

# 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 the site visitor.

## HTML Form Syntax

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

## HTML 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.
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Tag	Description
<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> 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.

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.

### Syntax:

1. **<form>**
2. //Form elements
3. **</form>**

## 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:

1. **<body>**
2. **<form>**
3. Enter your name **<br>**
4. **<input type="text" name="username">**

5. `</form>`
6. `</body>`

**Output:**

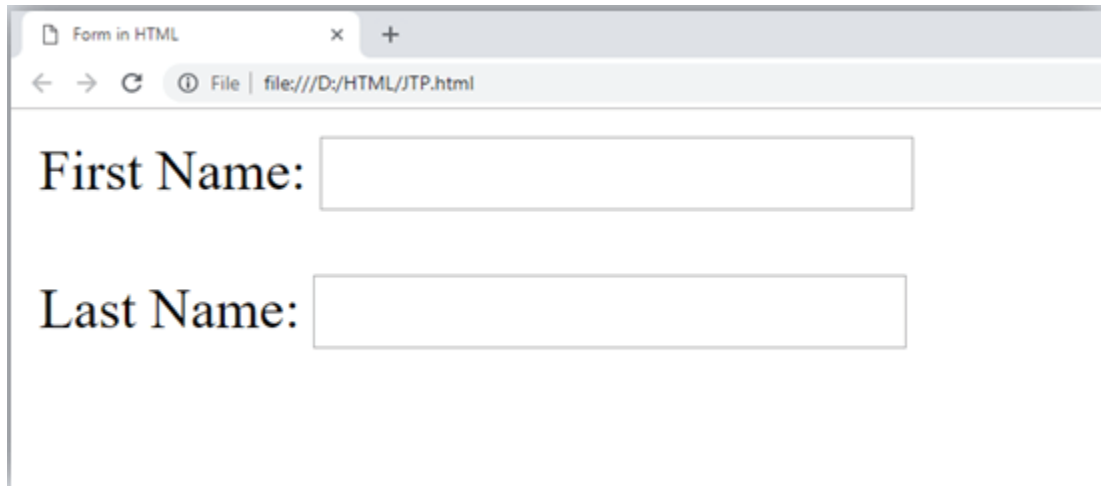
The image shows a simple web form. It consists of a large rectangular container. Inside this container, at the top, is the text "Enter your name" in a large, black, serif font. Below the text is a single-line text input field, represented by a thin gray rectangular border. The input field is empty and occupies most of the width of the container.

## HTML TextField Control

The `type="text"` attribute of input tag creates textfield control also known as single line textfield control. The name attribute is optional, but it is required for the server side component such as JSP, ASP, PHP etc.

1. `<form>`
2. First Name: `<input type="text" name="firstname"/> <br/>`
3. Last Name: `<input type="text" name="lastname"/> <br/>`
4. `</form>`

**Output:**

A screenshot of a web browser window. The title bar says "Form in HTML". The address bar shows "file:///D:/HTML/JTP.html". The main content area contains two text input fields. The first field is preceded by the label "First Name:" and the second field is preceded by the label "Last Name:". Both labels are in a serif font.

Note: If you will omit 'name' attribute then the text filed input will not be submitted to server.

