

Web Development

HTML Forms

Forms

Forms add the ability to web pages to not only provide the person viewing the document with dynamic information but also to obtain information from the person viewing it, and process the information.

- Forms work in all browsers.
- Forms are Platform Independent.

Objectives:

Upon completing this section, you should be able to

1. Create a FORM.
2. Add elements to a FORM.
3. Specify an action for the FORM.

Forms

- To insert a form we use the `<FORM></FORM>` tags. The rest of the form elements must be inserted in between the form tags.

```
<HTML>
```

```
  <HEAD>
```

```
    <TITLE> Sample Form</TITLE>
```

```
  </HEAD>
```

```
  <BODY BGCOLOR="FFFFFF">
```

```
    <FORM ACTION = http://www.xyz.com/formtest.php>
```

```
    <P> First Name: <INPUT TYPE="TEXT" NAME="fname" MAXLENGTH="50"> </P>
```

```
    <P> <INPUT TYPE="SUBMIT" NAME="fsubmit" VALUE="Send Info"> </P>
```

```
  </FORM>
```

```
  </BODY>
```

```
</HTML>
```

<FORM>element attributes

- **ACTION**: is the **URL** of the **CGI** (Common Gateway Interface) program that is going to accept the data from the form, process it, and send a response back to the browser.
- **METHOD**: **GET** (default) or **POST** specifies which **HTTP** method will be used to send the form's contents to the web server. The CGI application should be written to accept the data from either method.
- **NAME**: is a form name used by **VBScript** or **JavaScripts**.
- **TARGET**: is the target frame where the response page will show up.

Form Elements

- Form elements have properties: **Text** boxes, **Password** boxes, **Checkboxes**, Option(**Radio**) buttons, **Submit**, **Reset**, **File**, **Hidden** and **Image**.
- The properties are specified in the TYPE Attribute of the HTML element
<INPUT></INPUT>



First Name:

Last Name:

Gender::

☐ Male

☐ Female

Please choose type of residence::

☐ Steak

☐ Pizza

☐ Chicken

Enter your favorite
quote!

Select a Level of Education:

Diploma ▼ :

Select your favorite time of day::

Morning ▲
Day
Night ▼ :

Submit Data

Reset



Form Elements

<INPUT> Element's Properties

TYPE = Type of INPUT entry field.

NAME = Variable name passed to CGI application

VALUE = The data associated with the variable name to be passed to the CGI application

CHECKED = Button/box checked

SIZE = Number of visible characters in textfield

MAXLENGTH = Maximum number of characters accepted

Text Box

Text boxes: Used to provide input fields for text, phone numbers, dates, etc.

<INPUT TYPE= " TEXT" >

Browser will display

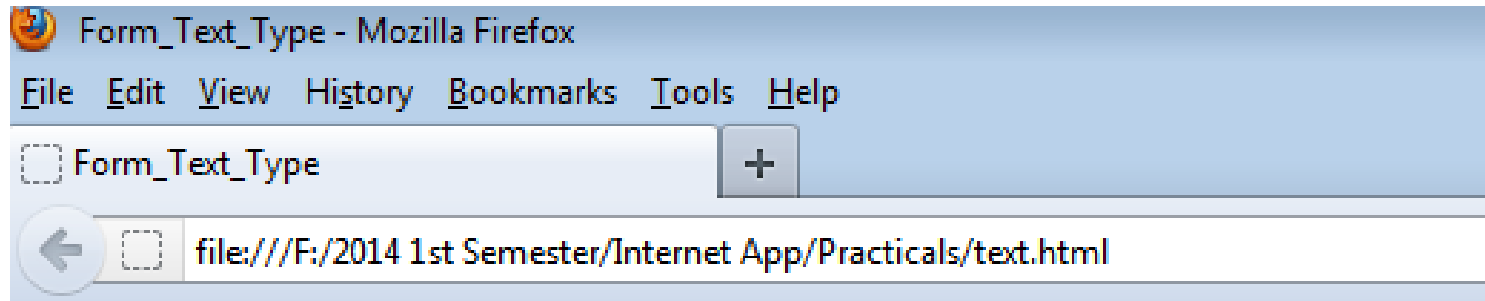
Textboxes use the following attributes:

- **TYPE:** text.
- **SIZE:** determines the size of the textbox in characters.
Default=20 characters.
- **MAXLENGTH** : determines the maximum number of characters that the field will accept.
- **NAME:** is the name of the variable to be sent to the CGI application.
- **VALUE:** will display its contents as the default value.

