

# HTML Forms

Client-side

# Two Parts of Forms

- HTML form:
  - The user interface (client-side)
- Server-side processing:
  - The action (server-side)
  - send e-mail
  - write data to a text file
  - update a database
  - performs some other type of processing on the server


# Overview of Forms

- Form

- An HTML element that contains and organizes
- form controls such as

text boxes,  
check boxes,  
and buttons

that can accept information from website visitors.



Shipping Address Entry

Name:

Company:

Address Line 1:

Address Line 2:

City:

State:

Zip Code:  -

Country:

# Common HTML Form Elements

- `<form>`
  - Contains the form elements on a web page
  - Container tag
- `<input>`
  - Configures a variety of form elements including text boxes, radio buttons, check boxes, and buttons
  - Stand alone tag
- `<textarea>`
  - Configures a scrolling text box
  - Container tag
- `<select>`
  - Configures a select box (drop down list)
  - Container tag
- `<option>`
  - Configures an option in the select box
  - Container tag

# Sample Form HTML

```
<h1>Join Our Newsletter</h1>
<form method="post" action="#">
  E-mail:
  <input type="text"><br>
  <input type="submit">
  <input type="reset">
</form>
```



# HTML form element

```
<form method="post" action="#">  
</form>
```

## Attributes

- **method**
  - get – default value,  
form data passed in URL
  - post – more secure,  
form data passed in HTTP Entity Body
- **action**
  - Specifies the server-side program or script that will process your form data

# Input Text box

```
<input type="text" name="email" id="email">
```

`<input>`

Accepts text information



Sample Text Box

Email:

Attributes:

- `type="text"` (the default)
- `name=""` (so the script on the server can "grab" the form data)
- `id=""` (to uniquely identify the element to do client-side stuff)

# input Password box

- `<input>`
- Accepts text information that needs to be hidden as it is entered
- Attributes:
  - `type="password"`
  - `name`
  - `id`



A sample password box with a title "Sample Password Box" and a label "Password:" followed by a text input field containing masked characters.

Sample Password Box

Password:



# input Check box

- <input>
- Allows the user to select one or more of a group of predetermined items
- Attributes:
  - type="checkbox"
  - name
  - id
  - checked
  - value

## Sample Check Box

Choose the browsers you use:

- ☐ Internet Explorer
- ☐ Firefox
- ☐ Opera

# input Radio Button

- `<input>`
- Allows the user to select exactly one from a group of predetermined items
- Each radio button in a group is given the same name and a unique value
- Attributes:
  - `type="radio"`
  - `name`
  - `id`
  - `checked`
  - `value`

## Sample Radio Buttons

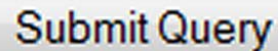
Select your favorite browser:

- ☐ Internet Explorer
- ☐ Firefox
- ☐ Opera

# input Submit Button

- `<input>`
- Submits the form information
- When clicked:
  - Triggers the **action** method on the `<form>` tag
  - Sends the form data (the name=value pair for each form element) to the web server.
- Attributes:
  - type="submit"
  - name
  - id
  - value

