



Session : FORM ELEMENTS

HTML FORM ELEMENTS

HTML Form: An **HTML form** is a section of a document which contains controls such as text fields, password fields, checkboxes, radio buttons, submit button, menus etc.

An HTML form facilitates the user to enter data that is to be sent to the server for processing such as name, email address, password, phone number, etc. .

Why use HTML Form

HTML forms are required if you want to collect some data from of the site visitor.

For example: If a user want to purchase some items on internet, he/she must fill the form such as shipping address and credit/debit card details so that item can be sent to the given address.

HTML Form Syntax

```
<form action="server url" method="get|post">  
  //input controls e.g. textfield, textarea, radiobutton, button  
</form>
```



HTML FORM ELEMENTS

HTML Form Tags: Let's see the list of HTML 5 form tags.

Tag	Description
<form>	It defines an HTML form to enter inputs by the used side.
<input>	It defines an input control.
<textarea>	It defines a multi-line input control.
<label>	It defines a label for an input element.
<fieldset>	It groups the related element in a form.
<legend>	It defines a caption for a <fieldset> element.
<select>	It defines a drop-down list.
<optgroup>	It defines a group of related options in a drop-down list.
<option>	It defines an option in a drop-down list.
<button>	It defines a clickable button.
<datalist>	It specifies a list of pre-defined options for input control.
<keygen>	It defines a key-pair generator field for forms.
<output>	It defines the result of a calculation.

HTML FORM ELEMENTS

HTML `<form>` element:

The HTML `<form>` element provide a document section to take input from user.

It provides various interactive controls for submitting information to web server such as text field, text area, password field, etc.

Syntax:

```
<form>
```

```
//Form elements
```

```
</form>
```

Note: The `<form>` element does not itself create a form but it is container to contain all required form elements, such as `<input>`, `<label>`, etc.



HTML <input> Element

Definition and Usage

The <input> tag specifies an input field where the user can enter data.

The <input> element is the most important form element.

The <input> element can be displayed in several ways, depending on the type attribute.

The input tag is used within < **form**> element to declare input controls that allow users to input data.

An input field can be of various types depending upon the attribute type

The Input tag is an empty element which only contains attributes **Syntax**
<input type = "value" />



HTML `<input>` Element

The different input types are as follows:

- `<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">` (default value)
- `<input type="time">`
- `<input type="url">`
- `<input type="week">`



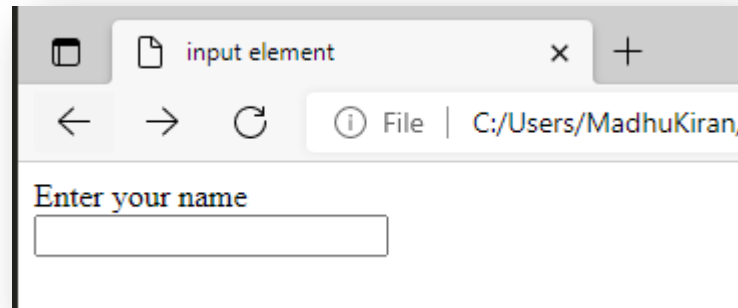
HTML <input> Element

HTML <input> element:

The HTML <input> element is fundamental form element. It is used to create form fields, to take input from user. We can apply different input field to gather different information from user.

Example: Following is the example to show the simple text input.

```
<!DOCTYPE html>
<html>
<head>
<title>input element</title>
</head>
<body>
  <form>
    Enter your name <br>
    <input type="text" name="username">
  </form>
</body>
</html>
```



HTML <label> Element

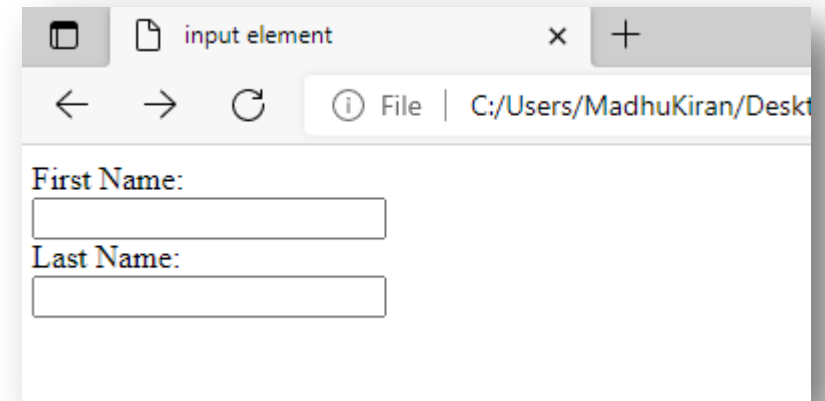
Label Tag in Form:

It is considered better to have label in form. As it makes the code parser/browser/user friendly.

If you click on the label tag, it will focus on the text control. To do so, you need to have for attribute in label tag that must be same as id attribute of input tag.

Example:

```
<!DOCTYPE html>
<html>
<head><title>input element</title></head>
<body>
  <form>
    <label for="firstname">First Name: </label> <br/>
    <input type="text" id="firstname" name="firstname"/> <br/>
    <label for="lastname">Last Name: </label> <br/>
    <input type="text" id="lastname" name="lastname"/> <br/>
  </form> </body></html>
```



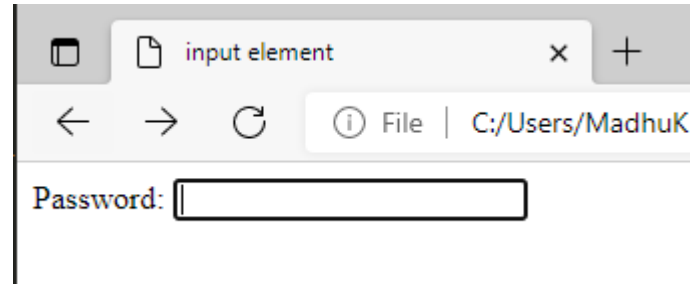
HTML <input> Element

HTML Password Field Control:

The password is not visible to the user in password field control.

