <p>The select element defines a drop-down list:</p>
7
8 <form action="/action_page.php">
9   <select name="goods">
10     <option value="op1">TV</option>
11     <option value="op2">Android phone</option>
12     <option value="op3" selected>iPhone</option>
13     <option value="op4">Bike</option>
14   </select>
15   <br><br>
16   <input type="submit">
17 </form>
18
19 </body>
20 </html>
```



**ex-0307.html**

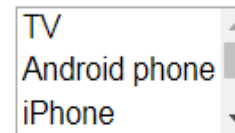
# Visible Values

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <h2>The select Element</h2>
6  <p>The select element defines a drop-down list:</p>
7
8  <form action="/action_page.php">
9    <select name="goods" size=3>
10      <option value="op1">TV</option>
11      <option value="op2">Android phone</option>
12      <option value="op3">iPhone</option>
13      <option value="op4">Bike</option>
14      <option value="op5">car</option>
15    </select>
16    <br><br>
17    <input type="submit">
18  </form>
19
20 </body>
21 </html>
```

← → ↺ ⓘ 檔案 | E:/教學/\_\_\_前端設計-jQuery/\_E

## The select Element

The select element defines a drop-down list:



提交

**ex-0308.html**

# Exercise it

## HTML Forms

First name:

Last name:

Your student ID:

☐ TV  
☒ Android phone  
☐ iPhone

If you click the "Submit" button, the form-data will be sent to a page called `"/backend.php"`.



# Exercise it

## HTML Forms

Writing:

勞作教育需撰寫兩篇心得上傳!

First name:

Last name:

Your student ID:

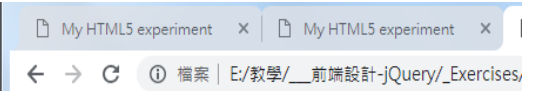
☐ TV  
☒ Android phone  
☐ iPhone

If you click the "Submit" button, the form-data will be sent to a page called `"/backend.php"`.

**ex-0310.html**

# Radio button

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="utf-8">
5   <title>My HTML5 experiment</title>
6   <link rel="stylesheet" href="ex-0309-style.css">
7 </head>
8
9 <body>
10 <h2>HTML Forms</h2>
11
12 <form action="/backend.php">
13   First name:
14   <input type="text" name="firstname" value="Wen-Yen">
15   <br>
16   Last name:
17   <input type="text" name="lastname" value="Wang">
18   <br>
19   Your student ID:
20   <input type="text" name="id" value="4090E001">
21   <br><br>
22
23   <h2>Radio Buttons</h2>
24   <input type="radio" name="dept" value="IS department" checked> IS department<br>
25   <input type="radio" name="dept" value="IM department"> IM department<br>
26   <input type="radio" name="dept" value="IC department"> IC department<br><br>
27
28   <input type="submit" value="Submit">
29 </form>
30
31 <p>If you click the "Submit" button, the form-data will be sent to a page called "</p>
32
33 </body>
34 </html>
```



## HTML Forms

First name: Wen-Yen  
Last name: Wang  
Your student ID: 4090E001

## Radio Buttons

- ☒ IS department
- ☐ IM department
- ☐ IC department

Submit

If you click the "Submit" button, the form-data will be sent to a page called "/backend.php".

# Exercise it

## HTML Forms

First name:

Last name:

Your student ID:

## Radio Buttons

- ☒ IS department
- ☐ IM department
- ☐ IC department

## Checkboxes

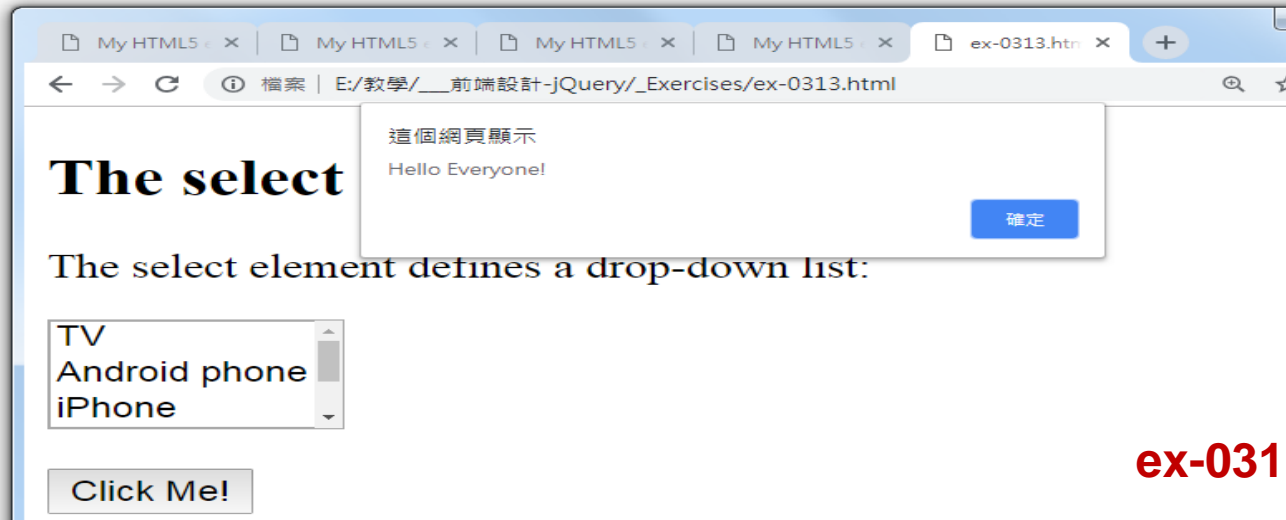
- ☒ apple
- ☒ orange
- ☐ cherry

**ex-0312.html**

If you click the "Submit" button, the form-data will be sent to a page called `"/backend.php"`.

# Alert action

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <h2>The select Element</h2>
6 <p>The select element defines a drop-down list:</p>
7
8 <form action="/action_page.php">
9   <select name="goods" size=3>
10     <option value="op1">TV</option>
11     <option value="op2">Android phone</option>
12     <option value="op3">iPhone</option>
13     <option value="op4">Bike</option>
14     <option value="op5">car</option>
15   </select>
16   <br><br>
17   <input type="button" onclick="alert('Hello Everyone!')" value="Click Me!">
18 </form>
19
20 </body>
21 </html>
```