Example on Text Box

```
<TITLE>Form_Text_Type</TITLE>
</HEAD> <BODY>
<h1> <font color=blue> Please enter the following
  BioData</font></h1>
<FORM name="form1" Method= " get " Action= " URL " >
First Name: <INPUT TYPE='TEXT' NAME="FName"
SIZE="15" MAXLENGTH="25"><BR>
Last Name: <INPUT TYPE='TEXT' NAME="LName"
SIZE="15" MAXLENGTH="25"><BR>
Nationality: <INPUT TYPE='TEXT' NAME="Country"
SIZE="25" MAXLENGTH="25"><BR>
The Phone Number: <INPUT TYPE='TEXT' NAME="Phone"
SIZE="15" MAXLENGTH="12"><BR>
</FORM> </BODY> </HTML>
```

Output



Please enter the following BioData

First Name:

Last Name:

Nationality:

The Phone Number:

Password

Password: Used to allow entry of passwords.

<INPUT TYPE= " PASSWORD " >

Browser will display

A screenshot of a web browser's password input field. The field is a rectangular box with a light gray border. Inside the box, there are eight black asterisks (*****), representing masked text.

Text typed in a password box is starred out in the browser display.

Password boxes use the following attributes:

- **TYPE:** password.
- **SIZE:** determines the size of the textbox in characters.
- **MAXLENGTH:** determines the maximum size of the password in characters.
- **NAME:** is the name of the variable to be sent to the CGI application.
- **VALUE:** is usually blank.

Example on Password Box

```
<HTML><HEAD>
```

```
<TITLE>Form_Password_Type</TITLE></HEAD>
```

```
<BODY>
```

```
<h1> <font color=red>To Access, Please  
enter:</font></h1>
```

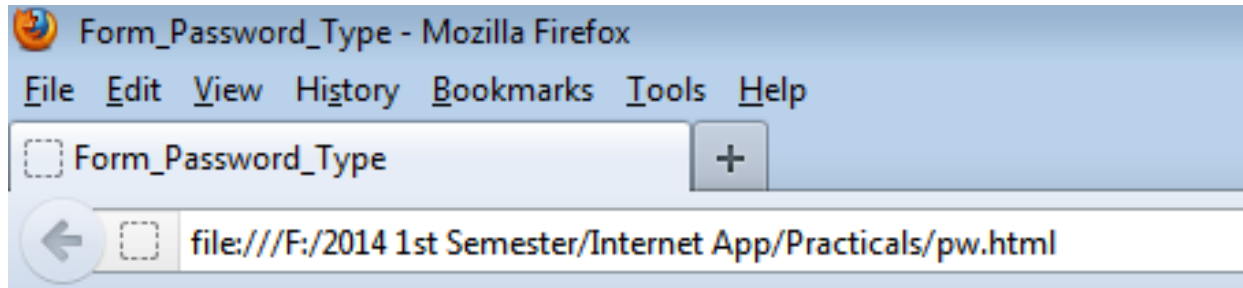
```
<FORM name="form2" Action="url" method="get">
```

```
User Name: <INPUT TYPE="TEXT" Name="FName"  
SIZE="15" MAXLENGTH="25"><BR>
```

```
Password: <INPUT TYPE="PASSWORD"  
NAME="PWord" value="" SIZE="15"  
MAXLENGTH="25"><BR>
```

```
</FORM></BODY> </HTML>
```

Output



To Access, Please enter:

User Name:
Password:

Hidden

Hidden: Used to send data to the CGI application that you don't want the web surfer to see, change or have to enter but is necessary for the application to process the form correctly.

<INPUT TYPE="HIDDEN">

Nothing is displayed in the browser.

Hidden inputs have the following attributes:

- **TYPE:** hidden.
- **NAME:** is the name of the variable to be sent to the CGI application.
- **VALUE:** is usually set a value expected by the CGI application.

Check Box

Check Box: Check boxes allow the users to select more than one option.

