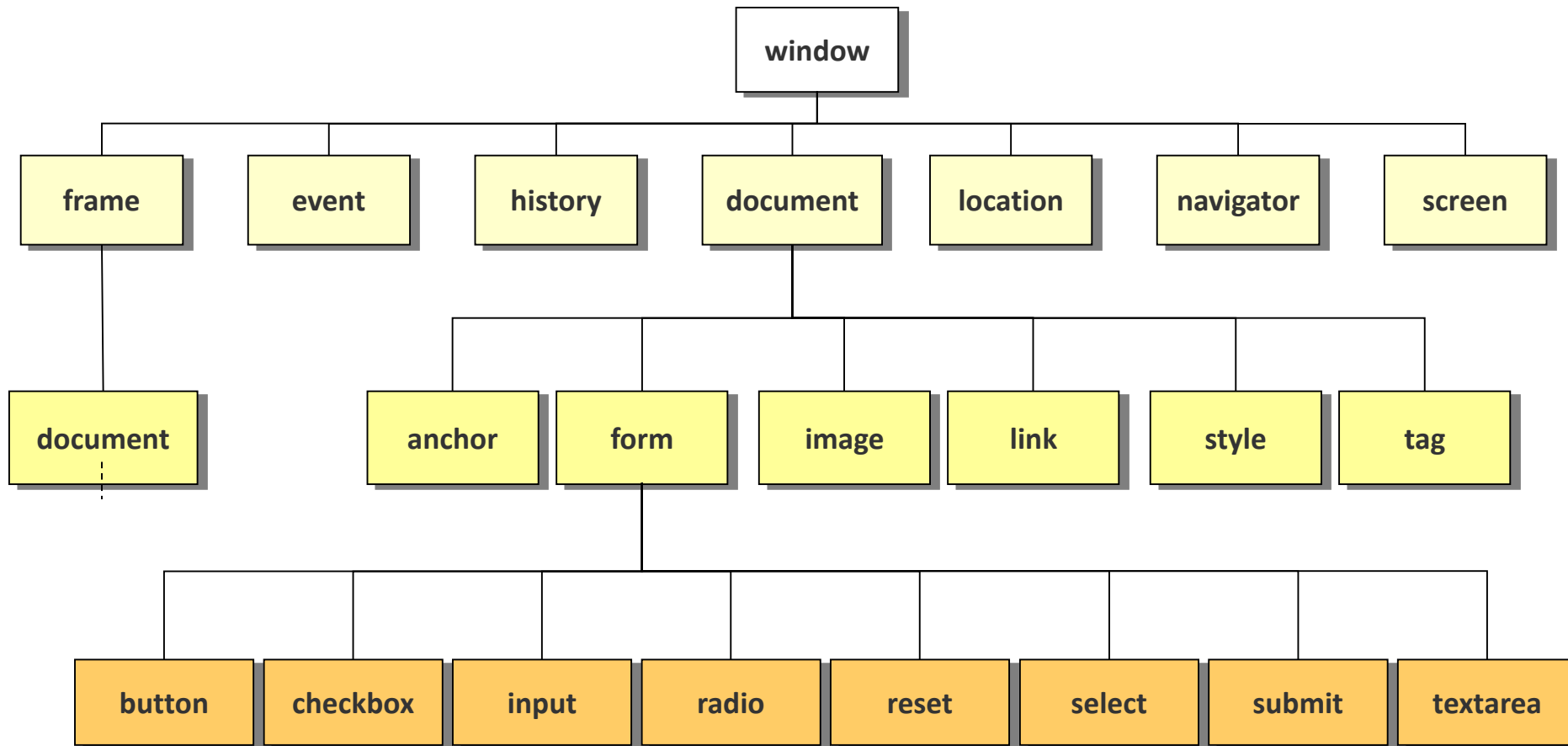


Eman Fathi
Information Technology Institute

Information Technology Institute

[illegible]

DOM TREE



DOCUMENT



- The *document* object represents the entire HTML document and can be used to access all elements in a page.
- A *page* is what appears within the browser window.
- So, every *window* is associated with a *document* object.
- Document Object has its own set of Properties, Collections, Methods & Event handlers.