Example: Following is the example to show the password input.

```
<!DOCTYPE html>
<html>
  <head>
    <title>input element</title>
  </head>
  <body>
    <form>
      <label for="password">Password: </label>
      <input type="password" id="password" name="password"/> <br/>
    </form>
  </body>
</html>
```



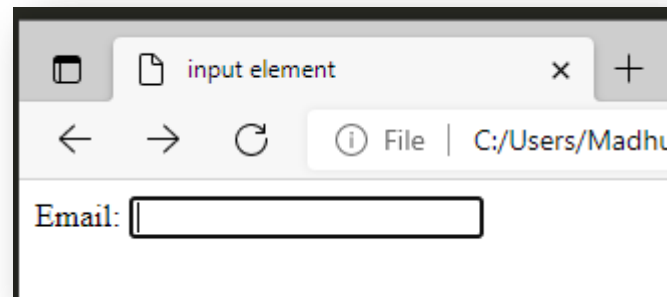
HTML <input> Element

HTML Email Field Control:

The email field is new in HTML 5. It validates the text for correct email address. You must use @ and . in this field.

Example: Following is the example to show the email input.

```
<!DOCTYPE html>
<html>
  <head>
    <title>input element</title>
  </head>
  <body>
    <form>
      <label for="email">Email: </label>
      <input type="email" id="email" name="email"/> <br/>
    </form>
  </body>
</html>
```



HTML <input> Element

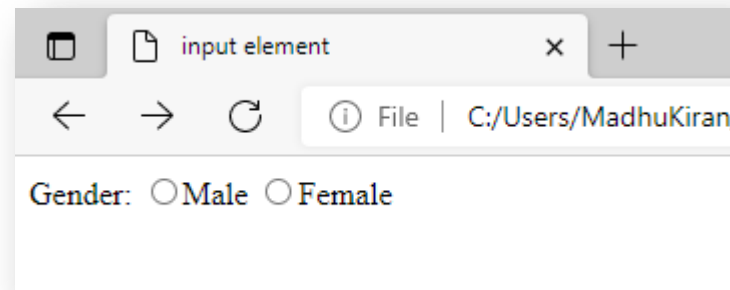
HTML Radio button Control: The radio button is used to select one option from multiple options. It is used for selection of gender, quiz questions etc.

If you use one name for all the radio buttons, only one radio button can be selected at a time.

Using radio buttons for multiple options, you can only choose a single option at a time.

Example: Following is the example to show the radio button input.

```
<!DOCTYPE html>
<html>
<head>
<title>input element</title>
</head>
<body>
<form>
<label for="gender">Gender: </label>
<input type="radio" id="gender" name="gender" value="male"/>Male
<input type="radio" id="gender" name="gender" value="female"/>Female <br/>
</form>
</body></html>
```

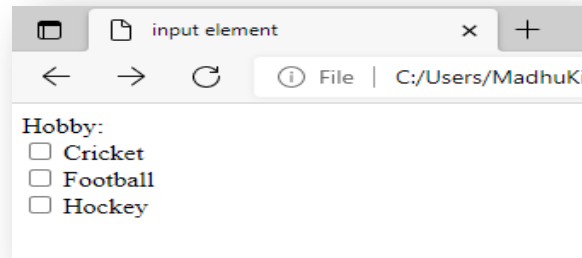


HTML <input> Element

HTML checkbox Control: The checkbox control is used to check multiple options from given checkboxes.

Example: Following is the example to show the checkbox input.

```
<!DOCTYPE html>
<html>
<head>
<title>input element</title>
</head>
<body>
<form>
Hobby:<br>
<input type="checkbox" id="cricket" name="cricket" value="cricket"/>
<label for="cricket">Cricket</label> <br>
<input type="checkbox" id="football" name="football" value="football"/>
<label for="football">Football</label> <br>
<input type="checkbox" id="hockey" name="hockey" value="hockey"/>
<label for="hockey">Hockey</label>
</form>
</body>
</html>
```

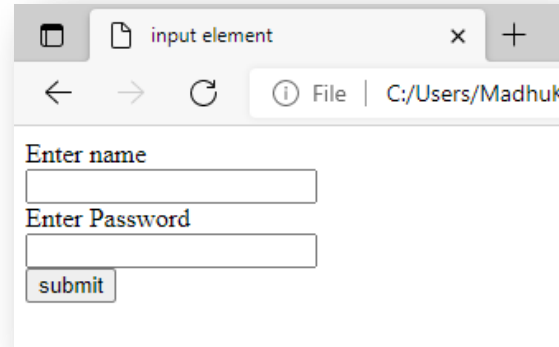


HTML <input> Element

HTML Submit button Control: HTML `<input type="submit">` are used to add a submit button on web page. When user clicks on submit button, then form get submit to the server.

