HTML Input Type

- This chapter describes the different types for the HTML **\<input\>** element.

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="number">`
- `<input type="password">`
- `<input type="radio">`
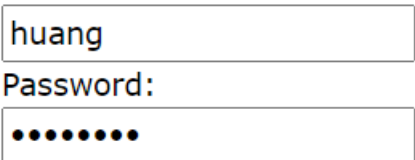- `<input type="range">`
- `<input type="reset">`
- `<input type="search">`
- `<input type="submit">`
- `<input type="tel">`
- `<input type="text">`
- `<input type="time">`
- `<input type="url">`
- `<input type="week">`

Input Type Text

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

```html
<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:

[   ]

Input Type Password

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

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Input Type Reset

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

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

First name:
John
Last name:
Doe

Submit 重設

- Try it Yourself »

Input Type Radio

- <input type="radio"> defines a **radio button**.
- Radio buttons let a user select **ONLY ONE** of a limited number of choices:

```
<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

Input Type Checkbox

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

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

```
<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>
```
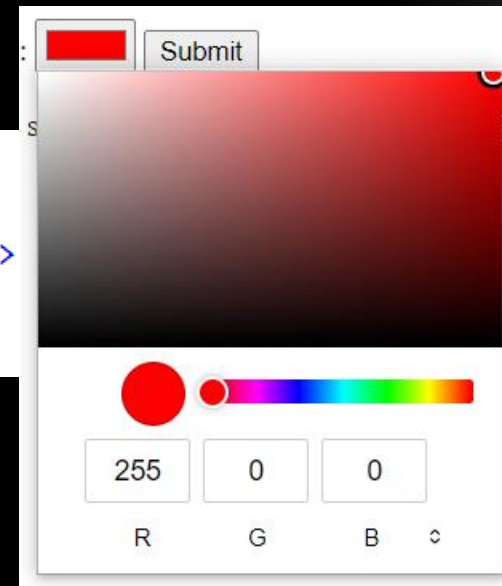
☐ I have a bike
☐ I have a car
☐ I have a boat

Input Type Button

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

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

```
Click Me!
```

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.

```
<form action="/action_page.php">
  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor" value="#ff0000">
  <input type="submit" value="Submit">
</form>
```

- Try it Yourself »

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.

```
<form action="/action_page.php">
  <label for="birthday">Birthday:</label>
  <input type="date" id="birthday" name="birthday">
  <input type="submit" value="Submit">
</form>
```
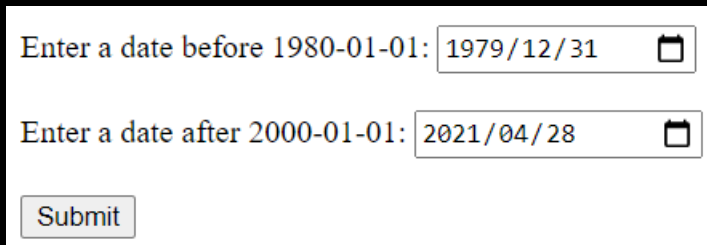
Birthday: 年 /月/日 📅 Submit

Min, Max

- You can also use the min and max attributes to add restrictions to dates:

```html
<form action="/action_page.php">
  <label for="datemax">Enter a date before 1980-01-01:</label>
  <input type="date" id="datemax" name="datemax" max="1979-12-31"><br><br>

  <label for="datemin">Enter a date after 2000-01-01:</label>
  <input type="date" id="datemin" name="datemin" min="2000-01-02"><br><br>

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

Enter a date before 1980-01-01: 1979/12/31

Enter a date after 2000-01-01: 2021/04/28

Submit

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 add ".com" to the keyboard to match email input.

```html
<form action="/action_page.php">
  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">
  <input type="submit" value="Submit">
</form>
```

- [Try it Yourself »](#)

Enter your email: [_____] [Submit]

Input Type File

- The <input type="file"> defines a file-select field and a "Browse" button for file uploads.

```
<form action="/action_page.php">
  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile"><br><br>
  <input type="submit" value="Submit">
</form>
```

- [Try it Yourself »](#)

Select a file: 選擇檔案 未選擇任何檔案

Submit

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:

```
<form action="/action_page.php">
  <label for="quantity">Quantity (between 1 and 5):</label>
  <input type="number" id="quantity" name="quantity" min="1" max="5">
  <input type="submit" value="Submit">
</form>
```

Quantity (between 1 and 5): [   ] [Submit]

Input Restrictions

- Here is a list of some common input restrictions

Attribute	Description
checked	Specifies that an input field should be pre-selected when the page loads (for type="checkbox" or type="radio")
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

