

Лекція 6. HTML Веб форми. Нові теги в HTML5

Стандартні форми HTML

HTML Form Elements

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

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

`<input type="password">` defines a password field:

`<input type="submit">` defines a button for submitting form data to a form-handler.

`<input type="reset">` defines a reset button that will reset all form values to their default values:

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

`<input type="checkbox">` defines a checkbox.

`<input type="button">` defines a button:

The `<select>` Element

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

```
<option value="fiat" selected>Fiat</option>
```

The `<textarea>` Element

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

The <button> Element

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

HTML5 Elements

<datalist> Specifies a list of pre-defined options for input controls
<keygen> Defines a key-pair generator field (for forms)
<output> Defines the result of a calculation

Color date datetime-local email month number range search tel time url week

HTML5 <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>
```

HTML5 <keygen> Element

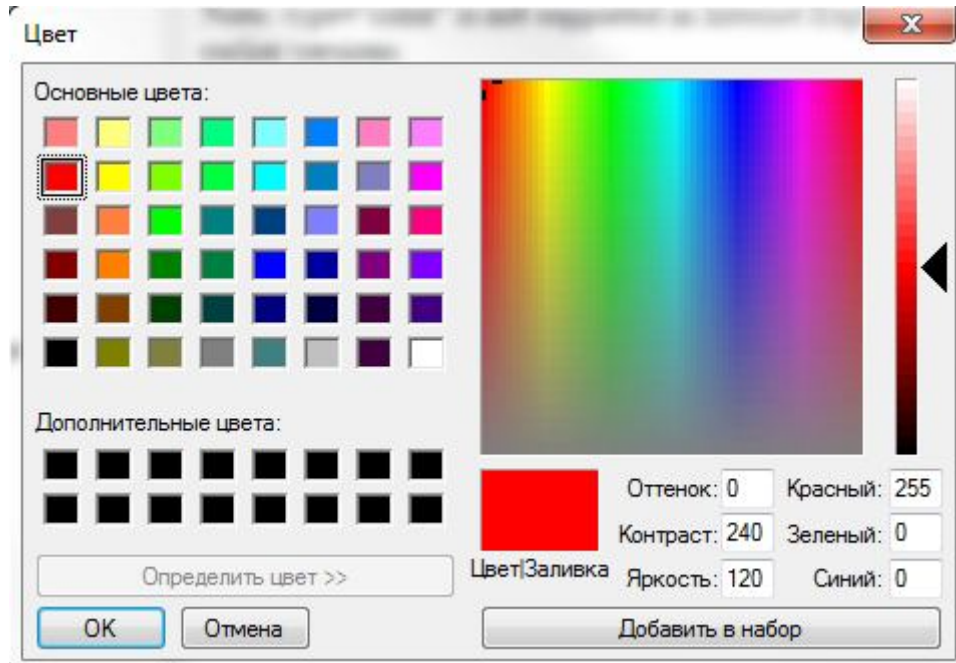
```
<form action="/action_page.php">  
  Username: <input type="text" name="user">  
  Encryption: <keygen name="security">  
  <input type="submit">  
</form>
```

HTML5 <output> Element

```
<form action="/action_page.php"  
  oninput="x.value=parseInt(a.value)+parseInt(b.value)">  
  0 <input type="range" id="a" name="a" value="50">  
  100 + <input type="number" id="b" name="b" value="50">  
  = <output name="x" for="a b"></output>
```

```
<input type="submit">  
</form>
```

```
<input type="color" name="favcolor">
```



```
<input type="date" name="bday">
```

Birthday:

The `<input type="datetime-local">` specifies a date and time input field, with no time zone.

Birthday (date and time):

The `<input type="email">` is used for input fields that should contain an e-mail address.

The `<input type="month">` allows the user to select a month and year.

Input Type Number

```
<form>
```

Quantity (between 1 and 5):

```
<input type="number" name="quantity" min="1" max="5">  
</form>
```

Input Restrictions

disabled Specifies that an input field should be disabled
max Specifies the maximum value for an input field
maxlength Specifies the maximum number of character for an input field
min Specifies the minimum value for an input field
pattern Specifies a regular expression to check the input value against
readonly Specifies that an input field is read only (cannot be changed)
required Specifies that an input field is required (must be filled out)
size Specifies the width (in characters) of an input field
step Specifies the legal number intervals for an input field
value Specifies the default value for an input field

Input Type Range

