HTML - Input Attributes

The HTML **<input>** tag provides different attributes to define its characteristics and behavior.

Input Attributes

The **HTML input attributes** define the characteristics and behavior of the <input> element. These **input attributes** are used with the different types of input fields, such as text, email, password, date, number, and so forth. Note that the input element is used to create interactive controls for the web-based forms so that it can accept data from the user.

The **<input>** element requires only an opening tag, and it will work only if we add it in between the **<form>** tags. In this tutorial, we are going to explore the attributes that are used with the **<input>** element.

The attributes of the **<input>** element are as follows –

- type and name
- value
- size
- maxlength
- readonly
- disabled
- min and max
- accept and multiple
- placeholder
- required
- autofocus
- list

The 'type' and 'name' Attributes

The **type** attribute indicates the type of input control, like text, password, email, and so on. The **name** attribute of an **input element** assigns an identifier to the form control that enables the server to recognize and retrieve the value.

Example

The following HTML code illustrates the use of **type** and **name** attributes:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The type and name Attributes</title>
</head>
<body>
   <form >
      First name: <input type = "text" name = "first_name" />
      <br><br>
      Last name: <input type = "text" name = "last_name" />
   </form>
</body>
</html>
```


The 'value' Attribute

The **value** attribute is used to provide an initial value inside the input control.

Example

In the following example, we are creating two input fields with initial value as " first name..." and " last name...":

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The value Attribute</title>
</head>
<body>
   <form >
      First name: <input type = "text" name = "first_name" value = "first name..." />
      <br><br>
      Last name: <input type = "text" name = "last_name" value = "last name..."/>
   </form>
</body>
</html>
```

The 'size' Attribute

The **size** attribute allows you to specify the width of the text-input control in terms of characters. The default size is 20 characters.

Example

In this example, the size of the text-input control is set to 40:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The size Attribute</title>
</head>
<body>
   <form >
      First name: <input type = "text" name = "first_name" size = "40" />
      <br><br>
      Last name: <input type = "text" name = "last_name" size = "40"/>
   </form>
</body>
</html>
```

The 'maxlength' Attribute

The **maxlength** attribute allows you to specify the maximum number of characters a user can enter into the text box.

Example

The following example demonstrates how to set the **maxlength** of an input field:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The maxlength Attribute</title>
</head>
<body>
   <form >
      First name: <input type = "text" name = "first_name" />
      <br><br>
      Last name: <input type = "text" name = "last_name" />
```

```
      <br><br>
      Contact: <input type = "text" name = "phone" maxlength = "10"/>
   </form>
</body>
</html>
```

The 'readonly' Attribute

The **readonly** attribute of an input field indicates the field as read-only. Although the content of a read-only field cannot be altered, users can still select it and copy the text. Also, the value of a read-only field is included when the form is submitted.

Example

The following example shows the use of the **readonly** attribute of the **<input>** element:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The readonly Attribute</title>
</head>
<body>
   <form >
      Emp. Name: <input type = "text" name = " your_name" value = "your name..."/>
      <br><br>
      Emp. Email: <input type = "text" name = "mail" value = "your email..."/>
      <br><br>
      Organization: <input type = "text" name = "organization" value = "Tutorialspoint"
readonly/>
   </form>
</body>
</html>
```

The 'disabled' Attribute

The **disabled** attribute of an input field indicates the field as disabled. Unlike readonly, the value of a disabled field will not be included when the form is submitted.

Example

In this example, the field containing the organization name is marked as disabled:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The disabled Attribute</title>
</head>
<body>
   <form >
      Emp. Name: <input type = "text" name = "your_name" value = "your name..."/>
      <br><br>
      Emp. Email: <input type = "email" name = "mail" value = "your email..."/>
      <br><br>
      Organization: <input type = "text" name = "organization" value = "Tutorialspoint"
disabled/>
   </form>
</body>
</html>
```

The 'min' and 'max' Attributes

The **min** and **max** attributes determine the minimum and maximum values, respectively, of an input field like number, date, week, and so on. If we use them together, they will allow users to enter an input within a predefined range.