## Sample Submit Button

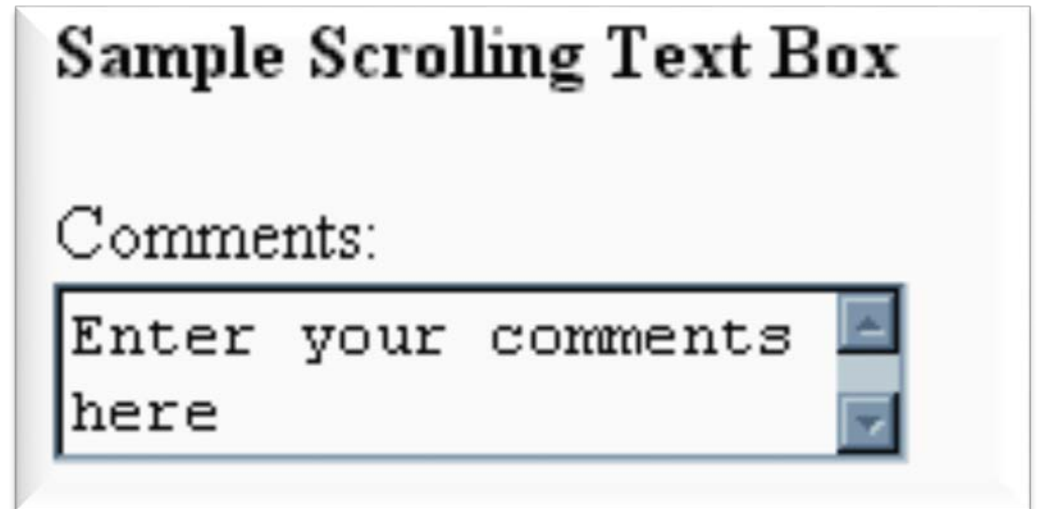


Submit Query

# textarea Scrolling Text Box

```
<textarea name="comments" id="comments"></textarea>
```

- `<textarea>` `</textarea>`
- Configures a scrolling text box
- Attributes:
  - name
  - id



# Accessibility & Forms

- Label Element
- Fieldset Element
- Legend Element
- Tab index

## Label element

- `<label></label>`
- Associates a text label with a form control
- Two Different Formats:  
`<label>Email: <input type="text" name="email" id="email"></label>`

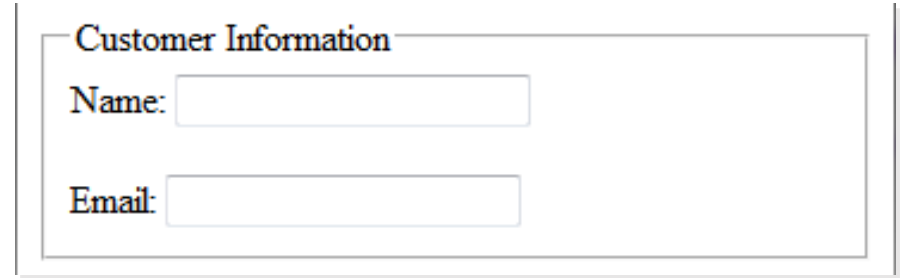
Or

```
<label for="email">Email: </label>  
<input type="text" name="CustEmail" id= "email">
```

# Fieldset and Legend Elements

- The Fieldset Element

- Container tag
- Creates a visual group of form elements on a web page



A visual representation of a fieldset. It consists of a rectangular box with a thin border. Inside the box, at the top, is the text "Customer Information" in a blue, serif font. Below this text are two text input fields. The first field is preceded by the label "Name:" and the second by "Email:". Both labels are in a blue, serif font. The input fields are simple rectangular boxes with a light gray border.

- The Legend Element

- Container tag
- Creates a text label within the fieldset

```
<fieldset>
```

```
    <legend>Customer Information</legend>
```

```
    <label>
```

```
        Name:
```

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

```
    </label><br>
```

```
    <label>
```

```
        Email:
```

```
        <input type="text" name="email" id="email">
```

```
    </label>
```

```
</fieldset>
```

## tabindex attribute

- Attribute that can be used on form controls and anchor tags
- Modifies the default tab order
- Assign a numeric value

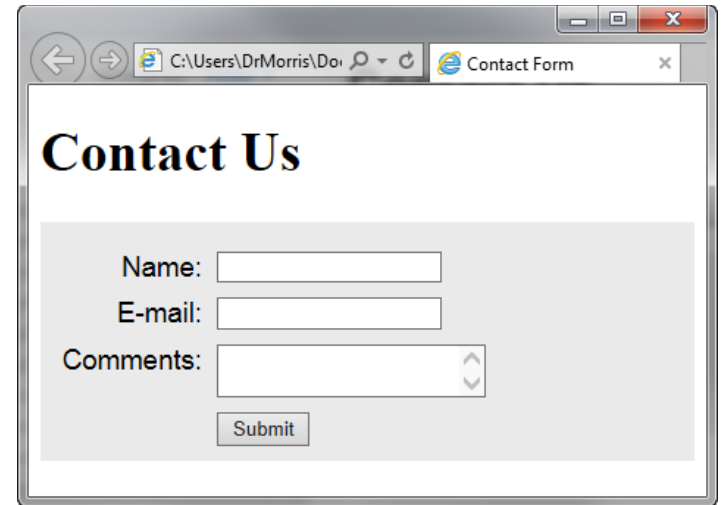
```
<input type="text" name="CustEmail" id="CustEmail"  
tabindex="1">
```