Find something

Do something

DOCUMENT

CONT.



Properties		
Name	Description	Syntax
bgColor	A string that specifies the background color.	<code>document.bgColor="red";</code>
fgColor	A string that specifies the text color.	<code>document.fgColor="blue";</code>
linkColor	The color of text for a link that the user has not yet visited (read/write).	<code>document.linkColor="blue";</code>
vlinkColor	The color of text for a link that the user has already visited (read/write).	<code>document.vlinkColor="blue";</code>
alinkColor	The color of text for active Link.	<code>document.alinkColor="blue"</code>

DOCUMENT

CONT.

Methods		
Name	Description	Syntax
Write	Writes one or more HTML expressions to a document in the specified window.	<code>document.write("hello");</code>
writeln	Writes one or more HTML expressions to a document in the specified window and follows them with a new line character.	<code>document.writeln("hello");</code>

DOCUMENT

CONT.



Methods(for accessing document objects)	
Name	Description
getElementById("id Attribute")	For accessing any element on the page via its ID attribute
getElementsByName("Name Attribute")	Returns a collection of objects with the specified name
getElementsByTagName("Tag Name")	Returns a collection of objects with the specified tagname
<i>querySelector("css selector") & querySelectorAll("css selector")</i>	

DOCUMENT

CONT.



Collections		
Name	Description	Syntax
forms	An array containing an entry for each form in the document	document.formname document.forms[index] document.forms["formNAME"] document.forms["formID"]
images	An array containing an entry for each image in the document	document.imgName document.images[index] document.images["imgName"] document.images["imgId"]
anchors	An array containing an entry for each anchor in the document.	document.anchors[index] document.anchors["ancName"]

DOCUMENT

CONT.



Event Handler	
Name	Description
onClick	Processes when user click on the document body
onDbIClick	Processes when user double click on the document body
onKeyPress	Processes when user click any key on the keyboard
onKeyUp	Processes when user release the key on the keyboard after pressing on it
onMouseDown	Processes when user click on mouse button
onMouseUp	Processes when user release the mouse button

IMAGE



- The Image object is an image on an HTML form, created by using the HTML 'IMG' tag.
- Any images created in a document are then stored in an array in the **document.images** property.
- Image Object has its own set of Properties, Collections, Methods & Event handlers.

IMAGE

CONT.



- Object Model Reference:

```
[window.]document.imageName  
[window.]document.imageID  
[window.]document.images[i]
```

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

IMAGE

CONT.



Properties				
Name	Id	src	height	width

Event Handler	
Name	Description
onabort	Code is executed when user aborts the downloading of the image.
onload	Code is executed when loading of the image
onerror	Code is executed when an error occurs with the loading of the image



20 min
Break.

FORM



- By using the form you have at your disposal information about the elements in a form and their values.
- A separate instance of the form object is created for each form in a document.
- Objects within a form can be referred to by a numeric index or be referred to by name.
- [Object Model Reference:](#)

```
[window.]document.formname  
[window.]document.forms[i]  
[window.]document.forms["formNAME"]  
[window.]document.forms["formID"]
```


FORM

CONT.

Text:

Password:

Select:

Select 2:
(with onchange event)