<INPUT TYPE="CHECKBOX">

Browser will display



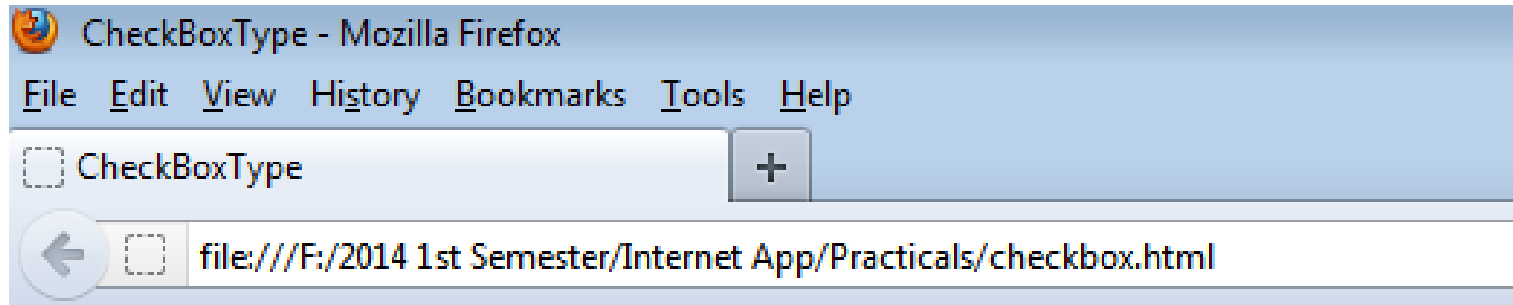
Checkboxes have the following attributes:

- **TYPE:** checkbox.
- **CHECKED:** is blank or **CHECKED** as the initial status.
- **NAME:** is the name of the variable to be sent to the CGI application.
- **VALUE:** is usually set to a value.

Example on Check Box

```
<HTML> <HEAD><TITLE>CheckBoxType</TITLE> </HEAD>
<BODY>
<h1> <font color=green>Please check one of the
following</font></h1>
<FORM name="form3" Action="url" method="get">
<font color=red> Select Country: </font><BR>
Sri Lanka:<INPUT TYPE="CheckBox" Name="country" CHECKED><BR>
England<INPUT TYPE="CheckBox" Name="country"><BR>
France<INPUT TYPE="CheckBox" Name="country"><BR> <BR>
<font color=blue>Select Language:</font><BR>
Sinhala<INPUT TYPE="CheckBox" Name="language" CHECKED><BR>
English<INPUT TYPE="CheckBox" Name="language"><BR>
French<INPUT TYPE="CheckBox" Name="language"> <BR></FORM>
</BODY></HTML>
```


Output



Please check one of the following

Select Country:

Sri Lanka: ☒

England: ☐

France: ☐

Select Language:

Sinhala: ☒

English: ☐

French: ☐

Radio Button

Radio Button: Radio buttons allow the users to select only one option.

<INPUT TYPE="RADIO">

Browser will display



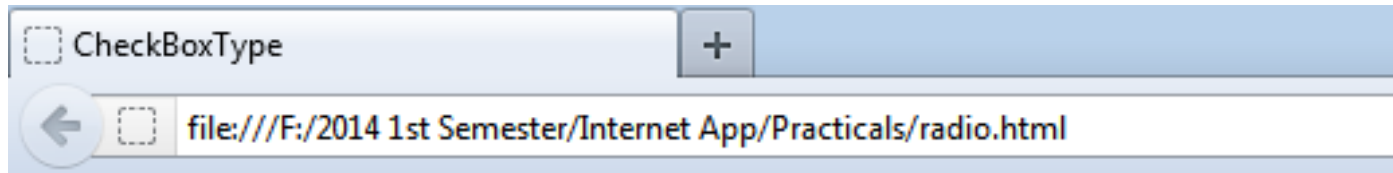
Radio buttons have the following attributes:

- **TYPE:** radio.
- **CHECKED:** is blank or **CHECKED** as the initial status. Only one radio button can be checked
- **NAME:** is the name of the variable to be sent to the CGI application.
- **VALUE:** usually has a set value.