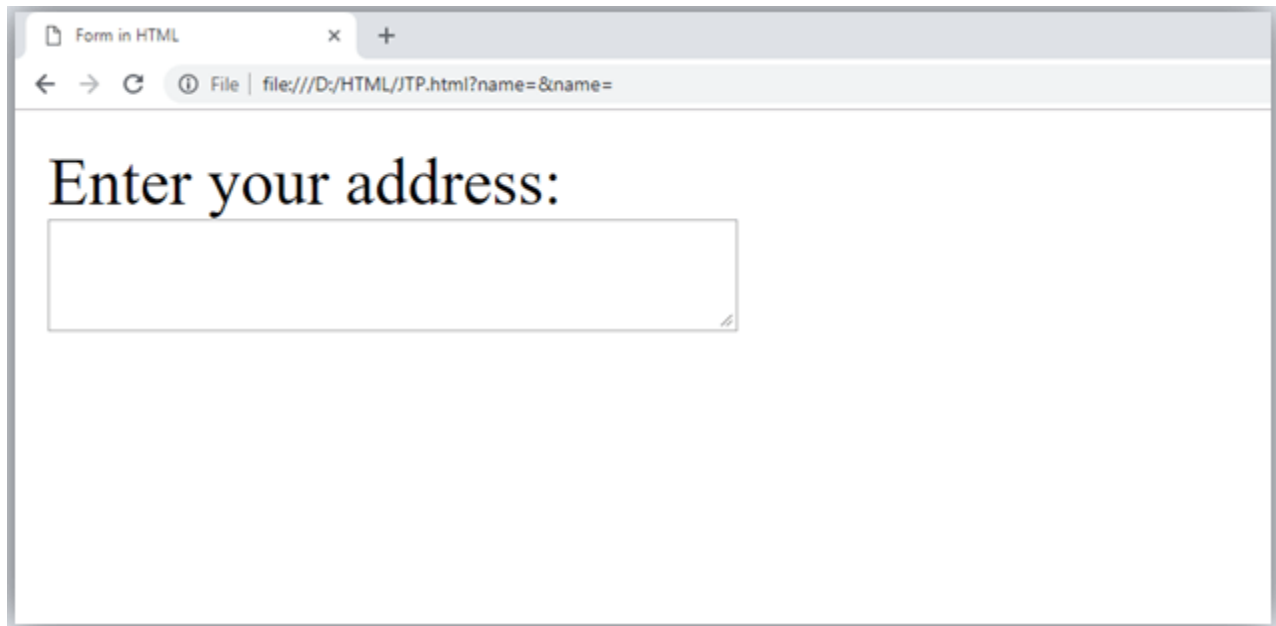
## HTML <textarea> tag in form

The <textarea> tag in HTML is used to insert multiple-line text in a form. The size of <textarea> can be specified either using "rows" or "cols" attribute or by CSS.

### Example:

1. <!DOCTYPE html>
2. <html>
3. <head>
4.     <title>Form in HTML</title>
5. </head>
6. <body>
7.     <form>
8.         Enter your address:<br>
9.         <textarea rows="2" cols="20"> </textarea>
10.     </form>
11. </body>
12. </html>

### Output:



## Label Tag in Form

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

NOTE: It is good to use `<label>` tag with form, although it is optional but if you will use it, then it will provide a focus when you tap or click on label tag. It is more worthy with touchscreens.

1. `<form>`
2. `<label for="firstname">First Name: </label> <br/>`
3. `<input type="text" id="firstname" name="firstname"/> <br/>`
4. `<label for="lastname">Last Name: </label>`
5. `<input type="text" id="lastname" name="lastname"/> <br/>`
6. `</form>`

**Output:**

First Name:

Last Name:

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## HTML Password Field Control

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

1. `<form>`
2. `<label for="password">Password: </label>`
3. `<input type="password" id="password" name="password"/> <br/>`
4. `</form>`

Output:

Password:

## HTML 5 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.

1. `<form>`
2. `<label for="email">Email: </label>`
3. `<input type="email" id="email" name="email"/> <br/>`
4. `</form>`

Email:

Note: If we will not enter the correct email, it will display error like:

Email:

 Please include an '@' in the email address.  
'example.com' is missing an '@'.

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## 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.

1. **<form>**
2.     **<label for="gender">**Gender: **</label>**
3.             **<input type="radio" id="gender" name="gender" value="male"/>**Male
4.             **<input type="radio" id="gender" name="gender" value="female"/>**Female **<br/>**
5. **</form>**

