



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A’ Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING-IOT Including CS&BCT

**COURSE NAME : 19SB602 FULL STACK DEVELOPMENT FOR NEXT
GENERATION IOT**

III YEAR / VI SEMESTER

Unit II- FRONT-END MODULES

Topic : Navs, Navigation Bars, Forms



Navs

A "nav" or navigation is a element that helps **users navigate through different sections or pages of a website.**

Bootstrap provides a **flexible and responsive navigation** component to make it easy to create navigational menus.

Bootstrap Navs:

Bootstrap navs are **components** that help in creating **navigation menus with various styles and layouts.**

They support different **types** of navigation, such as **tabs, pills, and navigation bars.**



Key Classes:

nav: The **base class** for **navigation** components.

nav-item: Represents an **individual item** in the navigation.

nav-link: Represents a **clickable link inside** a navigation item.



```
<!DOCTYPE html>
<html>
<body>
<h1>The nav element</h1>
<p>The nav element defines a set of navigation links:</p>
<nav>
<a href="/html/">HTML</a> |
<a href="/css/">CSS</a> |
<a href="/js/">JavaScript</a> |
<a href="/python/">Python</a>
</nav>
</body>
</html>
```



The nav element

The nav element defines a set of navigation links:

[HTML](#) | [CSS](#) | [JavaScript](#) | [Python](#)



Navigation Bar

A navigation bar, often referred to as a **navbar**, is an essential component in web design.

It provides a **consistent** and accessible way for users to **navigate through different sections or pages** of a website.

Navigation bars can **vary in style and complexity**, but they typically include **links to key sections** of a website.



```
<!DOCTYPE html>
<html>
<head>
<style>
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
}
</style>
</head>
<body>
```



<p>In this example, we remove the bullets from the list, and its default padding and margin.</p>

```
<ul>
```

```
<li><a href="#home">Home</a></li>
```

```
<li><a href="#news">News</a></li>
```

```
<li><a href="#contact">Contact</a></li>
```

```
<li><a href="#about">About</a></li>
```

```
</ul>
```

```
</body>
```

```
</html>
```




In this example, we remove the bullets from the list, and its default padding and margin.

[Home](#)

[News](#)

[Contact](#)

[About](#)



Forms

Forms are used to **collect user input** and **submit it to a server** for processing.

Forms are created using the `<form>` element, and various form elements like **text inputs, radio buttons, checkboxes, and buttons** are used within the form to **capture information**.

Definition and Usage

The `<form>` tag is used to **create an HTML form for user input**.

The `<form>` element can contain one or more of the following form elements:



<input>

<textarea>

<button>

<select>

<option>

<optgroup>

<fieldset>

<label>

<output>



<input> Tag

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.



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

```
<h1>The input element</h1>
```

```
<form action="/action_page.php">  
  <label for="fname">First name:</label>  
  <input type="text" id="fname" name="fname"><br><br>  
  <label for="lname">Last name:</label>  
  <input type="text" id="lname" name="lname"><br><br>  
  <input type="submit" value="Submit">  
</form>
```

```
<p>Click the "Submit" button and the form-data will be sent to a page on the  
server called "action_page.php".</p>
```

```
</body>  
</html>
```



The input element

First name:

Last name:

Click the "Submit" button and the form-data will be sent to a page on the server called "action_page.php".



<textarea> Tag



The <textarea> tag defines a **multi-line text** input control.

The <textarea> element is often used in a form, to collect user inputs like comments or reviews.



```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The textarea element</h1>
```

```
<form action="/action_page.php">
```

```
<p><label for="w3review">Review of W3Schools:</label></p>
```

```
<textarea id="w3review" name="w3review" rows="4" cols="50">At w3schools.com you  
will learn how to make a website. They offer free tutorials in all web development  
technologies.</textarea>
```

```
<br>
```

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

```
</form>
```

```
<p>Click the "Submit" button and the form-data will be sent to a page on the  
server called "action_page.php".</p>
```

```
</body>
```

```
</html>
```




The textarea element

Review of W3Schools:

```
At w3schools.com you will learn how to make a website.  
They offer free tutorials in all web development  
technologies.
```

Submit

Click the "Submit" button and the form-data will be sent to a page on the server called "action_page.php".



`<button>` Tag

The `<button>` tag defines a **clickable button**.

Inside a `<button>` element you can put text (and tags like `<i>`, ``, ``, `
`, ``, etc.).

That is not possible with a button created with the `<input>` element!



```
<!DOCTYPE html>
```

The button Element

```
<html>
```

A small rectangular button with the text "Click Me!" inside.

```
<body>
```

```
<h1>The button Element</h1>
```

```
<button type="button" onclick="alert('Hello world!')">Click  
Me!</button>
```

```
</body>
```

```
</html>
```



`<select>` Tag

The `<select>` element is used to **create a drop-down** list.

The `<select>` element is most often used in a form, to collect user input.

The name attribute is needed to reference the form data after the form is submitted (if you omit the name attribute, no data from the drop-down list will be submitted).