Example on Radio Button

```
<HTML> <HEAD><TITLE>CheckBoxType</TITLE> </HEAD>
<BODY>
<h1> <font color=green>Please check one of the
following</font></h1>
<FORM name="form3" Action="url" method="get">
<font color=red> Select Country: </font><BR>
jordan:<INPUT TYPE="RADIO" Name="country" CHECKED><BR>
Yemen<INPUT TYPE="RADIO " Name="country"><BR>
Qatar:<INPUT TYPE="RADIO" Name="country"><BR> <BR>
<font color=blue>Select Language:</font><BR>
Arabic:<INPUT TYPE="RADIO" Name="language" CHECKED><BR>
English:<INPUT TYPE=" RADIO " Name="language"><BR>
French:<INPUT TYPE=" RADIO " Name="language"> <BR></FORM>
</BODY></HTML>
```

Output



A screenshot of a web browser window. The address bar shows the file path: file:///F:/2014 1st Semester/Internet App/Practicals/radio.html. Below the address bar, there is a checkbox labeled "CheckBoxType" and a "+" button.

Please check one of the following

Select Country:

Sri Lanka: ☒

England: ☐

France: ☐

Select Language:

Sinhala: ☒

English: ☐

French: ☐

```
<HTML><HEAD>
<TITLE>RADIOBox</TITLE> </HEAD>
<BODY>
```

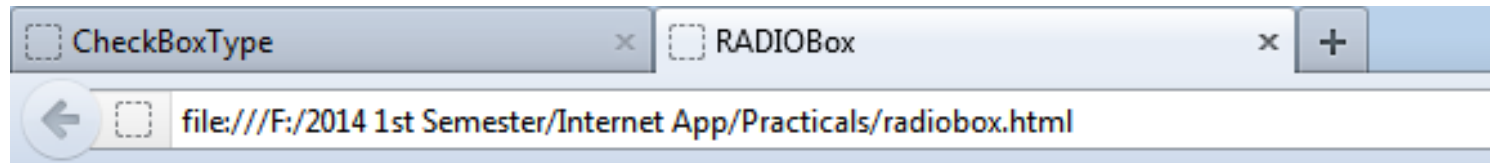
Form #1:

```
<FORM>
  <INPUT TYPE="radio" NAME="choice" VALUE="one"> Yes.
  <INPUT TYPE="radio" NAME="choice" VALUE="two"> No.
</FORM>
<HR color=red size="10" >
```

Form #2:

```
<FORM>
  <INPUT TYPE="radio" NAME="choice" VALUE="three" CHECKED>
Yes.
  <INPUT TYPE="radio" NAME="choice" VALUE="four"> No.
</FORM>
</BODY></HTML>
```

Output



Form #1:

☐ Yes. ☐ No.



Form #2:

☒ Yes. ☐ No.

Push Button

Push Button: This element would be used with JavaScript to cause an action to take place.

<INPUT TYPE="BUTTON">

Browser will display



Push Button has the following attributes:

- **TYPE:** button.
- **NAME:** is the name of the button to be used in scripting.
- **VALUE:** determines the text label on the button.

Example on Push Button

<DIV align=center>

<FORM>

<h1>Press Here to see a baby crying:

<INPUT TYPE="button" VALUE="Press Me">

Click Here to see a baby shouting:

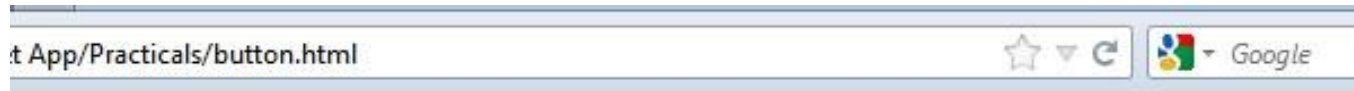
<INPUT TYPE="button" VALUE="Click Me" >

Hit Here to see a baby eating:

<INPUT TYPE="button" VALUE="Hit ME" >

</FORM></DIV>

Output



Press Here to see a baby crying:

Press Me

Click Here to see a baby shouting:

Click Me

Hit Here to see a baby eating:

Hit ME

Submit Button

Submit: Every set of Form tags requires a Submitbutton. This is the element causes the browser to send the names and values of the other elements to the CGIApplication specified by the ACTION attribute of the FORM element.