Example: Following is the example to show the submit button input.

```
<!DOCTYPE html>
<html>
<head>
<title>input element</title>
</head>
<body>
<form>
<label for="name">Enter name</label><br>
<input type="text" id="name" name="name"><br>
<label for="pass">Enter Password</label><br>
<input type="Password" id="pass" name="pass"><br>
<input type="submit" value="submit">
</form>
</body>
</html>
```

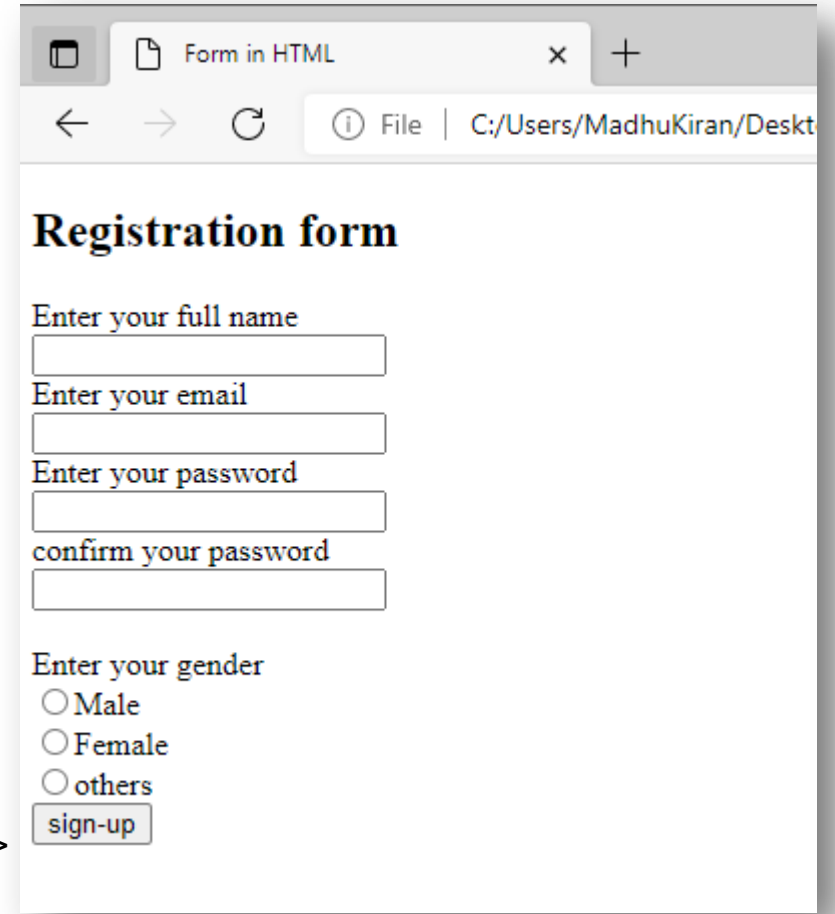


HTML <input> Element

HTML Form Example: Full form with input element

```
<!DOCTYPE html>
<html>
<head>
  <title>Form in HTML</title>
</head>
<body>
  <h2>Registration form</h2>
  <form>
    <label>Enter your full name</label><br>
    <input type="text" name="name"><br>
    <label>Enter your email</label><br>
    <input type="email" name="email"><br>
    <label>Enter your password</label><br>
    <input type="password" name="pass"><br>
    <label>confirm your password</label><br>
    <input type="password" name="pass"><br>
    <br><label>Enter your gender</label><br>
    <input type="radio" id="gender" name="gender" value="male"/>Male <br>
    <input type="radio" id="gender" name="gender" value="female"/>Female <br>
    <input type="radio" id="gender" name="gender" value="others"/>others <br>

    <input type="submit" value="sign-up">
  </form> </body> </html>
```



The screenshot shows a web browser window with the title "Form in HTML". The address bar shows the file path "C:/Users/MadhuKiran/Desktop". The form is titled "Registration form" and contains the following fields and controls:

- Label: "Enter your full name" followed by a text input field.
- Label: "Enter your email" followed by an email input field.
- Label: "Enter your password" followed by a password input field.
- Label: "confirm your password" followed by a password input field.
- Label: "Enter your gender" followed by three radio button options: "Male", "Female", and "others".
- A "sign-up" button at the bottom.

HTML Action & Method Attributes for <form> tag

HTML action attribute:

The action attribute of <form> element defines the process to be performed on form when form is submitted, or it is a URI to process the form information.

The action attribute value defines the web page where information proceed. It can be .php, .jsp, .asp, etc. or any URL where you want to process your form.

Syntax:

```
<form action="url">  
contents here...  
</form>
```

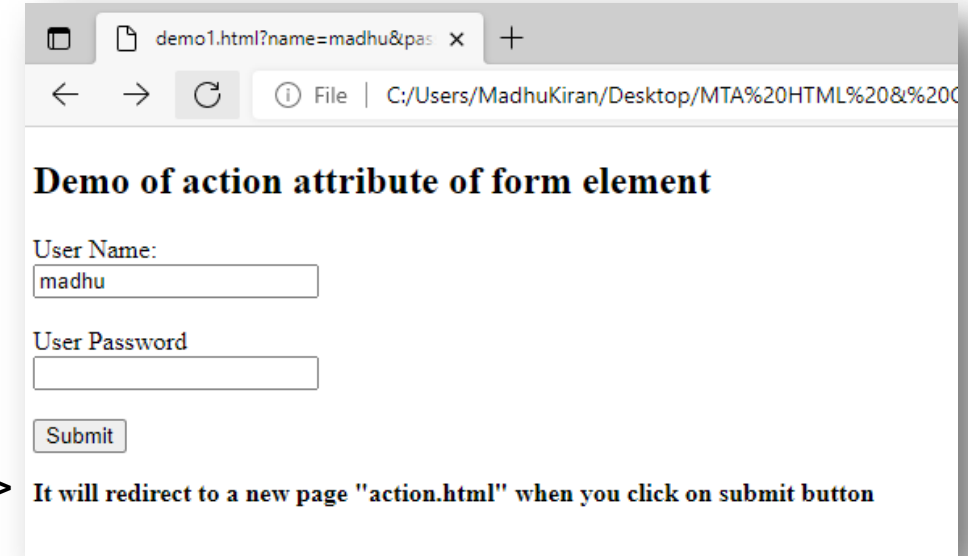


HTML Action & Method Attributes for <form> tag

Example for Action Attributes:

```
<!DOCTYPE html>
<html>

<body>
    <h2>Demo of action attribute of form element</h2>
    <form action="action.html" method="post">
        <label>User Name:</label><br>
        <input type="text" name="name"><br><br>
        <label>User Password</label><br>
        <input type="password" name="pass"><br><br>
        <input type="submit">
    </form>
    <p><b>It will redirect to a new page "action.html" when you click on
submit button</b></p>
</body>
</html>
```



HTML Action & Method Attributes for <form> tag

HTML Method attribute:

The method attribute defines the HTTP method which browser used to submit the form.