Example

In the following example, we are mentioning the minimum working hours as 3 and maximum as 8 by using the **min** and **max** attributes:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The min and max Attribute</title>
</head>
<body>
   <form >
      Emp. Name: <input type = "text" name = "your_name" value = "your name..."/>
      <br><br>
      Emp. Email: <input type = "email" name = "mail" value = "your email..."/>
      <br><br>
      Organization: <input type = "text" name = "organization" value = "Tutorialspoint"
readonly/>
```

```
      <br><br>
      Working Hrs: <input type = "number" name = "working_hours" min="3" max="8"/>
   </form>
</body>
</html>
```

The 'accept' and 'multiple' Attributes

The **accept** attribute specifies the types of files that the server will take in. If we use the **multiple** attribute, it will allow the users to upload more than one file.

Example

The following HTML code can accept multiple image files:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The accept and multiple Attributes</title>
</head>
<body>
   <form>
      <input type = "file" name = "fileupload" accept = "image/*" multiple />
   </form>
</body>
</html>
```

The 'placeholder' Attribute

The **placeholder** attribute of an input field, like text, search, and email, briefly outlines the desired value of the field. Its predefined value is displayed in the input field until the user begins to enter their own value.

Example

In the following example, we are using the **placeholder** attribute for the email input field:

</> Open Compiler

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

```
<head>
   <title>The placeholder Attribute</title>
</head>
<body>
   <form>
      Emp. Name: <input type = "text" name = "your_name"/>
      <br><br>
      Emp. Email: <input type = "email" name = "mail" placeholder =
"example@email.com"/>
   </form>
</body>
</html>
```

The 'required' Attribute

The **required** attribute in an input field like text, search, password, and email signifies that the field must contain some values for the form to be successfully submitted. In other words, it indicates the mandatory field.

Example

The following example illustrates the use of the **required** attribute. Without filling the mandatory fields, users will not be able to submit the form:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The required Attribute</title>
</head>
<body>
   <form >
      <p>The * Star represents mandatory field</p>
      Emp. Name: <input type = "text" name = "your_name" required/>*
      <br><br>
      Emp. Email: <input type = "email" name = "mail" placeholder = "example@email.com"
required/>*
      <br><br>
      <input type = "submit">
   </form>
</body>
</html>
```

The 'autofocus' Attribute

The **autofocus** attribute in an input field ensures that the field must be selected automatically once the webpage loads completely. It implies that the cursor will be positioned to the specified input field. In cases where multiple elements use the **autofocus** attribute, only the first element will acquire the focus.

Example

Following is the example of the **autofocus** attribute:

</> Open Compiler

```
<!DOCTYPE html>
<html>
<head>
   <title>The autofocus Attribute</title>
</head>
<body>
   <form >
      Emp. Name: <input type = "text" name = "your_name" autofocus/>
      <br><br>
      Emp. Email: <input type = "email" name = "mail" placeholder = "example@email.com"
/>
      <br><br>
      <input type = "submit">
   </form>
</body>
</html>
```

The 'list' Attribute

The **list** attribute defines a set of predefined options for an **<input>** element, which are defined within a **<datalist>** element. The **<input>** element uses a specific string as an ID to create a link to the corresponding **<datalist>** element.

Example

In this example, we are creating a list of cities with the help of the **list** attribute:

</> Open Compiler

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

```
<head>
   <title>The list Attribute</title>
</head>
<body>
   <form >
      Emp. Name: <input type = "text" name = "your_name" autofocus/>
      <br><br>
      Emp. Email: <input type = "email" name = "mail" placeholder = "example@email.com"
/>
      <br><br>
      Location –
      <input list="location" name="cities">
         <datalist id = "location">
            <option value="Banglore">
            <option value="Hyderabad">
            <option value="Patna">
            <option value="Delhi">
         </datalist>
      <input type = "submit">
   </form>
</body>
</html>
```