<INPUT TYPE="SUBMIT">

The browser will display



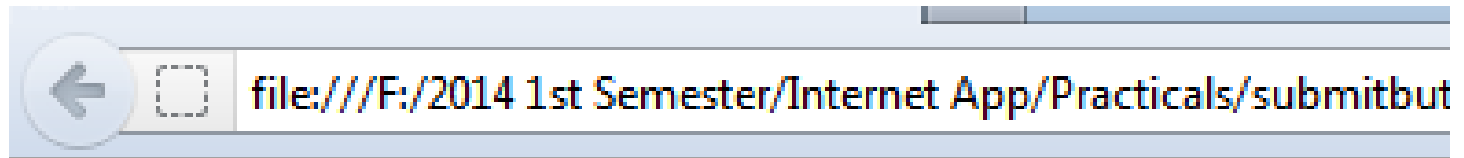
Submit has the following attributes:

- **TYPE:** submit.
- **NAME:** value used by the CGI script for processing.
- **VALUE:** determines the text label on the button, usually Submit Query.

Example on Submit Button

```
<FORM Action="URL" method="get">  
First Name: <INPUT TYPE='TEXT' Size=25  
name="firstName"><BR>  
Family Name: <INPUT TYPE='TEXT' Size=25  
name="LastName"><BR>  
<BR>  
<FONT Color=red>  
Press Here to submit the data:<BR>  
<INPUT TYPE="submit" VALUE="Submit Data " >  
</FORM>
```

Output



A screenshot of a web browser's address bar. It features a back button (left arrow) and a refresh button (circular arrow). The address text is "file:///F:/2014 1st Semester/Internet App/Practicals/submitbut".

First Name:

Family Name:

Press Here to submit the data:

Reset Button

Reset: It is a good idea to include one of these for each form where users are entering data. It allows the surfer to clear all the input in the form.

- **<INPUT TYPE="RESET">**

- Browser will display 

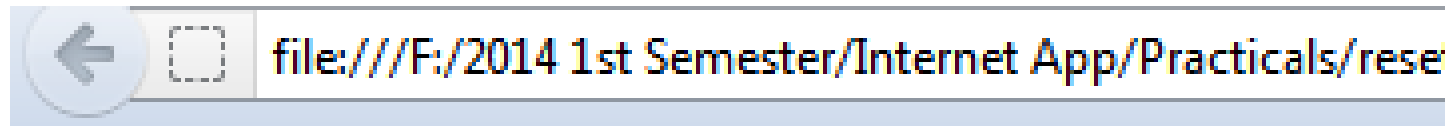
Reset buttons have the following attributes:

- **TYPE:** reset.
- **VALUE:** determines the text label on the button, usually Reset.

Example on Reset Button

```
<FORM Action="URL" method="get">  
First Name: <INPUT TYPE='TEXT' Size=25  
name="firstName"> <BR>  
Family Name: <INPUT TYPE='TEXT' Size=25  
name="LastName"><BR>  
<BR>  
<FONT Color = red>  
<STRONG><font size=5>Press Here to submit the  
data:</font></STRONG><BR>  
<INPUT TYPE="submit" VALUE="SubmitData">  
<INPUT TYPE="RESET" VALUE="Reset">  
</FORM>
```

Output



A web browser address bar with a back button (left arrow) and a refresh button (circular arrow). The address text is "file:///F:/2014 1st Semester/Internet App/Practicals/rese".

First Name:

Family Name:

Press Here to submit the data:

Image Submit Button

Image Submit Button: Allows you to substitute an image for the standard submit button.

```
<INPUT TYPE="IMAGE" SRC="image1.gif">
```

Image submit button has the following attributes:

- **TYPE:** Image.
- **NAME:** is the name of the button to be used in scripting.
- **SRC:** URL of the Image file.

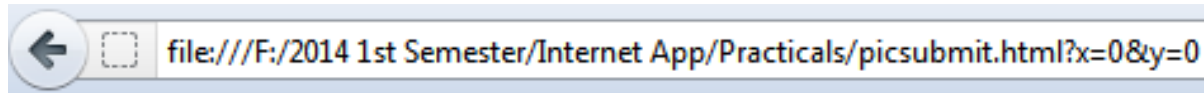
<form>

<H1>

Click to go Sri Lanka's Map:

<INPUT TYPE="IMAGE" SRC="srilanka.jpg">

</form>



Click to go Sri Lanka's Map:



File

File Upload: You can use a file upload to allow surfers to upload files to your web server.

<INPUT TYPE="FILE">

Browser will display

A diagram showing a browser file upload control. It consists of a horizontal line representing a text input field, followed by a button labeled "Browse...".

