Input Type Text

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

<!DOCTYPE html>
<html>
<body>
<form action="action_page.php">
First name:
<input type="text" name="firstname">

Last name:
<input type="text" name="lastname">

<input type="submit">
</form>
<p>Note that the form itself is not visible.</p>
<p>Also note that the default width of a text field is 20 characters.</p>
</body>
</html>

First name:

Last name:

Submit

Note that the form itself is not visible.
Also note that the default width of a text field is 20 characters.

Input Type Password

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

<!DOCTYPE html>
<html>
<body>
<form action="">
User name:
<input type="text" name="userid">

User password:
<input type="password" name="psw">
</form>
<p>The characters in a password field are masked (shown as asterisks or circles).</p>
</body>
</html>

This is how the HTML code above will be displayed in a browser:

User name:

User password:

The characters in a password field are masked (shown as asterisks or circles).

Input Type Submit

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

The form-handler is typically a server page with a script for processing input data.

The form-handler is specified in the form's **action** attribute:

```
<!DOCTYPE html>
<html>
<body>
<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 "Submit", the form-data will be sent to a page called "action_page.php".</p>
</body>
</html>
```

This is how the HTML code above will be displayed in a browser:

First name:

| Mickey |

Last name:

| Mouse |

| Submit |

If you omit the submit button's value attribute, the button will get a default text:

```
<!DOCTYPE html>
<html>
<body>
<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">
</form>
</body>
</html>
```

First name:

| Mickey |

Last name:

| Mouse |

| Submit |

Input Type Reset

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

```
<!DOCTYPE html>
<html>
<body>
<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">
<input type="reset">
</form>
<p>If you change the input values and then click the "Reset" button, the form-data will be reset to the
default values.</p>

</body>
</html>
```

First name:

| Mickey |

Last name:

| Mouse |

Submit   Reset

If you change the input values and then click the "Reset" button, the form-data will be reset to the
default values.

Input Type Radio

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

Radio buttons let a user select ONLY ONE of a limited number of choices:

```
<!DOCTYPE html>
<html>
<body>
<form action="action_page.php">
  <input type="radio" name="gender" value="male" checked> Male<br>
  <input type="radio" name="gender" value="female"> Female<br>
  <input type="radio" name="gender" value="other"> Other<br><br>
  <input type="submit">
</form>
</body>
</html>
```

○ Male

○ Female

○ Other

Submit

Input Type Checkbox

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

Checkboxes let a user select ZERO or MORE options of a limited number of choices.

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

```
<body>
<form action="action_page.php">
<input type="checkbox" name="vehicle1" value="Bike">I have a bike
<br>
<input type="checkbox" name="vehicle2" value="Car">I have a car
<br><br>
<input type="submit">
</form>
</body>
</html>
```

☐ I have a bike

☐ I have a car

[Submit]

Input Type Button

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

```
<!DOCTYPE html>
<html>
<body>
<input type="button" onclick="alert('Hello World!')" value="Click Me!">
</body>
</html>
```

This is how the HTML code above will be displayed in a browser:

HTML5 Input Types

HTML5 added several new input types:
- color
- date
- datetime
- datetime-local
- email
- month
- number
- range
- search
- tel
- time
- url
- week

Input Type Number

The **<input type="number">** defines a **numeric** input field. You can also **set** restrictions on what numbers are accepted. The following example displays a numeric input field, where you can enter a value from 1 to 5:

```
<!DOCTYPE html>

<html>
<body><p>Numeric restrictions will apply in the input field:</p>
<form action="action_page.php">
```

```
Quantity (between 1 and 5):
<input type="number" name="quantity" min="1" max="5">
<input type="submit">
</form>
<p><b>Note:</b> type="number" is not supported in IE9 and earlier.</p>
</body>
</html>
```

Numeric restrictions will apply in the input field:

Quantity (between 1 and 5): <u>S</u>ubmit

Note: type="number" is not supported in IE9 and earlier.

Input Restrictions

Here is a list of some common input restrictions (some are new in HTML5):

Attribute	Description
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

You will learn more about input restrictions in the next chapter.

The following example displays a numeric input field, where you can enter a value from 0 to 100, in steps of 10. The default value is 30:

```
<!DOCTYPE html>
<html>
<body>
<p>Depending on browser support:<br>

Fixed steps will apply in the input field.
</p>

<form action="action_page.php">
```

```
  Quantity:
  <input type="number" name="quantity"
   min="0" max="100" step="10" value="30">
  <input type="submit">
</form>
<p><b>Note:</b>type="number" is not supported in IE9 and earlier.</p>

</body>

</html>
```

Depending on browser support:
Fixed steps will apply in the input field.