Gender: ☐ Male ☒ Female

## Checkbox Control

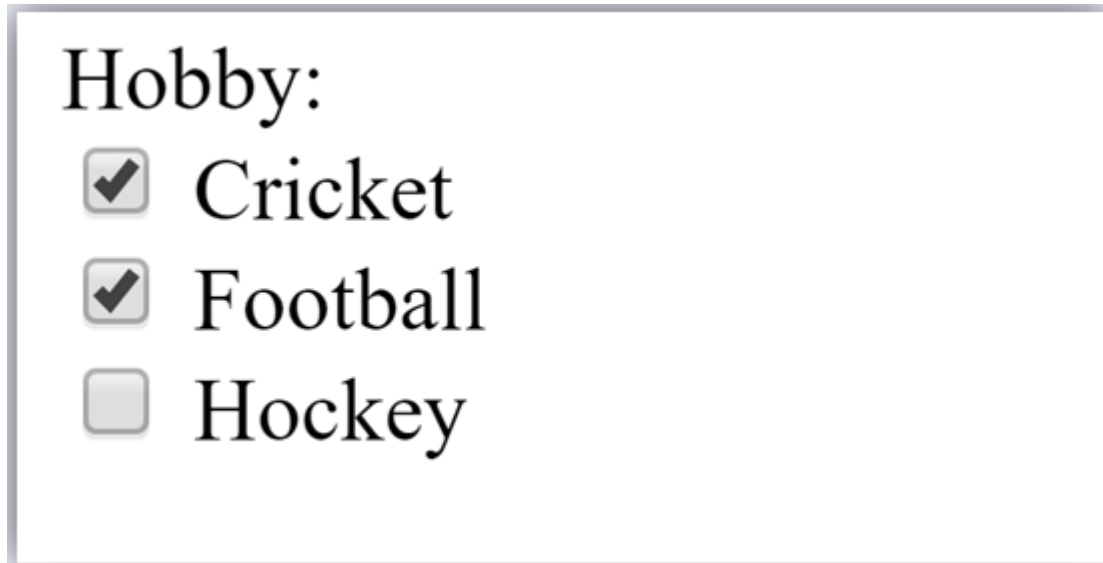
The checkbox control is used to check multiple options from given checkboxes.

1. **<form>**
2. Hobby:**<br>**
3.     **<input type="checkbox" id="cricket" name="cricket" value="cricket"/>**
4.     **<label for="cricket">**Cricket**</label>** **<br>**
5.     **<input type="checkbox" id="football" name="football" value="football"/>**
6.     **<label for="football">**Football**</label>** **<br>**
7.     **<input type="checkbox" id="hockey" name="hockey" value="hockey"/>**
8.     **<label for="hockey">**Hockey**</label>**
9. **</form>**



Note: These are similar to radio button except it can choose multiple options at a time and radio button can select one button at a time, and its display.

### Output:



Hobby:

☒ Cricket

☒ Football

☐ Hockey

## 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.

Syntax:

1. **<input type="submit" value="submit">**

The type = submit , specifying that it is a submit button

The value attribute can be anything which we write on button on web page.

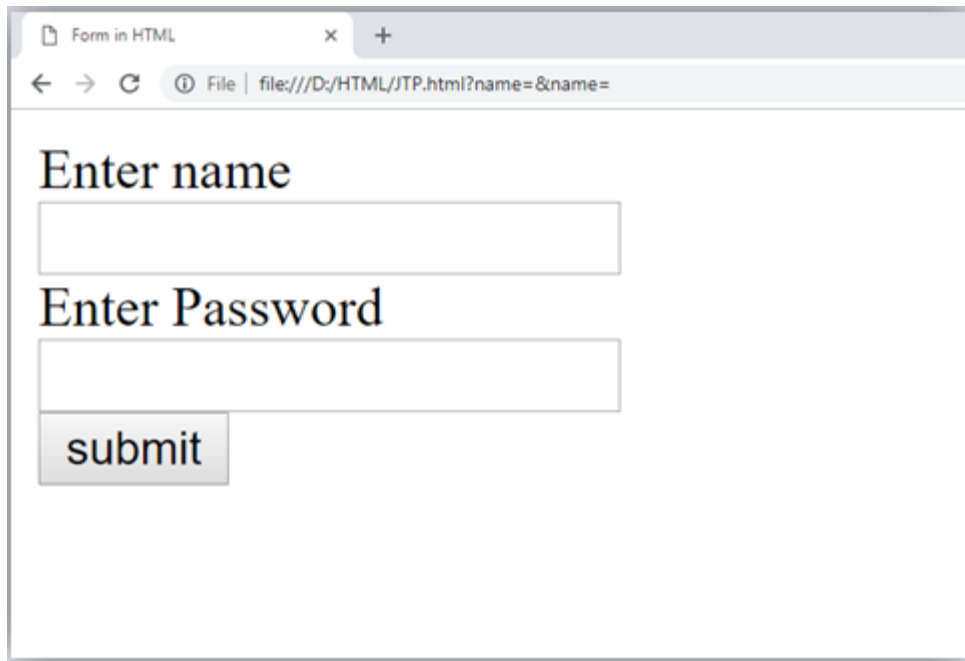
The name attribute can be omitted here.