File Upload has the following attributes:

- **TYPE:** file.
- **SIZE:** is the size of the text box in characters.
- **NAME:** is the name of the variable to be sent to the CGI application.
- **MAXLENGTH:** is the maximum size of the input in the textbox in characters.

Example on File

<BODY bgcolor=lightblue>

<form>

<H3>

Please attach your file here to for uploading to
My **SERVER...
**

<INPUT TYPE="File" name="myFile" size="30">

<INPUT TYPE="Submit" value="Submit File">

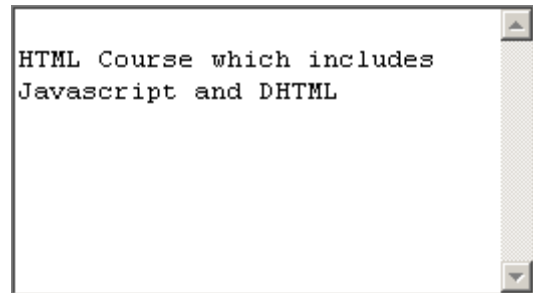
</form>

</BODY>

Other Elements used in Forms

<TEXTAREA></TEXTAREA>: is an element that allows for free form text entry.

Browser will display

A screenshot of a web browser window showing a text area. The text area contains the text "HTML Course which includes Javascript and DHTML". The text area has a vertical scrollbar on the right side. The browser window has a title bar at the top and a status bar at the bottom.

Textarea has the following attributes:

- **NAME**: is the name of the variable to be sent to the CGI application.
- **ROWS**: the number of rows to the textbox.
- **COLS**: the number of columns to the textbox.

Example on <TEXTAREA>

```
<BODY bgcolor=lightblue>
```

```
<form>
```

```
<TEXTAREA COLS=40 ROWS=20 Name="comments" >
```

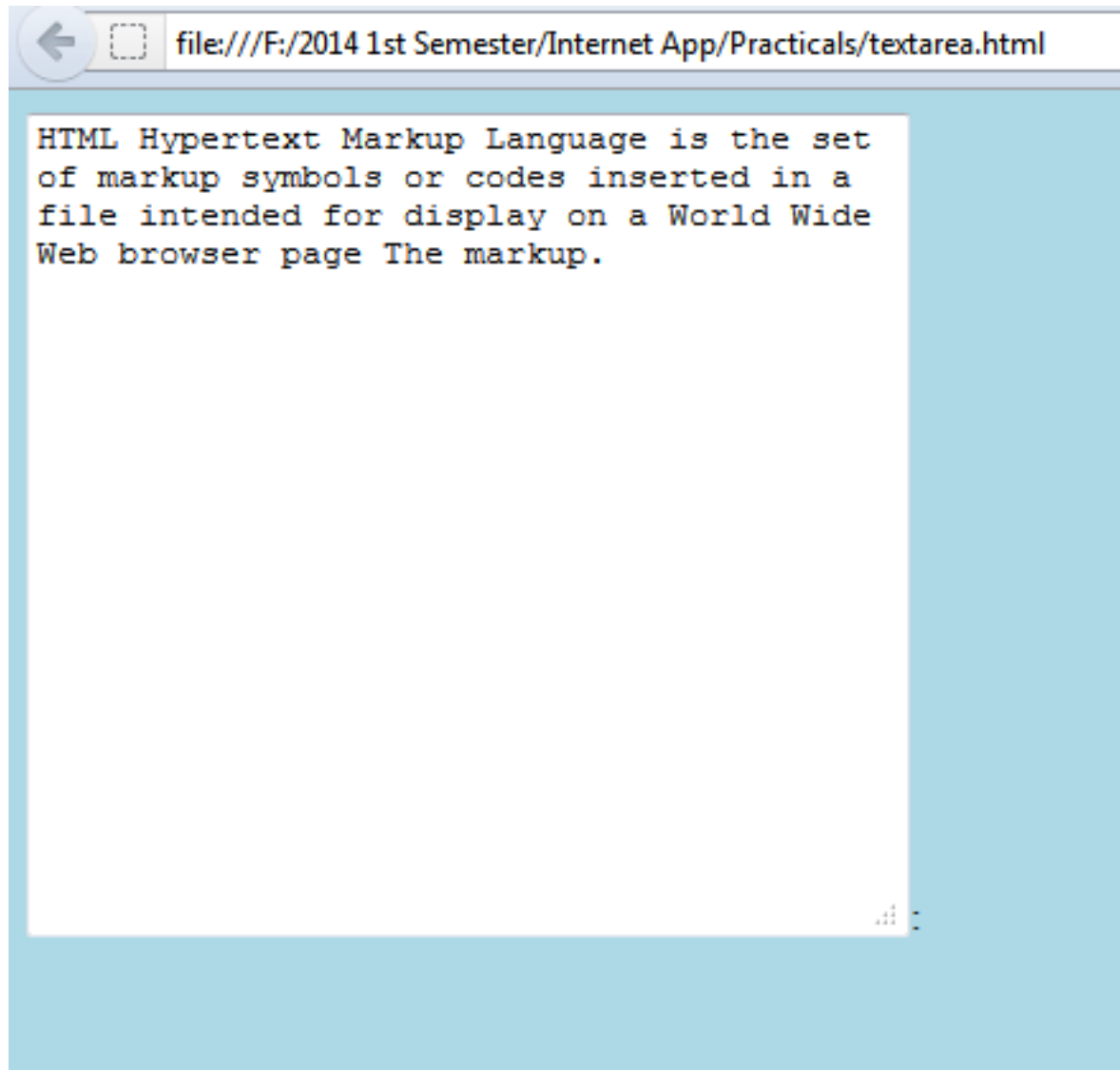
HTML Hypertext Markup Language is the set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page. The markup.

```
</TEXTAREA>:
```

```
</form>
```

```
</BODY>
```