```
<form>  
  <input type="range" name="points" min="0" max="10">  
</form>
```



Input Type Search

```
<form>  
  Search Google:  
  <input type="search" name="googlesearch">  
</form>
```

Input Type Tel

```
<form>  
  Telephone:  
  <input type="tel" name="usrstel">  
</form>
```

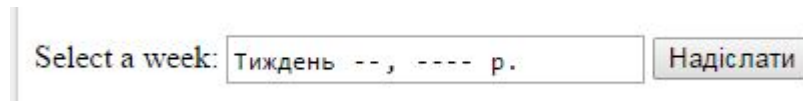
Input Type Time

```
<form>  
  Select a time:  
  <input type="time" name="usr_time">  
</form>
```

Input Type Url

```
<form>  
  Add your homepage:  
  <input type="url" name="homepage">  
</form>  
Try it Yourself »
```

Input Type Week



The screenshot shows a web form with a label 'Select a week:' followed by a text input field containing the text 'Тиждень --, ---- p.'. To the right of the input field is a button labeled 'Надіслати' (Submit).

Атрибути

The readonly Attribute

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

The disabled Attribute

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

The size Attribute

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

The maxlength Attribute

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

HTML 5 Атрибути

autocomplete
autofocus
form
formaction
formenctype
formmethod
formnovalidate
formtarget
height and width
list
min and max
multiple
pattern (regexp)
placeholder
required
step

The formaction Attribute

```
<form action="/action_page.php">  
  First name: <input type="text" name="fname"><br>  
  Last name: <input type="text" name="lname"><br>  
  <input type="submit" value="Submit"><br>  
  <input type="submit" formaction="/action_page2.php"  
  value="Submit as admin">  
</form>
```

The enctype Attribute

```
<form action="/action_page_binary.asp" method="post">  
  First name: <input type="text" name="fname"><br>  
  <input type="submit" value="Submit">  
  <input type="submit" formenctype="multipart/form-data"  
  value="Submit as Multipart/form-data">  
</form>
```

The formmethod Attribute

```
<form action="/action_page.php" method="get">  
  First name: <input type="text" name="fname"><br>  
  Last name: <input type="text" name="lname"><br>  
  <input type="submit" value="Submit">  
  <input type="submit" formmethod="post" formaction="action_page_post.asp"  
  value="Submit using POST">
```

</form>

The formnovalidate Attribute

```
<form action="/action_page.php">  
  E-mail: <input type="email" name="userid"><br>  
  <input type="submit" value="Submit"><br>  
  <input type="submit" formnovalidate value="Submit without validation">  
</form>
```

The formtarget Attribute

```
<form action="/action_page.php">  
  First name: <input type="text" name="fname"><br>  
  Last name: <input type="text" name="lname"><br>  
  <input type="submit" value="Submit as normal">  
  <input type="submit" formtarget="_blank"  
  value="Submit to a new window">  
</form>
```

The height and width Attributes

```
<input type="image" src="img_submit.gif" alt="Submit" width="48" height="48">
```

The min and max Attributes

Enter a date before 1980-01-01:

```
<input type="date" name="bday" max="1979-12-31">
```

Enter a date after 2000-01-01:

```
<input type="date" name="bday" min="2000-01-02">
```

Quantity (between 1 and 5):

```
<input type="number" name="quantity" min="1" max="5">
```

The multiple Attribute

```
Select images: <input type="file" name="img" multiple>
```

The pattern Attribute

```
Country code: <input type="text" name="country_code" pattern="[A-Za-z]{3}" title="Three letter  
country code">
```

The placeholder Attribute

```
<input type="text" name="fname" placeholder="First name">
```

The required Attribute

```
Username: <input type="text" name="username" required>
```

The step Attribute