The possible values of method attribute can be:

- **post:** We can use the post value of method attribute when we want to process the sensitive data as it does not display the submitted data in URL.

Syntax: `<form action="action.html" method="post">`

- **get:** The get value of method attribute is default value while submitting the form. But this is not secure as it displays data in URL after submitting the form.

Syntax: `<form action="action.html" method="get">`



HTML Action & Method Attributes for <form> tag

HTML Target attribute:

The target attribute defines where to open the response after submitting the form.

The following are the keywords used with the target attribute.

- **_self**: If we use _self as an attribute value, then the response will display in current page only.

Syntax: `<form action="action.html" method="get" target="_self">`

- **_blank**: If we use _blank as an attribute it will load the response in a new page.

Syntax: `<form action="action.html" method="get" target="_blank">`



HTML <input> element Attributes

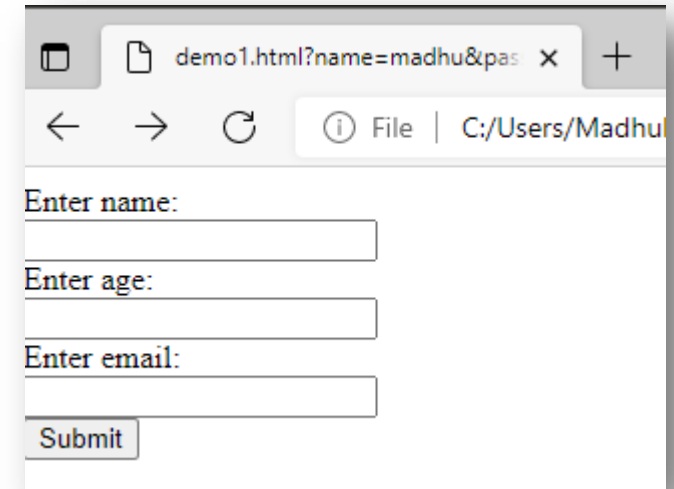
HTML name attribute:

The HTML name attribute defines the name of an input element. The name and value attribute are included in HTTP request when we submit the form.

Example:

```
<!DOCTYPE html>
<html>

<body>
<form action = "action.html" method = "get">
    Enter name:<br><input type="name" name="uname"><br>
    Enter age:<br><input type="number" name="age"><br>
    Enter email:<br><input type="email"><br>
    <input type="submit" value="Submit">
</form>
</body>
</html>
```



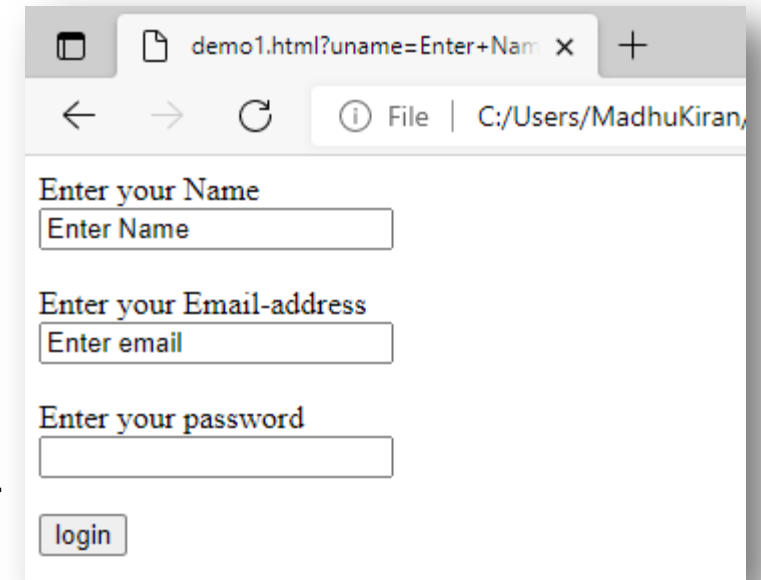
HTML <input> element Attributes

HTML value attribute:

The HTML value attribute defines the initial value or default value of an input field.

Example:

```
<!DOCTYPE html>
<html>
<body>
<form>
  <label>Enter your Name</label><br>
  <input type="text" name="uname" value="Enter Name"><br><br>
  <label>Enter your Email-address</label><br>
  <input type="text" name="uname" value="Enter email"><br><br>
  <label>Enter your password</label><br>
  <input type="password" name="pass" value=""><br><br>
  <input type="submit" value="login">
</form>
</body>
</html>
```



HTML <input> element Attributes

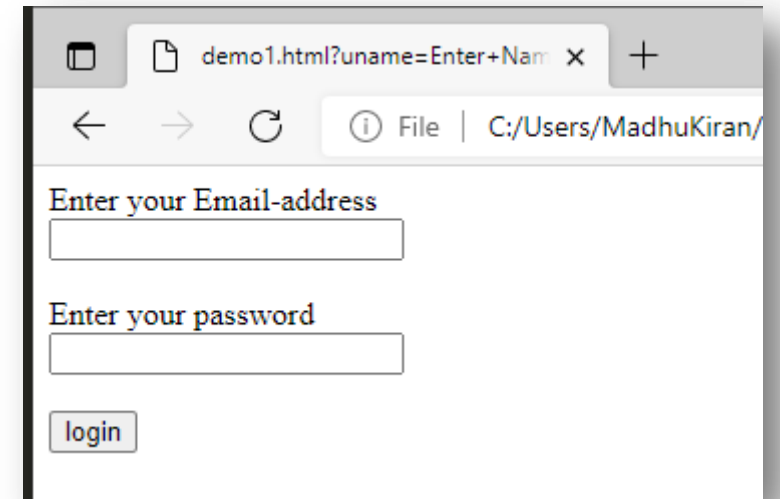
HTML required attribute:

HTML required is a Boolean attribute which specifies that user must fill that field before submitting the form.

