

HTML Tutorial-4

by

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Image Maps

Image maps are images, usually in **gif** format that have been divided into regions; clicking in a region of the image cause the web surfer to be connected to a new URL. Image maps are graphical form of creating links between pages.

There are two type of image maps:

Client side and server side

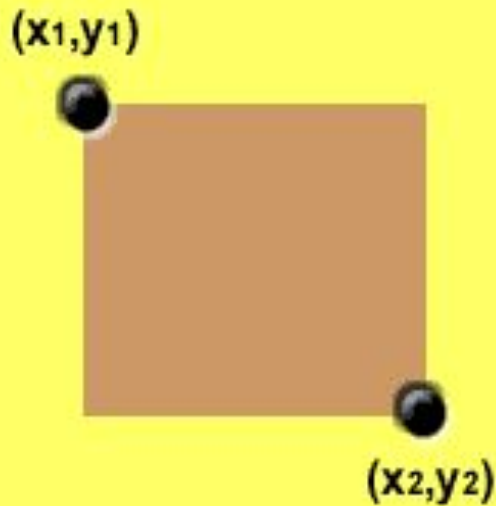
Both types of image maps involve a listing of co-ordinates

that define the mapping regions and which URLs those coordinates are associated with. This is known as the map

file.

Area Shapes Used

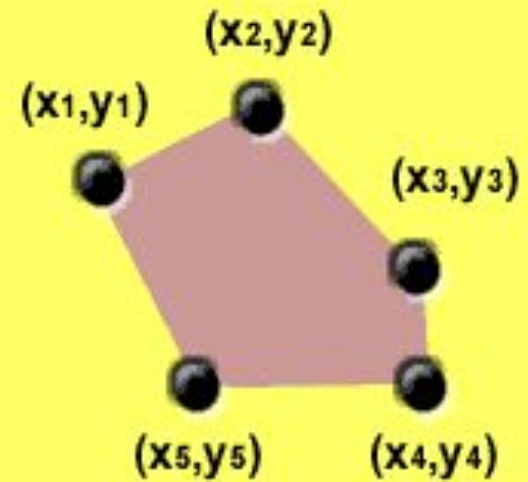
Finding the coordinates....



Rectangle



Circle



Polygon

Client Side Image Maps

Client-side image maps (USEMAP) use a map file that is part of the HTML document (in an element called MAP), and is linked to the image by the Web browser.

```

```

```
<map name="workmap">  
<area shape="rect" coords="34,44,270,350" alt="Co  
mputer" href="computer.htm">  
<area shape="rect" coords="290,172,333,250" alt="Ph  
one" href="phone.htm">  
<area shape="circle" coords="337,300,44" alt="Coffe  
e" href="coffee.htm">  
</map>
```

We can use Poly as well as Rect.....

OutPut



This image is having the name “workplace.jpg”. Within the image, there are two rectangular components and one circular component.

- If you click on the computer, an html file called “computer.htm” will open.**
- If you click on the phone, an html file called “phone.htm” will open.**
- If you click on the coffee, an html file called “coffee.htm” will open.**

Shapes, Coords

- **Types of Shapes**

- Rect `[x1, y1, x2, y2]` used for squares and ordered shapes.
- Circle `[cx, cy, R]` used for circles.
- Poly `[x1, y1, x2, y2, ...]` used for unordered shapes.

- **Number of coordinates for each shape:**

- Rect `[x1, y1, x2, y2]` 4 numbers for two corners
- Circle `[cx, cy, R]` 3 numbers for the center & R
- Poly `[x1, y1, x2, y2, ...]` depends on the number of corners of the shape(2 numbers for each corner)

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.

Objectives:

Upon completing this section, you should be able to

1. Create a FORM.
2. Add elements to a FORM.
3. Define CGI (Common Gateway Interface).
4. Describe the purpose of a CGI Application.
5. Specify an action for the FORM.
 - Forms work in all browsers.
 - Forms are Platform Independent.

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.xnu.com/formtest.asp>
```

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

```
<P> <INPUT TYPE="SUBMIT" NAME="fsubmit1" 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>**.

Name:

Sami Ali

Student No.

123456789

Address:

Al al-Bayt University
CIS Department
Faculty of IT

City:

Amman
Amman
Irbid
Karak

is foreign?



