**HTML Forms**

HTML stands for HyperText Markup Language. It is used to design web pages using a markup language. It is a combination of Hypertext and Markup language. HTML uses predefined tags and elements that tell the browser how to properly display the content on the screen, and form is one of them. So, in this article, we will learn what is exactly HTML form, what are the elements of forms and how can we use HTML form in our webpage.

**What is HTML <form>?**

<form> is an HTML element to collect input data containing interactive controls. It provides facilities to input text, number, values, email, password, and control fields such as checkboxes, radio buttons, submit buttons, etc., or in other words, form is a container that contains input elements like text, email, number, radio buttons, checkboxes, submit buttons, etc. Forms are generally used when you want to collect data from the user. For example, a user wants to buy a bag online, so he/she has to first enter their shipping address in the address form and then add their payment details in the payment form to place an order.

Forms are created by placing input fields within paragraphs, preformatted text, lists and tables. This gives considerable flexibility in designing the layout of forms.

**Syntax:**

<form>

<!--form elements-->

</form>

**Form elements**

These are the following HTML <form> elements:

* **<label>:**It defines label for <form> elements.
* **<input>:**It is used to get input data from the form in various types such as text, password, email, etc by changing its type.
* **<button>:**It defines a clickable button to control other elements or execute a functionality.
* **<select>:**It is used to create a drop-down list.
* **<textarea>:**It is used to get input long text content.
* **<legend>:**It defines a caption for fieldset elements.
* **<option>:**It is used to define options in a drop-down list.

**Textbox in HTML Form**

In an HTML form,we use the <input> tag by assigning type attribute value to text to input single line input. To define type attribute see the below syntax.

Tip: The default value of the type attribute is “text”.

**Syntax:**

<input type="text" />

Or shorthand for “text” type:

<input />

**Password in an HTML Form**

We can change the type value text to password to get the input password

**Example:** This example shows the type password in html form.

**HTML**

|  |
| --- |
| <!DOCTYPE html>  <**html**>  <**head**>      <**title**>Page Title</**title**>  </**head**>    <**body**>      <**h2**>Welcome To GFG</**h2**>      <**form**>            <**p**>              <**label**>Username : <**input** type="text" /></**label**>          </**p**>            <**p**>              <**label**>Password : <**input** type="password" /></**label**>          </**p**>            <**p**>              <**button** type="submit">Submit</**button**>          </**p**>        </**form**>  </**body**>  </**html**> |

**Output:** In this example, we can see the difference between type text and type password. The username will be visible but the password will not be visible.

A screenshot of a login box

Description automatically generated

**Radio Button in an HTML Form**

To create a radio button, we use the <input> tag following by radio type to provide users to choose a limited number of choices.

**Syntax:**

<input type="radio" name="radio\_button\_name" value="radio\_button\_value" />

**Note:**The radio button must have shared the same name to be treated as a group.

**Note:** The value attribute defines the unique value associated with each radio button. The value is not shown to the user, but is the value that is sent to the server on “submit” to identify which radio button that was selected.

**Example:**In this example, we will create a radio button to choose your gender.

**HTML**

|  |
| --- |
| <!DOCTYPE html>  <**html**>  <**head**>      <**title**>Page Title</**title**>  </**head**>    <**body**>      <**h2**>Select your gender</**h2**>      <**form**>          <**label**>Male<**input** type="radio"                            name="gender"                            value="male" />            </**label**>          <**label**>Female<**input** type="radio"                              name="gender"                              value="female" />            </**label**>      </**form**>  </**body**>  </**html**> |

**Output:**

A black text on a white background

Description automatically generated

**Checkbox in an HTML Form**

To create a checkbox in an HTML form, we use the <input> tag followed by the input type checkbox. It is a square box to tick to activate this. It used to choose more options at a time.

**Syntax:**

<input type="checkbox" name="select\_box\_name" value="select\_box\_value" />

**Note:** the “name” and “value” attributes are used to send the checkbox data to the server.

**Example:**In this example, we use checkboxes to select language.

**HTML**

|  |
| --- |
| <!DOCTYPE html>  <**html**>  <**head**>      <**title**>Page Title</**title**>  </**head**>    <**body**>      <**h2**>Choose Language</**h2**>      <**form**>          <**ul** style="list-style-type:none;">              <**li**><**input** type="checkbox"                         name="language"                         value="hindi" />                    Hindi                </**li**>              <**li**><**input** type="checkbox"                         name="language"                         value="english" />                    English                </**li**>              <**li**><**input** type="checkbox"                         name="language"                         value="sanskrite" />                    Sanskrit                </**li**>          </**ul**>      </**form**>  </**body**>  </**html**> |

**Output:**

A close-up of a white background

Description automatically generated

**Combobox in an HTML Form**

Combobox is used to create a drop-down menu in your form which contains multiple options. So, to create a Combobox in an HTML form, we use the <select> tag with <option> tag. It is also known as a drop-down menu.