Example:

```
<!DOCTYPE html>
<html>

  <body>
    <form>
      <label>Enter your Email-address</label><br>
      <input type="text" name="uname" required><br><br>
      <label>Enter your password</label><br>
      <input type="password" name="pass"><br><br>
      <input type="submit" value="login">
    </form>
  </body>
</html>
```



HTML <input> element Attributes

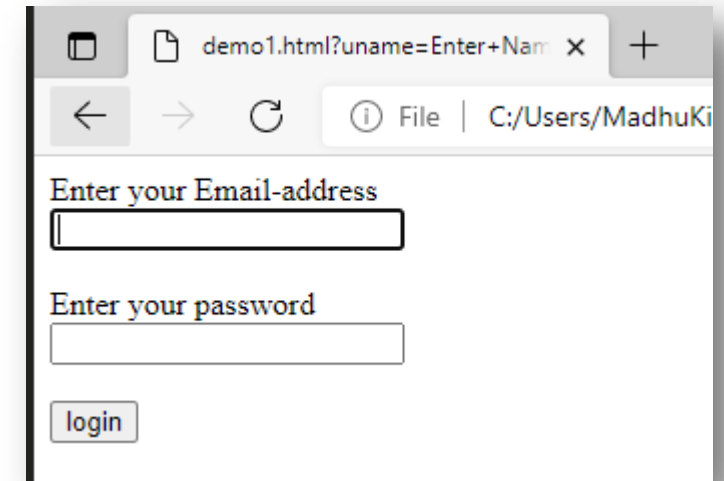
HTML autofocus attribute:

The autofocus is a Boolean attribute which enables a field automatically focused when a webpage loads.

Example:

```
<!DOCTYPE html>
<html>

  <body>
    <form>
      <label>Enter your Email-address</label><br>
      <input type="text" name="uname" autofocus><br><br>
      <label>Enter your password</label><br>
      <input type="password" name="pass"><br><br>
      <input type="submit" value="login">
    </form>
  </body>
</html>
```



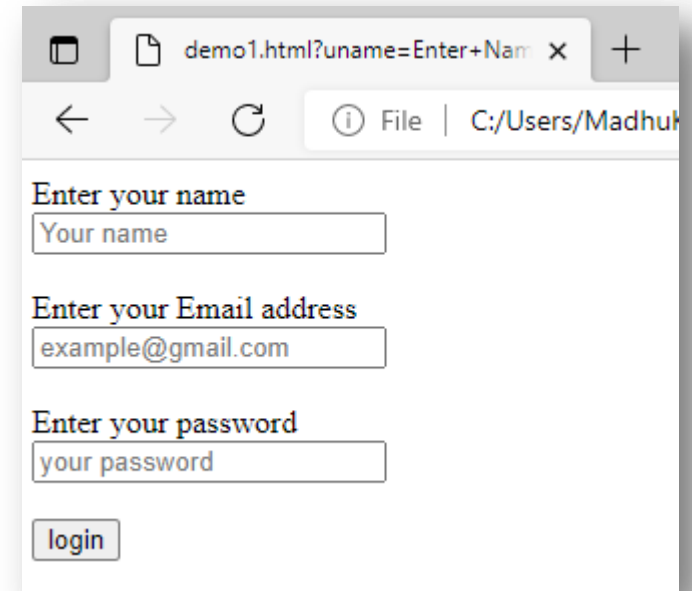
HTML <input> element Attributes

HTML placeholder attribute:

- The placeholder attribute specifies a text within an input field which informs the user about the expected input of that field.
- The placeholder attribute can be used with text, password, email, and URL values.
- When the user enters the value, the placeholder will be automatically removed.

Example:

```
<!DOCTYPE html>
<html>
<body>
<form>
  <label>Enter your name</label><br>
  <input type="text" name="uname" placeholder="Your name"><br><br>
  <label>Enter your Email address</label><br>
  <input type="email" name="email" placeholder="example@gmail.com"><br><br>
  <label>Enter your password</label><br>
  <input type="password" name="pass" placeholder="your password"><br><br>
  <input type="submit" value="login">
</form>
</body>
</html>
```



HTML <input> element Attributes

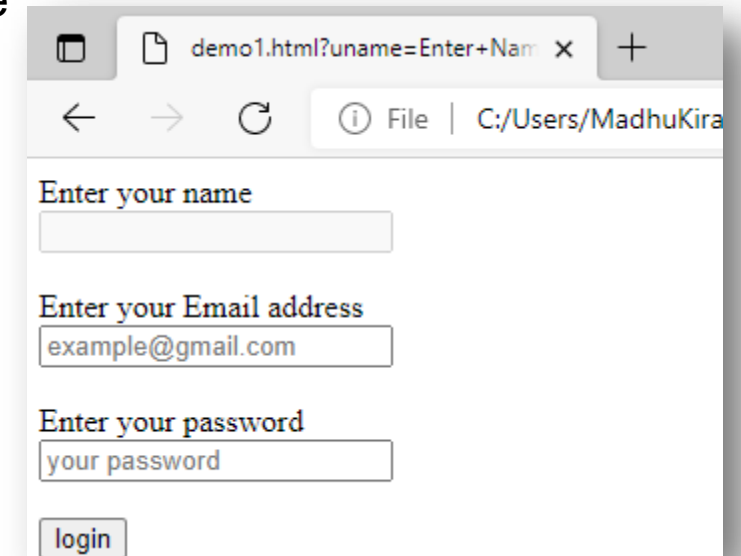
HTML disabled attribute:

- The HTML disabled attribute when applied then it disable that input field. The disabled field does not allow the user to interact with that field.
- The disabled input field does not receive click events, and these input value will not be sent to the server when submitting the form.