The id attribute is needed to associate the drop-down list with a label.



```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The select element</h1>
```

```
<p>The select element is used to create a drop-down list.</p>
```

```
<form action="/action_page.php">
```

```
  <label for="cars">Choose a car:</label>
```

```
  <select name="cars" id="cars">
```

```
    <option value="volvo">Volvo</option>
```

```
    <option value="saab">Saab</option>
```

```
    <option value="opel">Opel</option>
```

```
    <option value="audi">Audi</option>
```

```
  </select>
```

```
  <br><br>
```

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

```
</form>
```

```
<p>Click the "Submit" button and the form-data will be sent to a page on the server called "action_page.php".</p>
```

```
</body>
```

```
</html>
```



The select element

The select element is used to create a drop-down list.

Choose a car:

Click the "Submit" button and the form-data will be sent to a page on the server called "action_page.php".



`<option>` Tag

The `<option>` tag defines an **option in a select list**.

`<option>` elements go inside a `<select>`, `<optgroup>`, or `<datalist>` element.

The option element

Choose a car:



```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The option element</h1>
```

```
<label for="cars">Choose a car:</label>
```

```
<select id="cars">
```

```
  <option value="volvo">Volvo</option>
```

```
  <option value="saab">Saab</option>
```

```
  <option value="opel">Opel</option>
```

```
  <option value="audi">Audi</option>
```

```
</select>
```

```
</body>
```

```
</html>
```




<optgroup> Tag

The <optgroup> tag is used to **group related options** in a <select> element (drop-down list).

If you have a long list of options, groups of related options are easier to handle for a user.



```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The optgroup element</h1>
```

```
<p>The optgroup tag is used to group related options in a drop-down list:</p>
```

```
<form action="/action_page.php">
```

```
<label for="cars">Choose a car:</label>
```

```
<select name="cars" id="cars">
```

```
<optgroup label="Swedish Cars">
```

```
<option value="volvo">Volvo</option>
```

```
<option value="saab">Saab</option>
```

```
</optgroup>
```



```
<optgroup label="German Cars">
  <option value="mercedes">Mercedes</option>
  <option value="audi">Audi</option>
</optgroup>
</select>
<br><br>
<input type="submit" value="Submit">
</form>

</body>
</html>
```



The optgroup element

The optgroup tag is used to group related options in a drop-down list:

Choose a car:



<fieldset> Tag

The <fieldset> tag is used to **group related elements in a form.**

The <fieldset> tag draws a box around the related elements.

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The fieldset element</h1>
```

```
<form action="/action_page.php">
```

```
<fieldset>
```

```
<legend>Personalia:</legend>
```



```
<label for="fname">First name:</label>
<input type="text" id="fname" name="fname"><br><br>
<label for="lname">Last name:</label>
<input type="text" id="lname" name="lname"><br><br>
<label for="email">Email:</label>
<input type="email" id="email" name="email"><br><br>
<label for="birthday">Birthday:</label>
<input type="date" id="birthday" name="birthday"><br><br>
<input type="submit" value="Submit">
</fieldset>
</form>

</body>
</html>
```



The fieldset element

Personalia:

First name:

Last name:

Email:

Birthday:



<label> Tag

The <label> tag defines a **label for several elements:**

<input type="checkbox">

<input type="color">

<input type="date">

<input type="datetime-local">

<input type="email">

<input type="file">

<input type="month">

<input type="number">

<input type="password">

<input type="radio">

<input type="range">

<input type="search">

<input type="tel">

<input type="text">

<input type="time">

<input type="url">

<input type="week">

<meter>

<progress>

<select>

<textarea>



```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The label element</h1>
```

```
<p>Click on one of the text labels to toggle the related radio button:</p>
```

```
<form action="/action_page.php">
```

```
  <input type="radio" id="html" name="fav_language" value="HTML">
```

```
  <label for="html">HTML</label><br>
```

```
  <input type="radio" id="css" name="fav_language" value="CSS">
```

```
  <label for="css">CSS</label><br>
```

```
  <input type="radio" id="javascript" name="fav_language" value="JavaScript">
```

```
  <label for="javascript">JavaScript</label><br><br>
```

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

```
</form>
```

```
</body>
```

```
</html>
```



The label element

Click on one of the text labels to toggle the related radio button:

- HTML
- CSS
- JavaScript

Submit



<output> Tag

The <output> tag is used to **represent the result of a calculation** (like one performed by a script).

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The output element</h1>
```

```
<form oninput="x.value=parseInt(a.value)+parseInt(b.value)">
```

```
<input type="range" id="a" value="50">
```

```
+<input type="number" id="b" value="25">
```

```
=<output name="x" for="a b"></output>
```

```
</form>
```

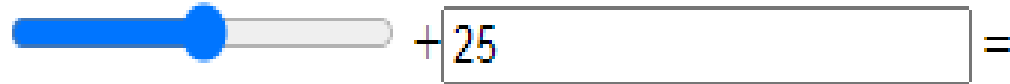
<p>Note: The output element is not supported in Edge 12 (or earlier).</p>

```
</body>
```

```
</html>
```



The output element



Note: The output element is not supported in Edge 12 (or earlier).

Navbar

A "navbar" is an area on a page that contains navigation components (links, buttons, etc) for getting to other pages of the website.

Nav

A "nav" is an HTML element that is normally used to enclose other elements related to navigation.



Any Query?????

Thank you.....