

## ❖ HTML Forms:

- **The <form> Element:**

The HTML <form> element defines a form that is used to collect user input:

```
<form>
```

.

*form elements*

.

```
</form>
```

- An HTML form contains form elements.
- Form elements are different types of input elements, like text fields, checkboxes, radio buttons, submit buttons, and more.

## ❖ HTML Form Elements:

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

- **The <text> Element:**

The <text> element defines a one-line input field.

Ex:

```
<form action="#" >
```

```
  First name:<br>
```

```
  <input type="text" name="firstname"><br>
```

```
  Last name:<br>
```

```
  <input type="text" name="lastname">
```

```
</form>
```



First name:

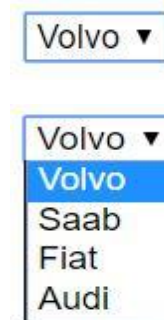
Last name:

- **The <select> Element:**

The <select> element defines a drop-down list:

Ex:

```
<form action="#">
  <select name="cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
    <option value="fiat">Fiat</option>
    <option value="audi">Audi</option>
  </select>
</form >
```



A screenshot of a web browser showing a drop-down menu. The menu is currently closed, displaying only the selected option 'Volvo' with a small downward-pointing triangle to its right. The menu is styled with a light blue border and a white background.

- The <option> elements defines an option that can be selected.
- By default, the first item in the drop-down list is selected.
- To define a pre-selected option, add the selected attribute to the option:

Ex:

```
<form action="#">
  <select name="cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
    <option value="fiat" selected >Fiat</option>
    <option value="audi">Audi</option>
  </select>
</form >
```



A screenshot of a web browser showing a drop-down menu. The menu is currently closed, displaying the selected option 'Fiat' with a small downward-pointing triangle to its right. The menu is styled with a light blue border and a white background.

- Visible Values: use the **size** attribute to specify the number of visible values.

Ex:

```
<form action="#">
  <select name="cars" size="3">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
    <option value="fiat">Fiat</option>
    <option value="audi">Audi</option>
  </select>
</form >
```



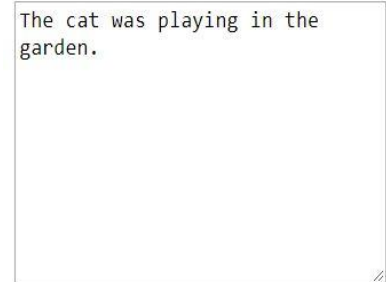
A screenshot of a web browser showing a multi-select menu. The menu is open, displaying three visible options: 'Volvo', 'Saab', and 'Fiat'. Each option has a small square checkbox to its right. The menu is styled with a light blue border and a white background.

- **The <textarea> Element:**

The <textarea> element defines a multi-line input field (a text area):

Ex:

```
<form action="#">
  <textarea name="message" rows="10" cols="30">
The cat was playing in the garden.
</textarea>
</form >
```



- The **rows** attribute specifies the visible number of lines in a text area.
- The **cols** attribute specifies the visible width of a text area.

- **The <button> Element:**

The <button> element defines a clickable **button**:

Ex:

```
<form action="#">
  <button type="button" onclick="alert('Hello World!')">Click
Me!</button>
</form >
```



## ❖ HTML Input Types:

### 1- Input Type Text:

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

Ex:

```
<form action="#" >
  First name:<br>
  <input type="text" name="firstname"><br>
  Last name:<br>
  <input type="text" name="lastname">
</form>
```



First name:

Last name:

### 2- Input Type Password:

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

Ex:

```
<form action="#" >
  User name:<br>
  <input type="text" name="username"><br>
  User password:<br>
  <input type="password" name="psw">
</form>
```



User name:

User password:

### 3- Input Type Submit:

`<input type="submit">` defines a **button for submitting** form data to a **form-handler**.

- The **form-handler** is typically a server page with a script for processing input data.
- The **form-handler** is specified in the form's action attribute:

Ex:

```
<form action="/action_page.php">  
  First name:<br>  
  <input type="text" name="firstname" value="Mickey"><br>  
  Last name:<br>  
  <input type="text" name="lastname" value="Mouse"><br><br>  
  <input type="submit" value="Submit">  
</form>
```



First name:

Last name:

#### 4- Input Type Reset:

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

Ex:

```
<form action="/action_page.php">  
  First name:<br>  
  <input type="text" name="firstname" value="Mickey"><br>  
  Last name:<br>  
  <input type="text" name="lastname" value="Mouse"><br><br>  
  <input type="submit" value="Submit">  
  <input type="reset">  
</form>
```



First name:

Last name:

## 5- Input Type Radio:

`<input type="radio">` defines a **radio button**.