Example:

```
<!DOCTYPE html>
<html>

<body>
<form>
  <label>Enter your name</label><br>
  <input type="text" name="uname" disabled><br><br>
  <label>Enter your Email address</label><br>
  <input type="email" name="email" placeholder="example@gmail.com"><br><br>
  <label>Enter your password</label><br>
  <input type="password" name="pass" placeholder="your password"><br><br>
  <input type="submit" value="login">
</form>
</body>
</html>
```



HTML <input> element Attributes

HTML size attribute:

- The size attribute controls the size of the input field in typed characters.

Example:

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

```
<body>
```

```
<form>
```

```
  <label>Enter your name</label><br>
```

```
  <input type="text" name="uname" size="40" required><br><br>
```

```
    <label>Enter your Email address</label><br>
```

```
  <input type="email" name="email" placeholder="example@gmail.com"><br><br>
```

```
    <label>Enter your password</label><br>
```

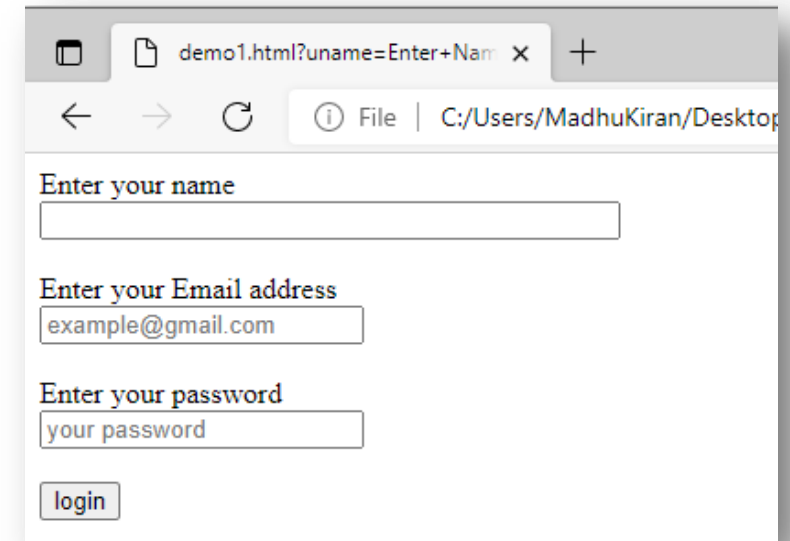
```
  <input type="password" name="pass" placeholder="your password"><br><br>
```

```
  <input type="submit" value="login">
```

```
</form>
```

```
</body>
```

```
</html>
```



The screenshot shows a web browser window with a single tab titled 'demo1.html?uname=Enter+Nam'. The address bar shows the file path 'C:/Users/MadhuKiran/Desktop'. The page content includes three input fields with labels: 'Enter your name' (a text field), 'Enter your Email address' (an email field containing 'example@gmail.com'), and 'Enter your password' (a password field containing 'your password'). Below these fields is a 'login' button.

HTML <select>tag

HTML select<select> Tag :

- ✓ HTML <select> tag is used to create a drop down list with multiple options.
- ✓ The <option> element is nested within <select> tag for defining options in a list.
- ✓ The <optgroup> element can be used for grouping related options in a list.
- ✓ If you want to send data to server then use <select> tag within <form> element.

Syntax:

```
<select>  
<option></option>  
</select>
```

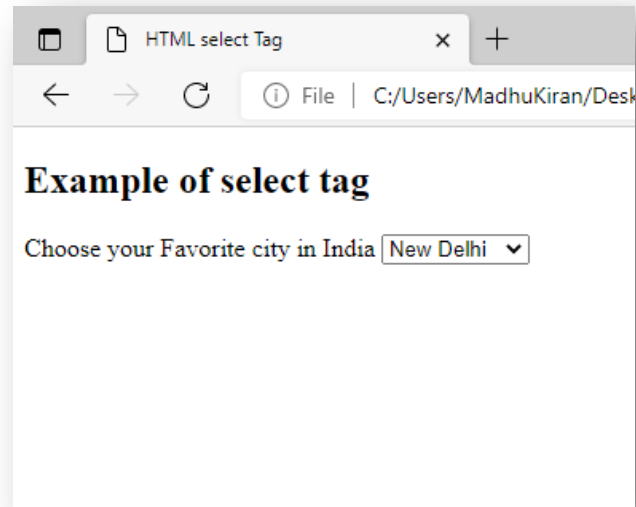


HTML <select>tag

Example for select<select> Tag :