Output



Other Elements used in Forms

- The two following examples are **<SELECT></SELECT>** elements, where the attributes are set differently.

The Select elements attributes are:

- **NAME**: is the name of the variable to be sent to the CGI application.
- **SIZE**: this sets the number of **visible** choices.
- **MULTIPLE**: the presence of this attribute signifies that the user can make multiple selections. By default only one selection is allowed.

Example on <SELECT>

<BODY bgcolor=lightblue>

<form>

Select the cities you have visited:

<SELECT name="list" size=5>

<option> London</option>

<option> Tokyo</option>

<option> Paris</option>

<option> New York</option>

<option> LA</option>

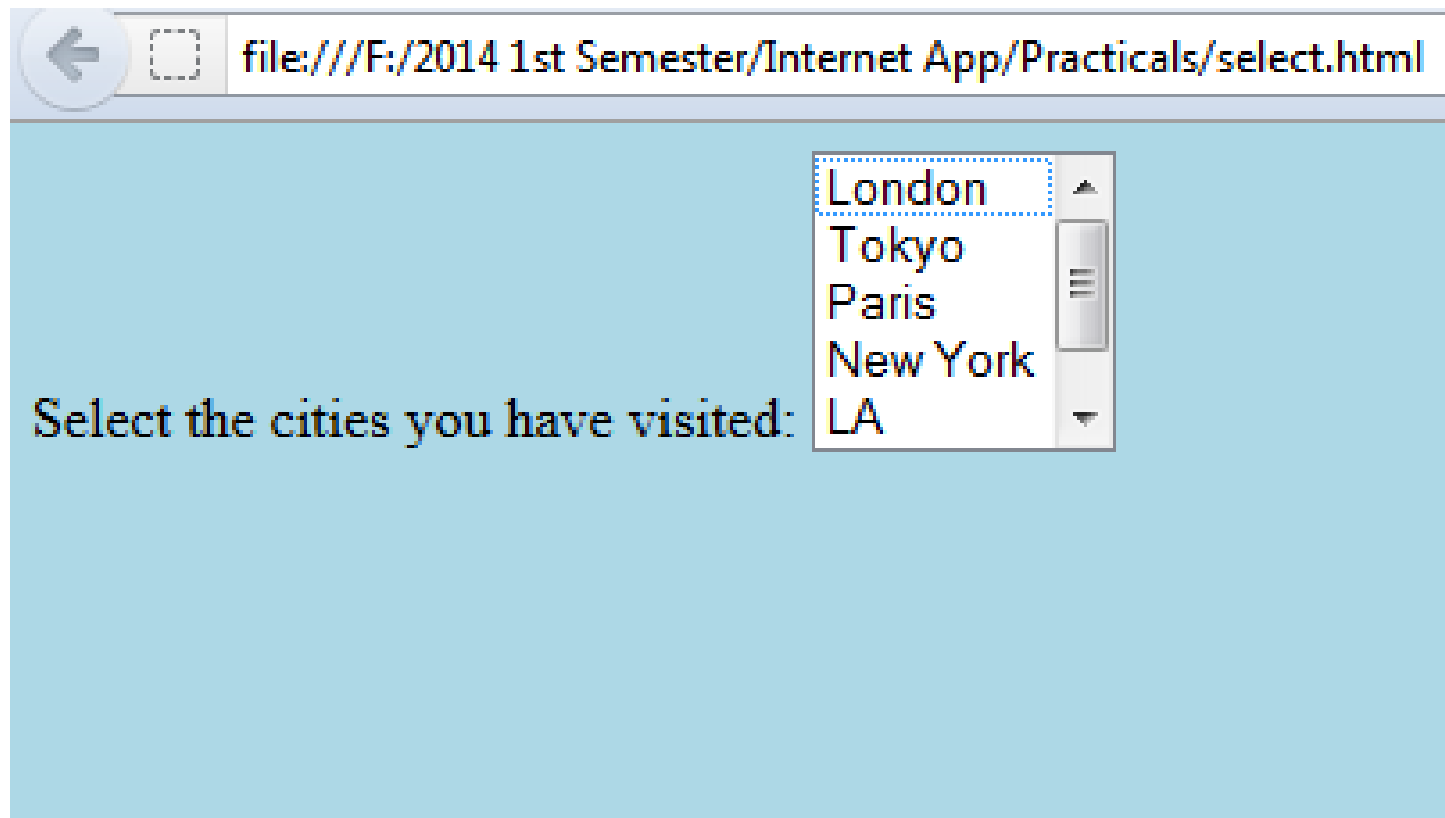
<option> KL</option>

</SELECT>

</form>

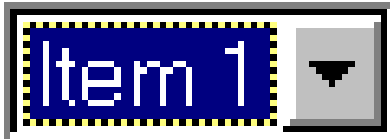
</BODY>

Output



Other Elements used in Forms

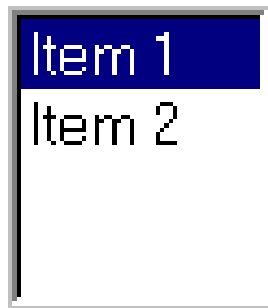
Drop Down List:



- **Name:** is the name of the variable to be sent to the CGI application.
- **Size: 1**

Other Elements used in Forms

List Box:



- **Name:** is the name of the variable to be sent to the CGI application.