```
<input type="number" name="points" step="3">
```

Селектори JS

```
Document.getElementsByTagName("p")
Document.getElementsByClassName("vito")
Document.getElementById("")
Dovumtent.querySelector("p")
Documrnt.querySelectorAll("p")
```

<i>JavaScript</i>	<i>jQuery</i>
JavaScript is a language. It is most popular scripting language on internet which works on all major browsers	jQuery is a framework. It is a fast and concise JavaScript library that simplifies HTML document
If I use JavaScript, you need to write own script which may take time	If I use jQuery you need not to write much scripting which already exists in libraries
JavaScript is a combination of ECMA script and DOM	jQuery has DOM (Document object Model)
<p>Example:</p> <p>JavaScript ID Selector:</p> <pre>var \$el = document.querySelector('#hello');</pre> <p>JavaScript Class Selector:</p> <pre>var \$el = document.querySelector('.bye');</pre> <pre>Function changeBackground(color) { Document.body.style.background = color;} Onload="changeBackground ('red');"</pre>	<p>Example:</p> <p>jQuery ID Selector:</p> <pre>var \$el = \$("#hello");</pre> <p>jQuery Class Selector:</p> <pre>var \$el = \$('.bye');</pre> <pre>\$ ('body') .css ('background', '#ccc');</pre>

JQ ID Selector	<code>var \$el = \$('#hello');</code>
JS ID Selector	<code>var \$el = document.getElementById('hello');</code>
JS generic Selector	<code>var \$el = document.querySelector('#hello');</code>
JQ Class Selector	<code>var \$el = \$('.bye');</code>
JS Class Selector	<code>var \$el = document.getElementsByClassName('bye');</code>
JS generic Selector	<code>var \$el = document.querySelectorAll('.bye');</code>
JQ multiselect	<code>var \$el = \$('#hello .bye');</code>
JS multiselect	<code>var \$el = document.querySelectorAll('#hello .bye');</code>
JQ 2 Selectors	<code>var \$el = \$('.bye, .bye2');</code>
JS 2 Selectors	<code>var \$el = document.querySelectorAll('.bye, .bye2');</code>