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML select Tag</title>

</head>
<body>
<h2>Example of select tag</h2>
<form>
  <label>Choose your Favorite city in India</label>
  <select>
    <option>New Delhi</option>
    <option>Indore</option>
    <option>Jaipur</option>
    <option>Jodhpur</option>
    <option>Chandigarh</option>
    <option>Mumbai</option>
    <option>Bengaluru</option>
    <option>Lucknow</option>
    <option>Amritsar</option>
  </select>
</form>
</body>
</html>
```



HTML <option>tag

HTML option<option> Tag :

- ✓ HTML <option> tag is used to define options in a dropdown list within <select> or <datalist> element.
- ✓ A dropdown list must have at least one <option> element.
- ✓ The related <option> of a dropdown list can be grouped using <optgroup> element which helps to understand a large list.

Syntax:

<option value="">.....</option>



HTML <option>tag

Example for option<option> Tag :

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <title>Option Tag</title>
```

```
  <style>
```

```
    body{
```

```
      text-align: center;}
```

```
  </style>
```

```
</head>
```

```
<body>
```

```
  <h2>Example of option tag</h2>
```

```
  <form>
```

```
    <select>
```

```
      <option>-----Select Your Favorite Color-----</option>
```

```
      <option value="yellow" style="color: violet;">Violet</option>
```

```
      <option value="white" style="color: blue;">Blue</option>
```

```
      <option value="black" style="color: black;">Black</option>
```

```
      <option value="green" style="color: green;">green</option>
```

```
      <option value="red" style="color: red;">Red</option>
```

```
    </select>
```

```
  </form>
```

```
</body>
```



HTML <textarea>tag

HTML textarea<textarea> Tag :

- ✓ The **HTML <textarea> tag** is used to define a multi-line text input control.
- ✓ It can hold unlimited number of characters and the texts are displayed in a fixed-width font (usually courier).
- ✓ The size of the HTML textarea is defined by <cols> and <rows> attribute, or it can also be defined through CSS height and width properties.

Syntax:

```
<textarea rows="9" cols="70">  
....  
</textarea>
```



HTML <textarea>tag

Example textarea<textarea> Tag :

```
<!DOCTYPE>
```

```
<html>
```

```
<body>
```

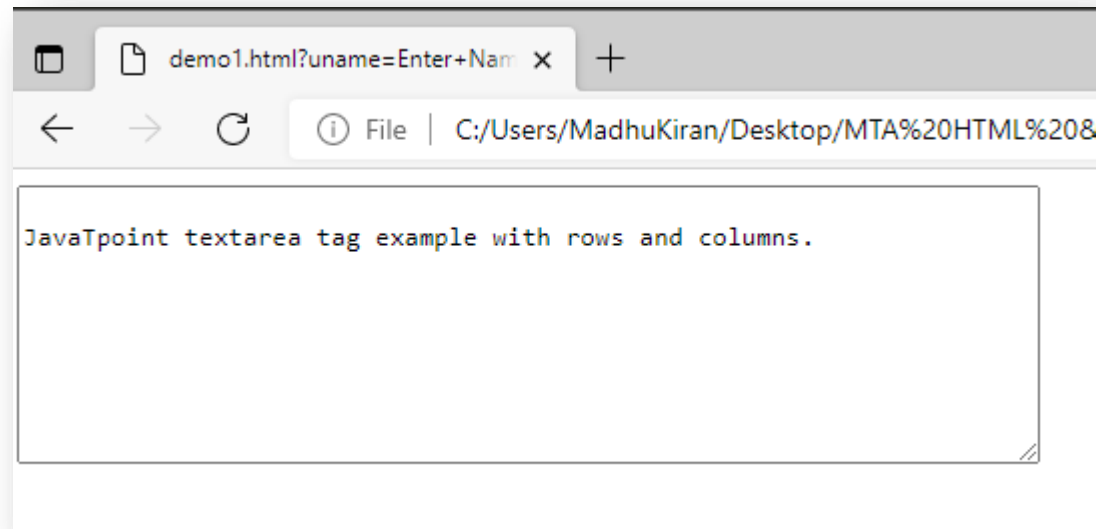
```
<textarea rows="9" cols="70">
```

JavaTpoint textarea tag example with rows and columns.

```
</textarea>
```

```
</body>
```

```
</html>
```



HTML <button>tag

HTML button<button> Tag :

The <button> tag is used to create a clickable button within HTML form on your webpage. You can put content like text or image within the <button>.....</button> tag.

You should always specify the type attribute for a <button> tag. Different browsers use different default type for the button element.

HTML Button tag can be used inside and outside the form.

If you use it **inside the form**, it works as the submit button. You can also use it as reset button.

If you use it **outside the form**, you can call JavaScript function on it.

Syntax:

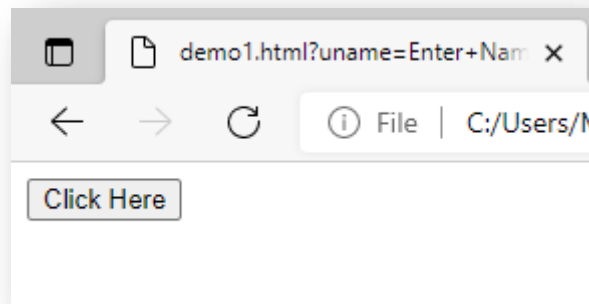
```
<button name="button" type="button">Click Here</button>
```



HTML <button>tag

Example 1 HTML button<button> Tag :

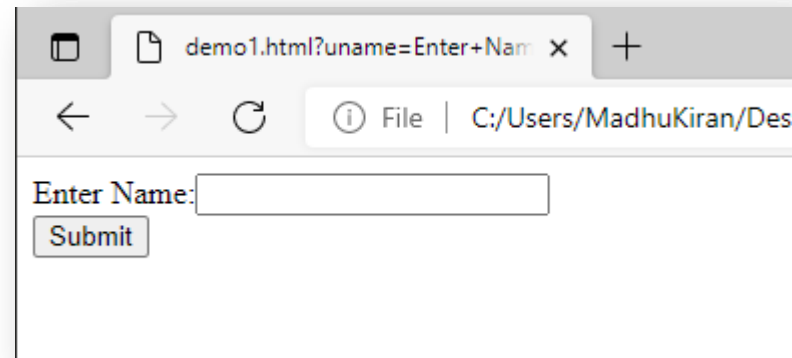
```
<!DOCTYPE>  
<html>  
<body>  
<form>  
<button name="button" value="OK" type="button">Click Here</button>  
</form>  
</body>  
</html>
```



HTML <button>tag

Example 3 HTML button<button> Tag :Let's see the code to submit form on button click.