Quantity: Submit

Note:type="number" is not supported in IE9 and earlier.

Input Type Date

The **<input type="date">** is used for input fields that should contain a date.Depending on browser support, a date picker can show up in the input field.
```
<!DOCTYPE html>
<html>
<body>
<p>
Depending on browser support:<br>
A date picker can pop-up when you enter the input field.
</p>
<form action="action_page.php">
  Birthday:
  <input type="date" name="bday">
  <input type="submit">
</form>

<p><strong>Note:</strong> type="date" is not supported in Firefox, or Internet Explorer 11 and
earlier versions.</p>
</body>
</html>
```

Depending on browser support:
A date picker can pop-up when you enter the input field.

Birthday: Submit

Note: type="date" is not supported in Firefox, or Internet Explorer 11 and earlier versions

You can also add restrictions to dates:
```
<!DOCTYPE html>
<html>
```

```
<body>

<form action="action_page.php">
Enter a date before 1980-01-01:<br>
<input type="date" name="bday" max="1979-12-31"><br><br>
Enter a date after 2000-01-01:<br>
<input type="date" name="bday" min="2000-01-02"><br><br>
<input type="submit">
</form>

<p><strong>Note:</strong> type="date" is not supported in Firefox, or Internet Explorer 11 and earlier versions.</p>

</body>
</html>
```

Enter a date before 1980-01-01:

Enter a date after 2000-01-01:

Submit

Note: type="date" is not supported in Firefox, or Internet Explorer 11 and earlier versions.

Input Type Color

The **<input type="color">** is used for input fields that should contain a color.

Depending on browser support, a color picker can show up in the input field.

```
<!DOCTYPE html>
<html>
<body>
<p>
Depending on browser support:<br>
A color picker can pop-up when you enter the input field.
</p>
<form action="action_page.php">
  Select your favorite color:
  <input type="color" name="favcolor" value="#ff0000">
  <input type="submit">
</form>
<p><b>Note:</b> type="color" is not supported in Internet Explorer 11 and earlier versions or Safari 9.1 and earlier versions.</p>
</body>
</html>
```

Depending on browser support:
A color picker can pop-up when you enter the input field.

Select your favorite color: Submit

Note: type="color" is not supported in Internet Explorer 11 and earlier versions or Safari 9.1 and earlier versions.

Input Type Range

The **<input type="range">** is used for input fields that should contain a value within a range. Depending on browser support, the input field can be displayed as a slider control.

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

<p>
Depending on browser support:<br>
The input type "range" can be displayed as a slider control.
</p>

<form action="action_page.php" method="get">
 Points:
 <input type="range" name="points" min="0" max="10">
 <input type="submit">
</form>

<p>
<b>Note:</b>
type="range" is not supported in Internet Explorer 9 and earlier versions.
</p>

</body>
</html>
```

Depending on browser support:
The input type "range" can be displayed as a slider control.

Points: Submit

Note: type="range" is not supported in Internet Explorer 9 and earlier versions.

You can use the following attributes to specify restrictions: min, max, step, value.

Input Type Month

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

Depending on browser support, a date picker can show up in the input field.

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

<p>
Depending on browser support:<br>
A date picker can pop-up when you enter the input field.
</p>
```

```
<form action="action_page.php">
  Birthday (month and year):
  <input type="month" name="bdaymonth">
  <input type="submit">
</form>

<p><strong>Note:</strong> type="month" is not supported in Firefox, or Internet Explorer 11
and earlier versions.</p>

</body>
</html>
```
Depending on browser support:
A date picker can pop-up when you enter the input field.

Birthday (month and year): Submit

Note: type="month" is not supported in Firefox, or Internet Explorer 11 and earlier versions.

Input Type Week

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

Depending on browser support, a date picker can show up in the input field.
```
<!DOCTYPE html>
<html>
<body>

<p>
Depending on browser support:<br>
A date picker can pop-up when you enter the input field.
</p>

<form action="action_page.php">
  Select a week:
  <input type="week" name="year_week">
  <input type="submit">
</form>

<p><strong>Note:</strong> type="week" is not supported in Firefox, or Internet Explorer 11 and
earlier versions.</p>

</body>
</html>
```
Depending on browser support:
A date picker can pop-up when you enter the input field.

Select a week: Submit

Note: type="week" is not supported in Firefox, or Internet Explorer 11 and earlier versions.

Input Type Time

The **<input type="time">** allows the user to select a time (no time zone).