# Using CSS to Style a Form

form

label	text box
label	text box
label	scrolling text box
submit button	

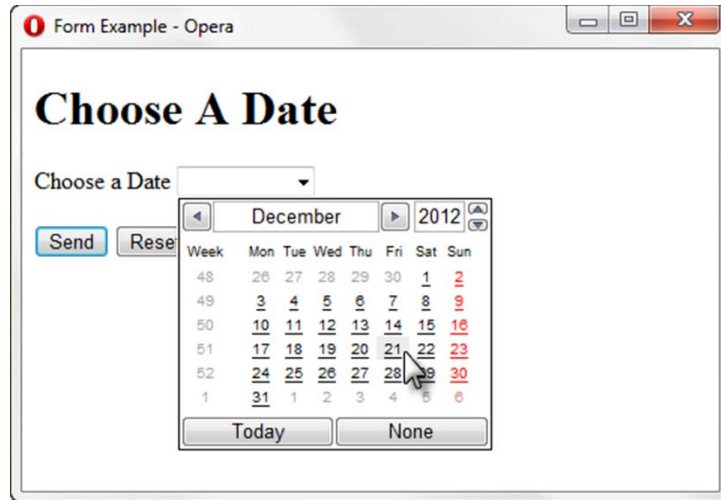


```
form { background-color: #eaeaea;
        font-family: Arial, sans-serif; padding: 10px; }
label { float: left; width: 100px; clear: left; text-align: right;
        padding-right: 10px; margin-top: 10px; }
input, textarea { margin-top: 10px; display: block; }
#mySubmit { margin-left: 110px; }
```

# New HTML5 Form Elements and Attributes

# HTML5: Calendar Control

```
<label for="myDate">Choose a Date</label>  
<input type="date" name="myDate" id="myDate">
```

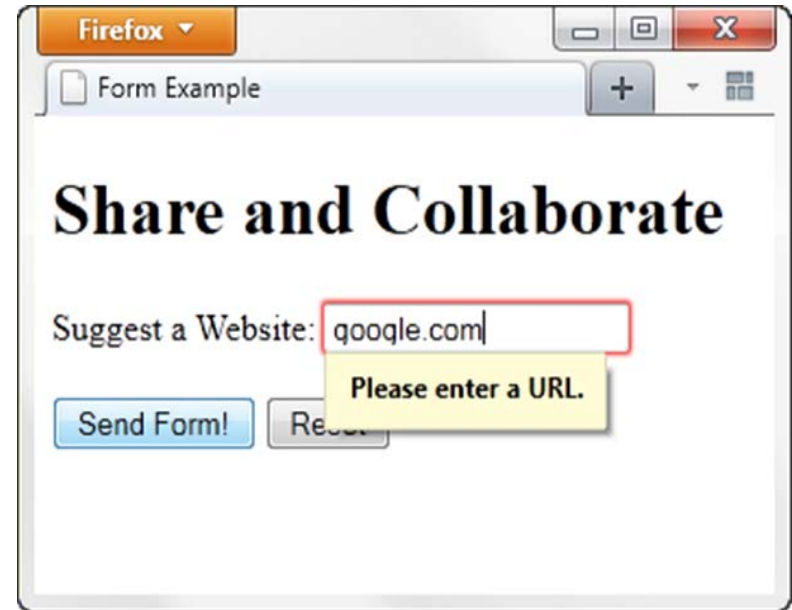


# HTML5: Email Text Box

- `<input>`
- Accepts text information in e-mail address format
- Common Attributes:
  - `type="email"`
  - `name`
  - `id`
  - `size`
  - `maxlength`
  - `value`
  - `placeholder`
  - `required`



- `<input>`
- Accepts text information in URL format
- Common Attributes:
  - `type="url"`
  - `name`
  - `id`
  - `size`
  - `maxlength`
  - `value`
  - `placeholder`
  - `required`