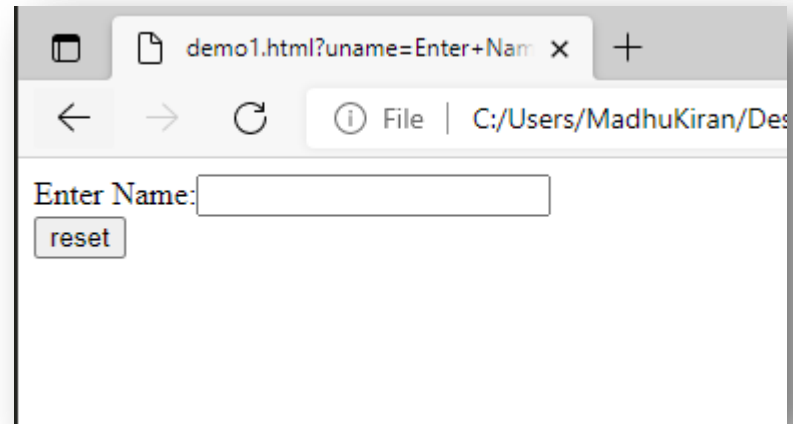
```
<!DOCTYPE>
<html>
<body>
<form>
Enter Name:<input type="text" name="name"/><br/>
<button type="submit">Submit</button>
</form>
</body>
</html>
```



HTML <button>tag

Example 4 HTML button<button> Tag :Let's see the code to reset form on button click.

```
<!DOCTYPE>
<html>
<body>
<form>
Enter Name:<input type="text" name="name"/><br/>
<button type="reset">reset</button>
</form>
</body>
</html>
```



HTML <datalist>tag

HTML datalist<datalist> Tag :

- ✓ The HTML <datalist> tag is used to provide an auto complete feature on form element. It provides a list of predefined options to the users to select data.
- ✓ The datalist tag is introduced in HTML5.
- ✓ The <datalist> tag should be used with an <input> element that contains a "list" attribute. The value of "list" attribute is linked with the datalist id.

Syntax

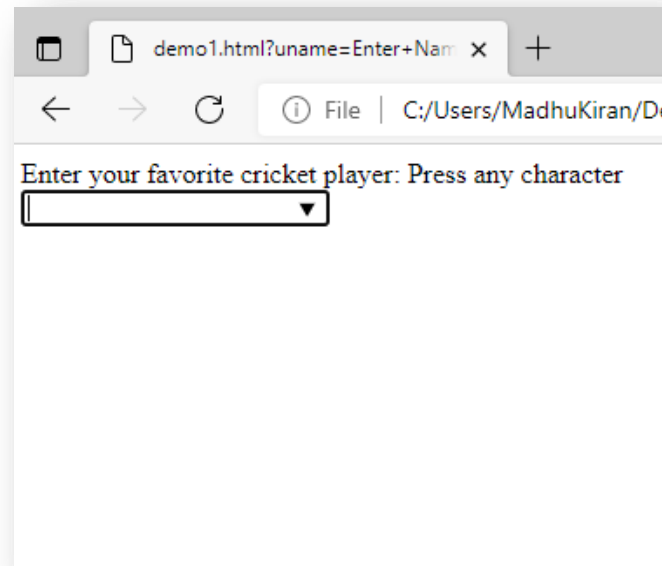
```
<input type="text" id="" list="">  
<datalist id="same as list in input">  
</datalist>
```



HTML <datalist>tag

Example HTML datalist<datalist> Tag :

```
<!DOCTYPE>
<html>
<body>
<label>
Enter your favorite cricket player: Press any character<br />
<input type="text" id="favCktPlayer" list="CktPlayers">
<datalist id="CktPlayers">
<option value="Sachin Tendulkar">
<option value="Brian Lara">
<option value="Jacques Kallis">
<option value="Ricky Ponting">
<option value="Rahul Dravid">
<option value="Shane Warne">
<option value="Rohit Sharma">
<option value="Donald Bradman">
<option value="Saurav Ganguly ">
<option value="AB diVilliers">
<option value="Mahendra Singh Dhoni">
<option value="Adam Gilchrist">
</datalist>
</label>
</body>
</html>
```



HTML <fieldset>tag

HTML fieldset<fieldset> Tag :

- ✓ HTML <fieldset> tag is used to group the logically related fields/labels contained within an HTML form.
- ✓ The use of this tag is optional while creating an HTML form but using <fieldset>, it is easy to understand the purpose of grouped elements of form.
- ✓ The <legend> tag is used with the <fieldset> element as a first child to define the caption for the grouped related fields.

Syntax

`<fieldset>.....</fieldset>`



HTML <fieldset>tag

HTML fieldset<fieldset> Tag :

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>HTML fieldset Tag</title>
```

```
</head>
```

```
<body>
```

```
    <form>
```

```
        <fieldset>
```

```
            <legend>Details</legend>
```

```
            Student Name: <input type = "text"><br />
```

```
            MCA Subjects:<input type = "text"><br />
```

```
            Course Link:<input type = "url" name = "websitelink">
```

```
        </fieldset>
```

```
    </form>
```

```
</body>
```

```
</html>
```