```
Chrome 39:  
$('#parent .child'): 798ms  
$('#parent > .child'): 692ms  
$('#parent').children('.child'): 1473ms  
$('#parent').find('.child'): 568ms  
$parent.find('.child'): 505ms
```

All Selector ("*")

Selects all elements.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:animated Selector

Select all elements that are in the progress of an animation at the time the selector is run.

Also in: Selectors > Attribute

Attribute Contains Prefix Selector [name|="value"]

Selects elements that have the specified attribute with a value either equal to a given string or starting with that string followed by a hyphen (-).

Also in: Selectors > Attribute

Attribute Contains Selector [name*="value"]

Selects elements that have the specified attribute with a value containing a given substring.

Also in: Selectors > Attribute

Attribute Contains Word Selector [name~="value"]

Selects elements that have the specified attribute with a value containing a given word, delimited by spaces.

Also in: Selectors > Attribute

Attribute Ends With Selector [name\$="value"]

Selects elements that have the specified attribute with a value ending exactly with a given string. The comparison is case sensitive.

Also in: Selectors > Attribute

Attribute Equals Selector [name="value"]

Selects elements that have the specified attribute with a value exactly equal to a certain value.

Also in: Selectors > Attribute | Selectors > jQuery Extensions

Attribute Not Equal Selector [name!="value"]

Select elements that either don't have the specified attribute, or do have the specified attribute but not with a certain value.

Also in: Selectors > Attribute

Attribute Starts With Selector [name^="value"]

Selects elements that have the specified attribute with a value beginning exactly with a given string.

Also in: Selectors > Form | Selectors > jQuery Extensions

:button Selector

Selects all button elements and elements of type button.

Also in: Selectors > Form | Selectors > jQuery Extensions

:checkbox Selector

Selects all elements of type checkbox.

Also in: Selectors > Form

:checked Selector

Matches all elements that are checked or selected.

Also in: Selectors > Hierarchy

Child Selector ("parent > child")

Selects all direct child elements specified by "child" of elements specified by "parent".

Also in: Selectors > Basic

Class Selector (".class")

Selects all elements with the given class.

Also in: Selectors > Content Filter

:contains() Selector

Select all elements that contain the specified text.

Also in: Selectors > Hierarchy

Descendant Selector ("ancestor descendant")

Selects all elements that are descendants of a given ancestor.

Also in: Selectors > Form

:disabled Selector

Selects all elements that are disabled.

Also in: Selectors > Basic

Element Selector ("element")

Selects all elements with the given tag name.

Also in: Selectors > Content Filter

:empty Selector

Select all elements that have no children (including text nodes).

Also in: Selectors > Form

:enabled Selector

Selects all elements that are enabled.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:eq() Selector

Select the element at index n within the matched set.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:even Selector

Selects even elements, zero-indexed. See also odd.

Also in: Selectors > Form | Selectors > jQuery Extensions

:file Selector

Selects all elements of type file.

Also in: Selectors > Child Filter

:first-child Selector

Selects all elements that are the first child of their parent.

Also in: Selectors > Child Filter

:first-of-type Selector

Selects all elements that are the first among siblings of the same element name.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:first Selector

Selects the first matched DOM element.

Also in: Selectors > Basic Filter | Selectors > Form

:focus Selector

Selects element if it is currently focused.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:gt() Selector

Select all elements at an index greater than index within the matched set.

Also in: Selectors > Attribute

Has Attribute Selector [name]

Selects elements that have the specified attribute, with any value.

Also in: Selectors > Content Filter | Selectors > jQuery Extensions

:has() Selector

Selects elements which contain at least one element that matches the specified selector.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:header Selector

Selects all elements that are headers, like h1, h2, h3 and so on.

Also in: Selectors > jQuery Extensions | Selectors > Visibility Filter

:hidden Selector

Selects all elements that are hidden.

Also in: Selectors > Basic

ID Selector (“#id”)

Selects a single element with the given id attribute.

Also in: Selectors > Form | Selectors > jQuery Extensions

:image Selector

Selects all elements of type image.

Also in: Selectors > Form | Selectors > jQuery Extensions

:input Selector

Selects all input, textarea, select and button elements.

Also in: Selectors > Basic Filter

:lang() Selector

Selects all elements of the specified language.

Also in: Selectors > Child Filter

:last-child Selector

Selects all elements that are the last child of their parent.

Also in: Selectors > Child Filter

:last-of-type Selector

Selects all elements that are the last among siblings of the same element name.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:last Selector

Selects the last matched element.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:lt() Selector

Select all elements at an index less than index within the matched set.

Also in: Selectors > Attribute

Multiple Attribute Selector [name="value"][name2="value2"]

Matches elements that match all of the specified attribute filters.

Also in: Selectors > Basic

Multiple Selector ("selector1, selector2, selectorN")

Selects the combined results of all the specified selectors.

Also in: Selectors > Hierarchy

Next Adjacent Selector ("prev + next")

Selects all next elements matching "next" that are immediately preceded by a sibling "prev".

Also in: Selectors > Hierarchy

Next Siblings Selector ("prev ~ siblings")

Selects all sibling elements that follow after the "prev" element, have the same parent, and match the filtering "siblings" selector.

Also in: Selectors > Basic Filter

:not() Selector

Selects all elements that do not match the given selector.

Also in: Selectors > Child Filter

:nth-child() Selector

Selects all elements that are the nth-child of their parent.

Also in: Selectors > Child Filter

:nth-last-child() Selector

Selects all elements that are the nth-child of their parent, counting from the last element to the first.

Also in: Selectors > Child Filter

:nth-last-of-type() Selector

Selects all the elements that are the nth-child of their parent in relation to siblings with the same element name, counting from the last element to the first.

Also in: Selectors > Child Filter

:nth-of-type() Selector

Selects all elements that are the nth child of their parent in relation to siblings with the same element name.

Also in: Selectors > Basic Filter | Selectors > jQuery Extensions

:odd Selector

Selects odd elements, zero-indexed. See also even.

Also in: Selectors > Child Filter

:only-child Selector

Selects all elements that are the only child of their parent.

Also in: Selectors > Child Filter

:only-of-type Selector

Selects all elements that have no siblings with the same element name.

Also in: Selectors > Content Filter | Selectors > jQuery Extensions

:parent Selector

Select all elements that have at least one child node (either an element or text).

Also in: Selectors > Form | Selectors > jQuery Extensions

:password Selector

Selects all elements of type password.

Also in: Selectors > Form | Selectors > jQuery Extensions

:radio Selector

Selects all elements of type radio.

Also in: Selectors > Form | Selectors > jQuery Extensions

:reset Selector

Selects all elements of type reset.

Also in: Selectors > Basic Filter

:root Selector

Selects the element that is the root of the document.

Also in: Selectors > Form | Selectors > jQuery Extensions

:selected Selector

Selects all elements that are selected.

Also in: Selectors > Form | Selectors > jQuery Extensions

:submit Selector

Selects all elements of type submit.

Also in: Selectors > Basic Filter

:target Selector

Selects the target element indicated by the fragment identifier of the document's URI.

Also in: Selectors > Form | Selectors > jQuery Extensions

:text Selector

Selects all input elements of type text.

Also in: Selectors > jQuery Extensions | Selectors > Visibility Filter

:visible Selector

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Selects all elements that are visible.