

HTML Forms

Fajiang Yu, fjyu@whu.edu.cn

School of Computer, Wuhan University

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Introduction to Forms

An HTML form is a section of a document.

Users generally "complete" a form by modifying its **controls** (entering text, selecting menu items, etc.), before submitting the form to an agent for processing.

Usual Control Types:

buttons, checkboxes, radio buttons, menus, text input, file select, hidden controls, etc.



The form element

The **form** element acts as a container for controls.

It specifies

- The layout of the form
- The program that will handle the completed and submitted form
- The method by which user data will be sent to the server
- A character encoding that must be accepted by the server in order to handle this form



The form element

Some Attributes

- `action`, to specify a form processing agent (URI)
- `method = get | post`, to specify which HTTP method will be used to submit the form data set
- `enctype = application/x-www-form-urlencoded | multipart/form-data`

HTML5 new attributes

- `autocomplete`
- `novalidate`



The input element

Some attributes

- `type = text | password | checkbox | radio | submit | reset | file | hidden | image | button`

- `name`

When several radios share the same control name, they are mutually exclusive.

- `value`

To specify the initial value.

It is **optional except** when the type attribute has the value "radio" or "checkbox".

- `size`

To specify the initial width of the control.

The width is given in pixels except when type attribute has the value "text" or "password" (its value refers to the (integer) number of characters)



The input element

Some attributes

- **maxlength**

When the type attribute has the value "text" or "password", this attribute specifies the maximum number of characters the user may enter.

- **checked**

When the type attribute has the value "radio" or "checkbox", this boolean attribute specifies that the button is on.

- **src = *URI***

When the type attribute has the value "image", this attribute specifies the location of the image.



The input element

HTML5 input types

- email, url
- number, range
- Date pickers: date, month, week, time, datetime, datetime-local
- search, color

```
<input type="email" name="user_email" />
```

```
<input type="number" name="points1" min="1" max="10" />
```

```
<input type="range" name="points2" min="1" max="10" step="2" />
```



The input element

HTML5 input attributes

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



The input element

Example(s)

```
<form action="demo_form.asp" method="get" id="user_form">
```

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

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

```
</form>
```

```
Last name: <input type="text" name="lname" form="user_form" />
```

```
<form action="demo_form.asp" method="get" id="user_form">
```

```
  E-mail: <input type="email" name="userid" /> <br />
```

```
  <input type="submit" value="Submit" /> <br />
```

```
  <input type="submit" formaction="demo_admin.asp"  
    value="Submit as admin" />
```

```
</form>
```



The button element

Some attributes

- name
- value
- type = submit | button | reset

```
<button name="submit" value="submit" type="submit">  
  Send   
</button>
```



The select and option elements

The select element

- **name**

- **size**

To specify the number of rows in the list that should be visible at the same time.

- **multiple**

If set, this **boolean attribute** allows multiple selections.



The select and option elements

The option element

- **selected**

When set, this **boolean attribute** specifies that this option is pre-selected.

- **value**

To specify the initial value of the control.

If this attribute is not set, the initial value is set to the contents of the **option** element.



The textarea element

The `textarea` element creates a multi-line text input control.

Some attributes

- `name`
- `rows`
- `cols`



HTML5 New Form Elements

- `<datalist>`
- `<keygen>`
- `<output>`

```
Webpage: <input type="url" list="url_list" name="link" />
<datalist id="url_list">
  <option label="W3School" value="http://www.W3School.com.cn" />
  <option label="Google" value="http://www.google.com" />
  <option label="Microsoft" value="http://www.microsoft.com" />
</datalist>
```



Disabled and read-only controls

Boolean attributes

- disabled
- readonly



Form submission method

The `method` attribute value of the `form` element

- **get**
the form data set is appended to the URI specified by the `action` attribute (with a question-mark (“?”) as separator) and this new URI is sent to the processing agent, which restricts form data set values to ASCII characters.
- **post**
the form data set is included in the body of the form and sent to the processing agent.



Successful controls

A successful control is "valid" for submission.

- A successful control must be defined within a **form** element and
- must have a **control name**.

Controls that are **disabled** cannot be successful.



Thank You!
Any Questions?