- Radio buttons let a user select ONLY ONE of a limited number of choices.

Ex:

```
<form action="/action_page.php">  
  <input type="radio" name="gender" value="male" checked> Male<br>  
  <input type="radio" name="gender" value="female"> Female<br>  
  <input type="radio" name="gender" value="other"> Other  
  <input type="submit">  
</form>
```



- Male
- Female
- Other

Submit

## 6- Input Type Checkbox:

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

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

Ex:

```
<form action="/action_page.php">  
  <input type="checkbox" name="vehicle1" value="Bike"> I have a bike<br>  
  <input type="checkbox" name="vehicle2" value="Car"> I have a car  
  <input type="submit">  
</form>
```



- I have a bike
- I have a car

Submit

➤ HTML5 added several new input types:

- color
- date
- email
- month
- number
- range
- search
- time
- url
- week

### 1- 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.

Ex:

```
<form>
  Select your favorite color:
  <input type="color" name="favcolor">
  <input type="submit">
</form>
```



Select your favorite color:

### 2- Input Type Date:

The `<input type="date">` is used for input fields that should contain a date.

Ex:

```
<form>
  Birthday:
  <input type="date" name="bday">
  <input type="submit">
</form>
```



Birthday:

October 2017 ▾

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

### 3- Input Type Email:


The `<input type="email">` is used for input fields that should contain an e-mail address.

Ex:

```
<form>
  E-mail:
  <input type="email" name="email">
  <input type="submit">
</form>
```



E-mail:

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

### 4- Input Type Number:

The `<input type="number">` defines a **numeric** input field.


➤ You can also set restrictions on what numbers are accepted.

Ex:

```
<form>
  Quantity (between 1 and 5):
  <input type="number" name="quantity" min="1" max="5">
  <input type="submit">
</form>
```



Quantity (between 1 and 5):

 Value must be less than or equal to 5.

### 5- Input Type Time:

The `<input type="time">` allows the user to select a time (no time zone).

Ex:

```
<form>
  Select a time:
  <input type="time" name="usr_time">
  <input type="submit">
</form>
```



Select a time:



## ❖ HTML Input Attributes:

- **The value Attribute:**

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

Ex:

```
<form action="#">
First name:<br>
<input type="text" name="firstname" value="John">
</form>
```



First name:

- **The disabled Attribute:**

The **disabled** attribute specifies that the input field is disabled.

- A disabled input field is unusable and un-clickable, and its value will not be sent when submitting the form:

Ex:

```
<form action="#">
First name:<br>
<input type="text" name="firstname" value="John" disabled>
</form>
```



First name:

- **The size Attribute:**

The **size** attribute specifies the size (in characters) for the input field:

Ex:

```
<form action="">
First name:<br>
<input type="text" name="fname" value="John" size="40">
Last name:<br>
<input type="text" name="lname">
</form>
```



First name:

Last name:

- **The maxlength Attribute:**

The **maxlength** attribute specifies the maximum allowed length for the input field:

Ex:

```
<form action="">  
First name:<br>  
<input type="text" name="firstname" maxlength="10">  
</form>
```



First name:  
0123456789

- **The autofocus Attribute:**

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

Ex:

```
<form action="#">  
First name:<input type="text" name="fname" autofocus><br>  
First name:<input type="text" name="lname">  
</form>
```



First name:

Last name:

- **The placeholder Attribute:**

The **placeholder** attribute specifies a hint that describes the expected value of an input field (a sample value or a short description of the format).

- The hint is displayed in the input field before the user enters a value.
- The placeholder attribute works with the following input types: text, search, url, tel, email, and password.

Ex:

```
<form action="#">
  <input type="text" name="fname" placeholder="First name"><br>
  <input type="text" name="lname" placeholder="Last name"><br>
  <input type="submit" value="submit">
</form>
```



- **The required Attribute:**

The **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.

Ex:

```
<form action="#">
  Username: <input type="text" name="username" required><br>
  <input type="submit" value="submit">
</form>
```



*End of HTML Lectures*