**Syntax:**

<select name="select\_box\_name">

<option value="value1">option1</option>

<option value="value2">option2</option>

<option value="value3">option3</option>

</select>

**Note:** the “name” and “value” attributes are used to send the Combobox data to the server.

**Example:**In this example, we will create a dropdown menu to select Nationality.

**HTML**

|  |
| --- |
| <!DOCTYPE html>  <**html**>  <**head**>      <**title**>Page Title</**title**>  </**head**>    <**body**>      <**h2**>Select Your Nationality</**h2**>      <**form**>          <**select** name="language">              <**option** value="indian">Indian</**option**>              <**option** value="nepali">Nepali</**option**>              <**option** value="others">Others</**option**>          </**select**>      </**form**>  </**body**>  </**html**> |

**Output:**

A black text on a white background

Description automatically generated

**Submit button in an HTML Form**

In the HTML form, submit button is used to submit the details of the form to the form handler. A form handler is a file on the server with a script that is used to process input data.

**Syntax:**

<button type="submit">submit</button>

**Example:**In this example, we will create a submit button.

**HTML**

|  |
| --- |
| <!DOCTYPE html>  <**html**>  <**head**>      <**title**>Page Title</**title**>  </**head**>    <**body**>      <**h2**>Welcome To GeeksforGeeks</**h2**>      <**form**>            <**p**>              <**label**>Username: <**input** type="text" /></**label**>            <**p**>              <**label**>Password: <**input** type="password" /></**label**>          </**p**>            <**p**>              <**button** type="submit">submit</**button**>          </**p**>        </**form**>  </**body**>  </**html**> |

**Output:**

A screenshot of a computer

Description automatically generated

**Create an HTML form to input the basic details of a student**

In this example, we will take input such as Salutation, First Name, Last Name, Email, Phone, Gender, Date of Birth, and Address.

To create this form, we need to use the <legend> tag to define the caption, <select> tag for Salutation, <option> tag to define elements of Salutation, <input> tag for First Name, Last Name, Email, Phone, Date of Birth by changing <input> tag type attribute, <textarea> to input address, the radio button for gender. After defining all these stuff, we will use a <button> to submit this form data.

**HTML**

|  |
| --- |
| <!DOCTYPE html>  <**html** lang="en">  <**head**>      <**title**>GfG</**title**>  </**head**>    <**body**>      <**form**>          <**fieldset**>              <**legend**>Personal Details</**legend**>                <**p**>                  <**label**>                      Salutation                      <**br** />                      <**select** name="salutation">                          <**option**>--None--</**option**>                          <**option**>Mr.</**option**>                          <**option**>Ms.</**option**>                          <**option**>Mrs.</**option**>                          <**option**>Dr.</**option**>                          <**option**>Prof.</**option**>                      </**select**>                  </**label**>              </**p**>                <**p**>                  <**label**>First name: <**input** name="firstName" /></**label**>              </**p**>                <**p**>                  <**label**>Last name: <**input** name="lastName" /></**label**>              </**p**>                <**p**>                  Gender :                  <**label**><**input** type="radio" name="gender"                                value="male" />                        Male                    </**label**>                  <**label**><**input** type="radio" name="gender"                                value="female" />                        Female                    </**label**>              </**p**>                <**p**>                  <**label**>Email:<**input** type="email"                                      name="email" />                    </**label**>              </**p**>                <**p**>                  <**label**>Date of Birth:<**input** type="date"                                              name="birthDate">                    </**label**>              </**p**>                <**p**>                  <**label**>                      Address :                      <**br** />                      <**textarea** name="address" cols="30"                                rows="3">                        </**textarea**>                  </**label**>              </**p**>                <**p**>                  <**button** type="submit">Submit</**button**>              </**p**>            </**fieldset**>      </**form**>  </**body**>  </**html**> |

**Output:**

A screenshot of a computer

Description automatically generated