```html
<form action="/action_page.php">
  <label for="quantity">Quantity:</label>
  <input type="number" id="quantity" name="quantity" min="0" max="100" step="10" value="30">
  <input type="submit" value="Submit">
</form>
```

Quantity: [30] [Submit]

Input Type Range

- The <input type="range"> defines a control for entering a number whose exact value is not important (like a slider control). Default range is 0 to 100. However, you can set restrictions on what numbers are accepted with the min, max, and step attributes

```html
<form action="/action_page.php" method="get">
  <label for="vol">Volume (between 0 and 50):</label>
  <input type="range" id="vol" name="vol" min="0" max="50">
  <input type="submit" value="Submit">
</form>
```

Volume (between 0 and 50): [slider] Submit

Input Type Tel

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

```
<form action="/action_page.php">
  <label for="phone">Enter a phone number:</label><br><br>
  <input type="tel" id="phone" name="phone" placeholder="123-45-678"
pattern="[0-9]{3}-[0-9]{2}-[0-9]{3}" required><br><br>
  <small>Format: 123-45-678</small><br><br>
  <input type="submit" value="Submit">
</form>
```

Enter a phone number:

123-45-678

Format: 123-45-678

Submit

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.

```
<form action="/action_page.php">
  <label for="appt">Select a time:</label>
  <input type="time" id="appt" name="appt">
  <input type="submit" value="Submit">
</form>
```

- Try it Yourself »

Select a time: -- --:-- 🕐 Submit

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.

```
<form action="/action_page.php">
  <label for="homepage">Add your homepage:</label>
  <input type="url" id="homepage" name="homepage">
  <input type="submit" value="Submit">
</form>
```
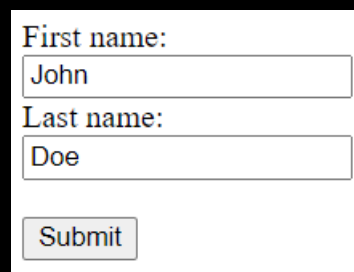
Add your homepage: [   ] [Submit]

HTML Input Attributes

- This chapter describes the different attributes for the HTML <input> element.

The value Attribute

- The input value attribute specifies an **initial value** for an input field:

```
<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 readonly Attribute

- The input readonly attribute specifies that **an input field is read-only**.

- A read-only input field cannot be modified (however, a user can tab to it, highlight it, and copy the text from it).

- The value of a read-only input field will be sent when submitting the form!

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John" readonly><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 disabled Attribute

- The input disabled attribute specifies that an input field should be disabled.

- A disabled input field is unusable and un-clickable.

- The value of a disabled input field will not be sent when submitting the form!

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John" disabled><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 size Attribute

- The input size attribute specifies the **visible width**, in characters, of an input field.

- The default value for size is 20.

- Note: The size attribute works with the following input types: text, search, tel, url, email, and password.

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" size="50"><br>
  <label for="pin">PIN:</label><br>
  <input type="text" id="pin" name="pin" size="4"><br><br>
  <input type="submit" value="Submit">
</form>
```

First name:

PIN:

Submit

The maxlength Attribute

- The input maxlength attribute specifies the **maximum number of characters** allowed in an input field.

- Note: When a maxlength is set, the input field will not accept more than the specified number of characters. However, this attribute does not provide any feedback. So, if you want to alert the user, you must write JavaScript code.

```
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" size="50"><br>
  <label for="pin">PIN:</label><br>
  <input type="text" id="pin" name="pin" maxlength="4" size="4">
</form>
```

First name:
[   ]
PIN:
[   ]

[Submit]

The required Attribute

- The input required attribute specifies that an input field must be filled out before submitting the form.

- The required attribute works with the following input types: text, search, url, tel, email, password, date pickers, number, checkbox, radio, and file.

```
<form action="/action_page.php">
  <label for="username">Username:</label>
  <input type="text" id="username" name="username" required>
  <input type="submit" value="Submit">
</form>
```

Username: [   ] [Submit]

The autofocus Attribute

- The input autofocus attribute specifies that an input field should automatically get focus when the page loads.

- Try it Yourself »

The height and width Attributes

- The input height and width attributes specify the height and width of an **<input type="image">** element.

```
<form action="/action_page.php">
  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname"><br><br>
  <label for="lname">Last name:</label>
  <input type="text" id="lname" name="lname"><br><br>
  <input type="image" src="img_submit.gif" alt="Submit" width="48" height="48">
</form>
```

First name: [   ]

Last name: [   ]

The autocomplete Attribute

- The input autocomplete attribute specifies whether a form or an input field should have autocomplete on or off.

- Autocomplete allows the browser to predict the value. When a user starts to type in a field, the browser should display options to fill in the field, based on earlier typed values.

- The autocomplete attribute works with <form> and the following <input> types: text, search, url, tel, email, password, datepickers, range, and color.

- Try it Yourself »

Exercise 09

- https://reurl.cc/pMlK0l

- Save the link as a ***.txt** file, and then upload to portal