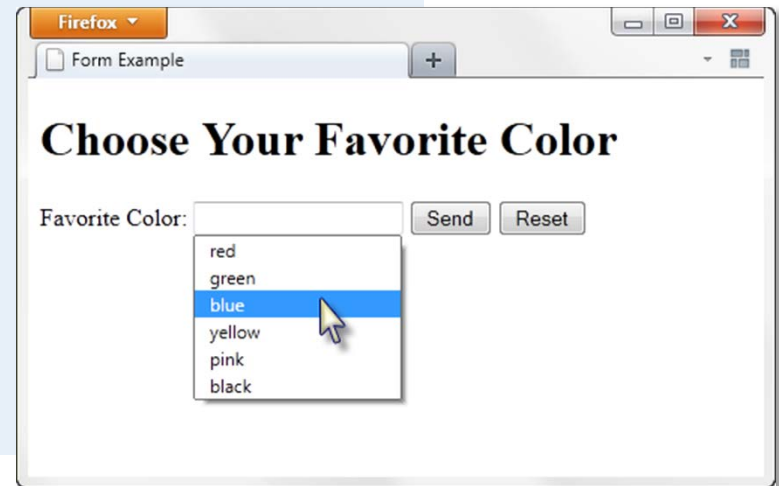


# HTML5: Telephone Number Text Box

- `<input>`
- Accepts text information in telephone number format
- Common Attributes:
  - `type="tel"`
  - `name`
  - `id`
  - `size`
  - `maxlength`
  - `value`
  - `placeholder`
  - `required`

# HTML5: Datalist Control

```
<label for="color">Favorite Color:</label>
<input type="text" name="color" id="color"
list="colors" >
<datalist id="colors">
  <option value="red">
  <option value="green">
  <option value="blue">
  <option value="yellow">
  <option value="pink">
  <option value="black">
</datalist>
```

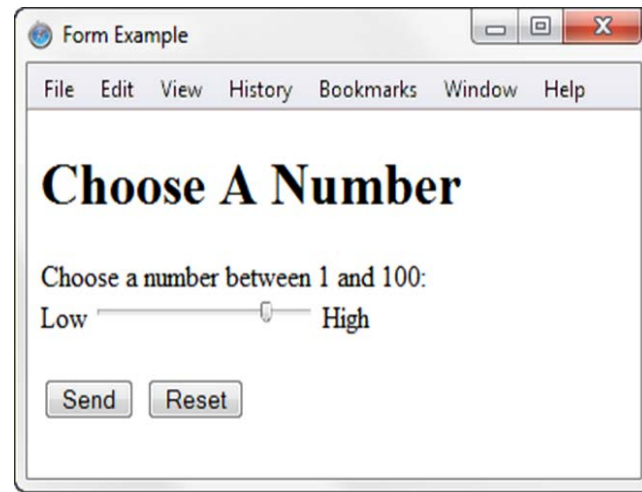


# HTML5: Slider Control

`<label for="myChoice">`

Choose a number between 1 and 100:`</label><br>`

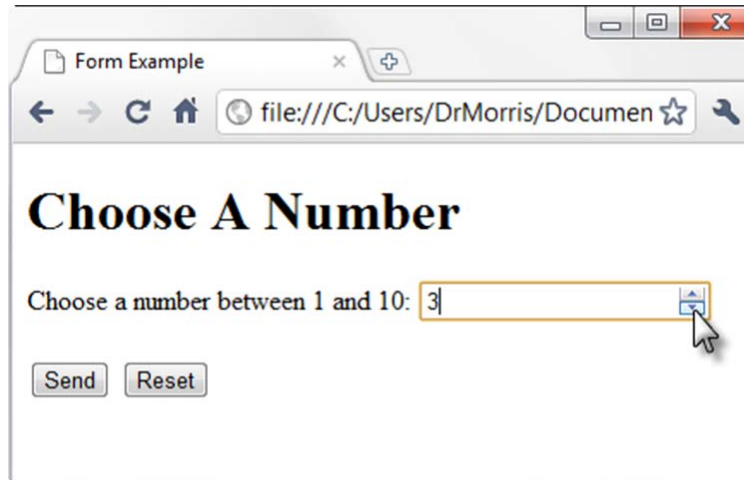
Low `<input type="range" name="myChoice" id="myChoice"`  
`min="1" max="100">` High





# HTML5: Spinner Control

```
<label for="myChoice">Choose a number between 1 and 10:</label>  
<input type="number" name="myChoice" id="myChoice"  
      min="1" max="10">
```



The screenshot shows a web browser window with a single tab titled 'Form Example'. The address bar displays a file path: 'file:///C:/Users/DrMorris/Documen'. The main content area features a heading 'Choose A Number' in a large, bold, black serif font. Below the heading is a form with the text 'Choose a number between 1 and 10:' followed by a spinner input field. The input field has a yellow border and contains the number '3'. To the right of the input field is a small blue square button with a white up/down arrow icon, which is being clicked by a mouse cursor. Below the input field are two buttons: 'Send' and 'Reset', both with a light gray background and a thin border.