

# CMSC388A

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## Web Application Development with JavaScript



### Forms

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# <label> Input Element

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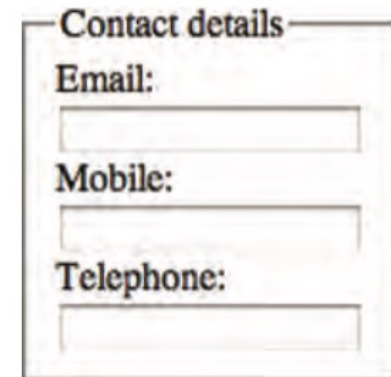
- <label> - Input label element that represents a caption for an item in a user interface
- By associating an <input> element with a <label>
  - When the user touches/taps a label, the browser changes the focus to its associated input
  - Screen readers will read out the label when the user is focused on the form input
  - **Reference:**
  - <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/label>
- To associate a <label> with an <input> element you have two choices:
  1. Nest the <input> element directly inside the <label>
  2. Give the <input> element an id and use the <label> **for** attribute with the specified id
- **Example:** Labels.html

# Group Form Elements with <fieldset>

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- Group-related form controls in an <fieldset> element
  - Rendered in most browsers with a line around the controls inside to show they are grouped

```
<fieldset>  
  <legend>Contact details</legend>  
  <input... />  
  <input... />  
</fieldset>
```



Contact details

Email:

Mobile:

Telephone:

- Use the <legend> tag to give the section a legend at the top
- **Example:** FieldSet.html

# Additional <input> Types

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- Types for <input type="OPTION"> - **OPTION will be range, date, ...**
- **range** - For selecting values in a range using a slider. The **min**, **max**, **step**, and **value** properties allow us to define minimum, maximum, increment, and initial values, respectively
  - Using the Opera browser allows you to see steps
- **number** - Relies on the same properties used by <range>. Using arrows, you can increase or decrease the value
- **date, time, datetime-local**
- **week, month**
- **search** - Behaves like text, and the main difference is that the browser styles it differently
- **tel** - Telephone value
  - Using pattern attribute, we can define a regular expression to control format input

# Additional <input> Types

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- **color** - You may see a color picker (depending on the browser)
- **button** - Defines a button. You can add functionality using JavaScript. It is not the same as **submit**
- **Example:** FormElements.html (see the style section)
- Try looking at the examples using different browsers
- You can try it on your phone using the following link  
<https://www.cs.umd.edu/~nelson/classes/resources/cmsc335/formsExample/FormElements.html>
- **Reference:**  
[https://www.w3schools.com/html/html\\_form\\_input\\_types.asp](https://www.w3schools.com/html/html_form_input_types.asp)

# Common <input> Attributes

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- **value** - default value for input field
- **size** - how much of the input is shown (same as setting CSS width). It is **not** the number of characters you can see
- **maxlength** - maximum number of characters for an input field
- **checked** - element must be selected when the page loads
- **max** - maximum value for input field
- **min** - minimum value for input field
- **step** - number of intervals for input field
- **pattern** - regular expression to check the input value against
- **readonly** - input field cannot be changed
- **disabled** - disabled, rendered with dimmer color, do not receive click event and are not submitted with the form
- **Example:** InputElementAttributes.html

## <input> list Attribute

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- `<input list="DATALIST_ID">`
- **<datalist>** - contains recommended or permissible options
- **You can specify an alternative to the options**
- **Example:** Inputlist.html