Male:



Female:



Submit

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 text field

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



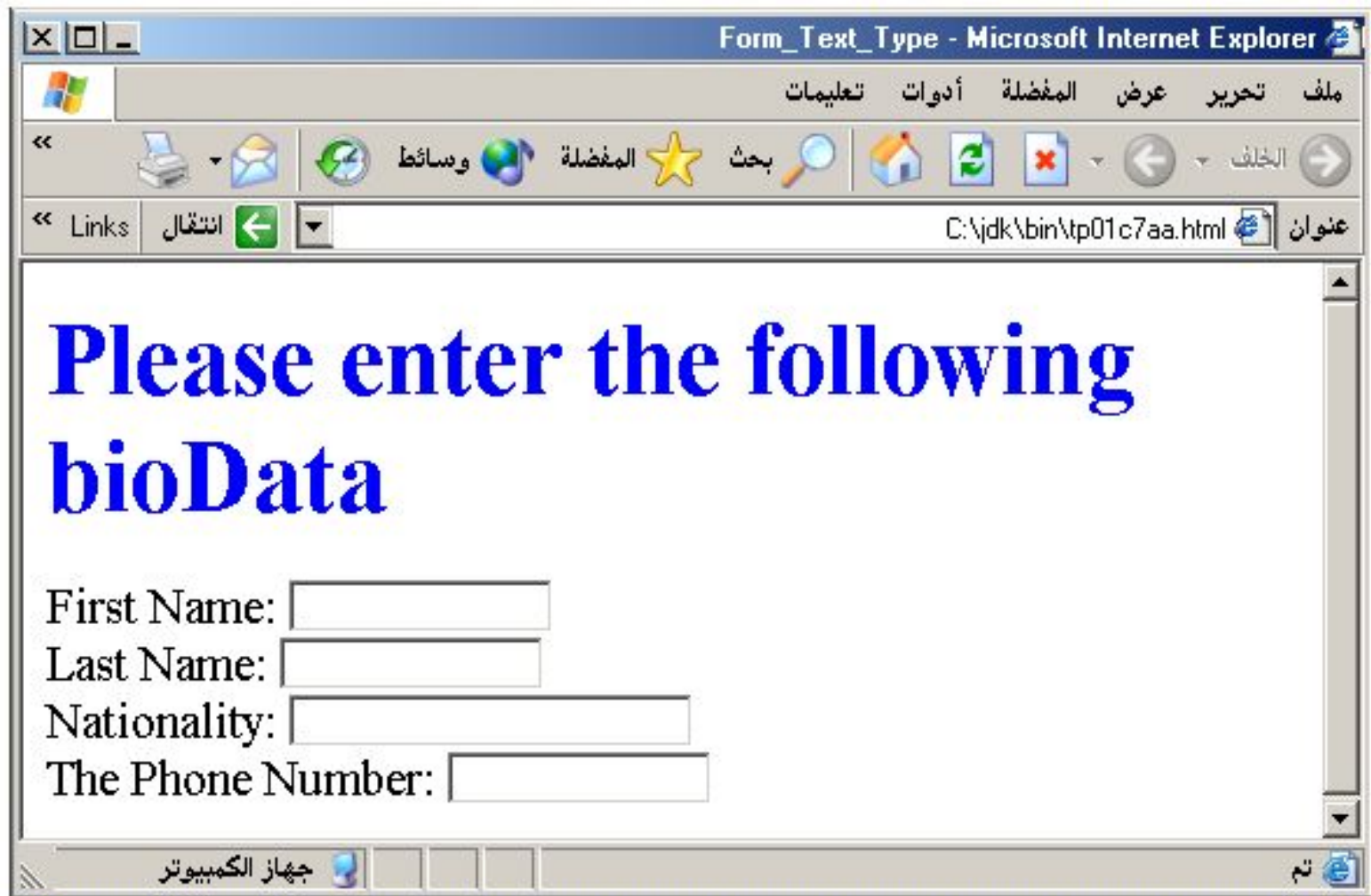
Textboxes use the following attributes:

- **TYPE:** text.
- **SIZE:** determines the size of the textbox in characters.
Default=20 characters.
- **MAXLENGHT** : 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="fome1" 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



Password

- **Password:** Used to allow entry of passwords.

<INPUT TYPE= " PASSWORD " >

Browser will display



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.

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.