- **SIZE:** is greater than one.

Other Elements used in Forms

Option

The list items are added to the **<SELECT>** element by inserting **<OPTION></OPTION>** elements.

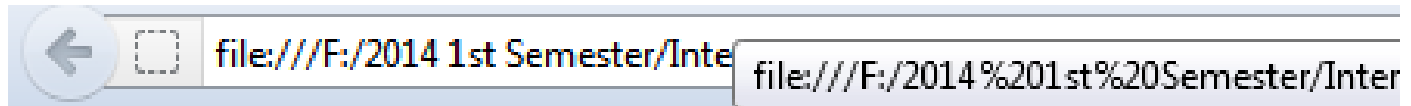
The Option Element's attributes are:

- **SELECTED**: When this attribute is present, the option is selected when the document is initially loaded. **It is an error for more than one option to be selected.**
- **VALUE**: Specifies the value the variable named in the select element.

Example

```
<HTML>
<HEAD></HEAD>
<BODY>
<h2><font color=blue>What type of Computer do you
  have?</font><h2>
<FORM>
<SELECT NAME="ComputerType" size=4>
  <OPTION value="IBM" SELECTED> IBM</OPTION>
  <OPTION value="INTEL"> INTEL</OPTION>
  <OPTION value=" Apple"> Apple</OPTION>
  <OPTION value="Compaq"> Compaq</OPTION>
</SELECT>
</FORM></BODY></HTML>
```

Output



What type of Computer do you have?

IBM	▲
INTEL	
Apple	
Compaq	▼

There are eleven different types of form elements:

Button

Checkbox

☐

FileUpload

Hidden

Password

Radio

☐

Reset object

Select object

Submit object

Text

Textarea