Depending on browser support, a time picker can show up in the input field.

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

<p>
Depending on browser support:<br>
A time picker might pop-up when you enter the input field.
</p>

<form action="action_page.php">
  Select a time:
  <input type="time" name="usr_time">
  <input type="submit">
</form>

<p><strong>Note:</strong> type="time" is not supported in Firefox, or Internet Explorer 12 and earlier versions.</p>

</body>
</html>
```

Depending on browser support:
A time picker might pop-up when you enter the input field.

Select a time: [Submit]

Note: type="time" is not supported in Firefox, or Internet Explorer 12 and earlier versions.

Input Type Datetime-local
The **<input type="datetime-local">** specifies a date and time input field, with no time zone.
Depending on browser support, a date picker can show up in the input field.

```
<!DOCTYPE html>
<html>
<body>
<p>
Depending on browser support:<br>
A date picker can pop-up when you enter the input field.
</p>

<form action="action_page.php">
  Birthday (date and time):
  <input type="datetime-local" name="bdaytime">
  <input type="submit" value="Send">
</form>

<p><strong>Note:</strong> type="datetime-local" is not supported in Firefox, or Internet Explorer 12 and earlier versions.</p>

</body>
</html>
```

Depending on browser support:
A date picker can pop-up when you enter the input field.

Birthday (date and time): [Send]

Note: type="datetime-local" is not supported in Firefox, or Internet Explorer 12 and earlier versions.

Input Type Email

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

Depending on browser support, the e-mail address can be automatically validated when submitted.

Some smartphones recognize the email type, and adds ".com" to the keyboard to match email input.

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

<form action="action_page.php">
 E-mail:
 <input type="email" name="email">
 <input type="submit">
</form>

<p>
<b>Note:</b>type="email" is not supported in IE9 and earlier.</p>

</body>
</html>
```

E-mail: [Submit]

Note:type="email" is not supported in IE9 and earlier.

Input Type Search

The **<input type="search">** is used for search fields (a search field behaves like a regular text field).

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

<form action="action_page.php">
 Search Google:
 <input type="search" name="googlesearch">
 <input type="submit">
</form>
```

```
</body>
</html>
```

Search Google: [Submit]

Input Type Tel

The **<input type="tel">** is used for input fields that should contain a telephone number.

The tel type is currently supported only in Safari 8.
```
<!DOCTYPE html>
<html>
<body>

<form action="action_page.php">
  Telephone:
  <input type="tel" name="usrtel">
  <input type="submit">
</form>

<p><b>Note:</b> type="tel" is only supported in Safari 8 and newer versions.</p>

</body>
</html>
```

Telephone: [Submit]

Note: type="tel" is only supported in Safari 8 and newer versions.

Input Type Url

The **<input type="url">** is used for input fields that should contain a URL address.

Depending on browser support, the url field can be automatically validated when submitted.

Some smartphones recognize the url type, and adds ".com" to the keyboard to match url input.
```
<!DOCTYPE html>
<html>
<body>

<form action="action_page.php">
  Add your homepage:
  <input type="url" name="homepage">
  <input type="submit">
</form>

<p><b>Note:</b>
The type="url" is not supported in IE9 and earlier versions.</p>

</body>
```

</html>

Add your homepage: 　Submit

Note: The type="url" is not supported in IE9 and earlier versions.

HTML Input Attributes

The value Attribute

The **value** attribute specifies the initial value for an input field:
<!DOCTYPE html>
<html>
<body>

<form action="">
First name:
<input type="text" name="firstname" value="John">

Last name:
<input type="text" name="lastname">
</form>

</body>
</html>
First name:

John

Last name:

The readonly Attribute

The **readonly** attribute specifies that the input field is read only (cannot be changed):

The disabled Attribute

The **disabled** attribute specifies that the input field is disabled.

A disabled input field is unusable and un-clickable, and its value will not be sent when submitting the form:

The size Attribute

The **size** attribute specifies the size (in characters) for the input field:
<!DOCTYPE html>
<html>

```
<body>

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

</body>
</html>
```

First name:

| John |

Last name:

| |

The maxlength Attribute

The **maxlength** attribute specifies the maximum allowed length for the input field:

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

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

</body>
</html>
```

First name:

| |

Last name:

| |

With a maxlength attribute, the input field will not accept more than the allowed number of characters.

The maxlength attribute does not provide any feedback. If you want to alert the user, you must write JavaScript code.

Note: Input restrictions are not foolproof, and JavaScript provides many ways to add illegal input. To safely restrict input, it must be checked by the receiver (the server) as well!