- **<HTML> <HEAD><TITLE>CheckBoxType</TITLE> </HEAD>**
- **<BODY>**
- **<h1> Please check one of the following</h1>**
- **<FORM name="fome3" Action="url" method="get">**
- ** Select Country:
**
- **jordan:<INPUT TYPE="CheckBox" Name="country" CHECKED>
**
- **Yemen<INPUT TYPE="CheckBox" Name="country">
**
- **Qatar:<INPUT TYPE="CheckBox" Name="country">

**
- **Select Language:
**
- **Arabic:<INPUT TYPE="CheckBox" Name="language" CHECKED>
 English:<INPUT TYPE="CheckBox" Name="language">
**
- **French:<INPUT TYPE="CheckBox" Name="language">
</FORM> </BODY></HTML>**

Output

Please check one of the following

Select Country:

jordan: ☒

Yemen ☐

Qatar: ☐

Select Language:

Arabic: ☒

English: ☐

French: ☐

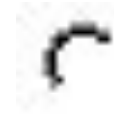
جهاز الكمبيوتر

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.

```

<HTML> <HEAD><TITLE>CheckBoxType</TITLE> </HEAD>
<BODY>
<h1> <font color=green>Please check one of the
following</font></h1>
<FORM name="fome3" 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>

```

Please check one of the following

Select Country:

Jordan: ☒

Yemen ☐

Qatar: ☐

Select Language:

Arabic: ☒

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.

<DIV align=center>

<FORM>

<h1>Press Here to see a baby crying:

<INPUT TYPE="button" VALUE="PressMe">

Click Here to see a baby shouting:

<INPUT TYPE="button" VALUE="ClickMe" >

Hit Here to see a baby eating:

<INPUT TYPE="button" VALUE="HitME" >

</FORM></DIV>

Press Here to see a baby crying:

PressMe

Click Here to see a baby shouting:

ClickMe

Hit Here to see a baby eating:

HitME

Submit Button

- **Submit:** Every set of Form tags requires a Submit button. This is the element causes the browser to send the names and values of the other elements to the CGI Application 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.

<FORM Action="URL" method="get">

**First Name: <INPUT TYPE="TEXT" Size=25
name="firstName">
**

**Family Name: <INPUT TYPE="TEXT" Size=25
name="LastName">
**

**
**

**Press Here to submit the data:
**

**<INPUT TYPE="submit" VALUE="SubmitData
" >**

</FORM>


First Name:

Family Name:

Press Here to submit the data:

SubmitData

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.

```
<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>
```

First Name:

Family Name:

Press Here to submit the data:

SubmitData

Reset

Image Submit Button

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

<INPUT TYPE="IMAGE" SRC="jordan.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><font color=blue>
```

Click to go Jordan's Map:

```
<INPUT TYPE="IMAGE"
```

```
SRC="jordan.gif">
```

```
</form>
```

Click to go Jordan'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



- 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.

<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="SubmitFile">

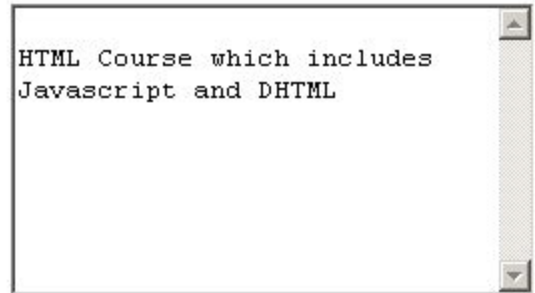
</form>

</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.

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.


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

```
<form>
```

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

From observing the apathy of those
about me during flag raising I
concluded that patriotism if not
actually on the decline is at least
in a state of dormancy.

Written by Khaled Al-Fagih

```
</TEXTAREA>:
```

```
</form>
```

```
</BODY>
```

From observing the apathy of those
about me during flag raising I
concluded that patriotism if not
actually on the decline is at least
in a state of dormancy.

Written by Khaled Al-Fagih

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.

```
<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>
```

Select the cities you have visited:



A multi-select list box with a light blue background. It contains five items: London, Tokyo, Paris, New York, and LA. The list box has a vertical scrollbar on the right side. The first item, London, is selected and highlighted in white. The other items are in a light blue color. The list box has a small upward arrow on the top right and a small downward arrow on the bottom right.

London
Tokyo
Paris
New York
LA

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.

</HEAD>

<BODY>

<h2>What type of Computer do you have?<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>

What type of Computer do you have?

IBM
INTEL
Apple
Compaq

<HEAD> <TITLE>SELECT with Mutiple </TITLE> </HEAD>

<BODY>

<h2>What type of Computer do you have?<h2>

<FORM>

<SELECT NAME="ComputerType" size=5 multiple>

<OPTION value="IBM" > IBM</OPTION>

<OPTION value="INTEL"> INTEL</OPTION>

<OPTION value=" Apple"> Apple</OPTION>

<OPTION value="Compaq" SELECTED> Compaq</OPTION>

<OPTION value=" other"> Other</OPTION>

</SELECT>

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

What type of Computer do you have?

IBM
INTEL
Apple
Compaq
Other

There are eleven different types of form elements:

Button

Checkbox

☐

FileUpload

Hidden

Password

Radio

☐

Reset object

Select object

Submit object

Text

Textarea

Thank You