### Example:

1. **<form>**
2. **<label for="name">Enter name</label> <br>**
3. **<input type="text" id="name" name="name"> <br>**

4. `<label for="pass">Enter Password</label><br>`
5. `<input type="Password" id="pass" name="pass"><br>`
6. `<input type="submit" value="submit">`
7. `</form>`

**Output:**



The screenshot shows a web browser window titled "Form in HTML". The address bar displays "file:///D:/HTML/JTP.html?name=&name=". The form contains two input fields: the first is labeled "Enter name" and the second is labeled "Enter Password". Below the password field is a "submit" button.

## HTML <fieldset> element:

The <fieldset> element in HTML is used to group the related information of a form. This element is used with <legend> element which provide caption for the grouped elements.

**Example:**

1. `<form>`
2. `<fieldset>`
3. `<legend>User Information:</legend>`
4. `<label for="name">Enter name</label><br>`
5. `<input type="text" id="name" name="name"><br>`
6. `<label for="pass">Enter Password</label><br>`
7. `<input type="Password" id="pass" name="pass"><br>`

8. `<input type="submit" value="submit">`
9. `</fieldset>`
10. `</form>`

**Output:**



User Information:

Enter name

Enter Password

submit

## HTML Form Example

Following is the example for a simple form of registration.

1. `<!DOCTYPE html>`
2. `<html>`
3. `<head>`
4. `<title>Form in HTML</title>`
5. `</head>`
6. `<body>`
7. `<h2>Registration form</h2>`
8. `<form>`
9. `<fieldset>`
10. `<legend>User personal information</legend>`
11. `<label>Enter your full name</label> <br>`
12. `<input type="text" name="name"> <br>`
13. `<label>Enter your email</label> <br>`
14. `<input type="email" name="email"> <br>`

```
15. <label>Enter your password</label> <br>
16. <input type="password" name="pass"> <br>
17. <label>confirm your password</label> <br>
18. <input type="password" name="pass"> <br>
19. <br> <label>Enter your gender</label> <br>
20. <input type="radio" id="gender" name="gender" value="male"/>Male <br>
21. <input type="radio" id="gender" name="gender" value="female"/>Female <br>
22. <input type="radio" id="gender" name="gender" value="others"/>others <br>
23. <br>Enter your Address:<br>
24. <textarea> </textarea> <br>
25. <input type="submit" value="sign-up">
26. </fieldset>
27. </form>
28. </body>
29. </html>
```

**Output:**

**Registration form**

User personal information

Enter your full name

Enter your email

Enter your password

confirm your password

Enter your gender

☐ Male

☐ Female

☐ others

Enter your Address:

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## HTML Form Example

1. `<form action="#">`
2. `<table>`
3. `<tr>`
4. `<td class="tdLabel"><label for="register_name" class="label">Enter name:</label>`  
`</td>`
5. `<td><input type="text" name="name" value="" id="register_name" style="width:160px"/></td>`
6. `</tr>`
7. `<tr>`
8. `<td class="tdLabel"><label for="register_password" class="label">Enter password:</label></td>`
9. `<td><input type="password" name="password" id="register_password" style="width:160px"/></td>`
10. `</tr>`
11. `<tr>`
12. `<td class="tdLabel"><label for="register_email" class="label">Enter Email:</label>`  
`</td>`
13. `<td`
14. `><input type="email" name="email" value="" id="register_email" style="width:160px"/`  
`></td>`
15. `</tr>`
16. `<tr>`
17. `<td class="tdLabel"><label for="register_gender" class="label">Enter Gender:</label>`  
`</td>`
18. `<td>`
19. `<input type="radio" name="gender" id="register_gendermale" value="male"/>`
20. `<label for="register_gendermale">male</label>`
21. `<input type="radio" name="gender" id="register_genderfemale" value="female"/>`
22. `<label for="register_genderfemale">female</label>`
23. `</td>`
24. `</tr>`

```
25. <tr>
26.   <td class="tdLabel"><label for="register_country" class="label">Select Country:</label></td>
27.   <td><select name="country" id="register_country" style="width:160px">
28.     <option value="india">india</option>
29.     <option value="pakistan">pakistan</option>
30.     <option value="africa">africa</option>
31.     <option value="china">china</option>
32.     <option value="other">other</option>
33.   </select>
34. </td>
35. </tr>
36. <tr>
37.   <td colspan="2"><div align="right"><input type="submit" id="register_0" value="register"/>
38. </div></td>
39. </tr>
40. </table>
41. </form>
```