ex-0313.html

# Date type

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <h2>The select Element</h2>
6  <p>The select element defines a drop-down list:</p>
7
8  <form action="/action_page.php">
9    <select name="goods" size=3>
10      <option value="op1">TV</option>
11      <option value="op2">Android phone</option>
12      <option value="op3">iPhone</option>
13      <option value="op4">Bike</option>
14      <option value="op5">car</option>
15    </select>
16    <br><br>
17    <h2>Date Field</h2>
18    <input type="date" name="bday">
19    <input type="button" onclick="alert('Hello Everyone!')" value="Click Me!">
20  </form>
21
22 </body>
23 </html>
```

ex-0314.html



**The select Element**

The select element defines a drop-down list:

TV  
Android phone  
iPhone

**Date Field**

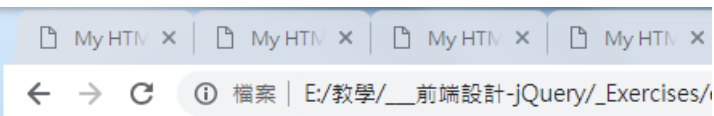
年 / 月 / 日 Click Me!

2019年03月

週日	週一	週二	週三	週四	週五	週六
24	25	26	27	28	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	6

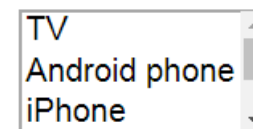
# Range

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <h2>The select Element</h2>
6 <p>The select element defines a drop-down list:</p>
7
8 <form action="/action_page.php">
9   <select name="goods" size=3>
10     <option value="op1">TV</option>
11     <option value="op2">Android phone</option>
12     <option value="op3">iPhone</option>
13     <option value="op4">Bike</option>
14     <option value="op5">car</option>
15   </select>
16   <br><br>
17   <h2>Range Field</h2>
18   Points:
19   <input type="range" name="points" min="0" max="10">
20   <br>
21   <input type="submit">
22 </form>
23
24 </body>
25 </html>
```



## The select Element

The select element defines a drop-down list:



## Range Field



ex-0315.html

# Exercise it

Please select your preferred contact method:

☐ Email ☐ Phone ☒ Mail

Submit

**ex-0316.html**

The End