Radio: ☒ Yes
☐ No
☐ Maybe So

Radio 2: ☐ Yes ☐ No ☐ Maybe So

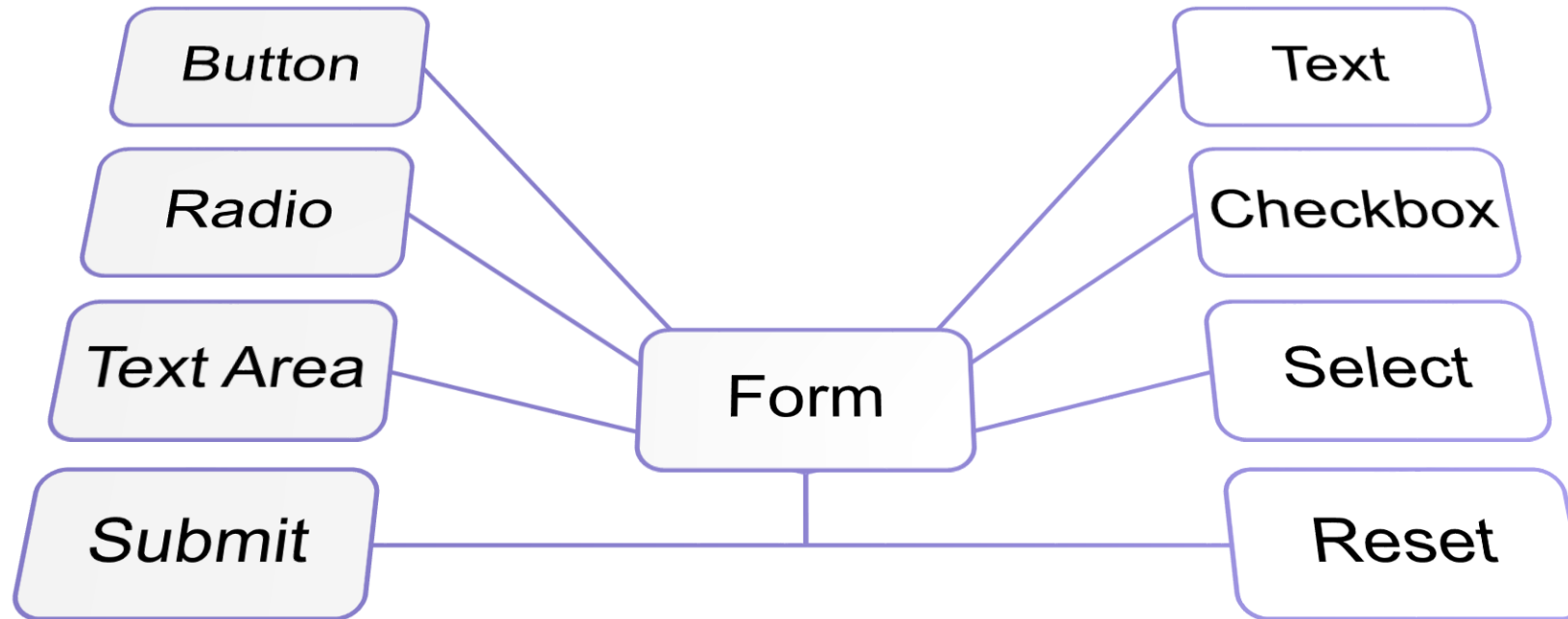
Checkbox: ☐

Checkbox 2: ☒

Buttons:

FORM

CONT.



FORM

CONT.



Properties		
Name	Description	Syntax
elements[]	An array containing all of the elements of the form. Use it to loop through form easily.	form.elements[index];
length	The number of elements in the form.	form.length;
name	The name of the form.	form.name;
id	The id of the form.	form.id;
target	The name of the target frame is to be submitted to.	form.target;

FORM

CONT.



Methods

Name	Description
reset()	Resets the form. Clicking the reset button clears all contents that the user has made..
submit()	Submits a form. Clicking the submit button submits the content of the form to the server

Event Handlers

Name	Description
onReset	Code is executed when the form is reset (by clicking on "reset" button)
onSubmit	Code is executed when form is submitted

A. TEXT

```
<input type="text"  
      id="id"  
      value="string"  
      maxlength="n"  
      size="x"  
/>
```

A. TEXT

CONT.



Methods	
Name	Description
blur()	Removes focus from the field.
focus()	Assigns focus to the field; places the cursor in the control.
select()	Selects, or highlights, the content of the control.

A. TEXT

CONT.



Events		
Event	Event Handler	Description
focus	onfocus	The field gains focus when the user tabs into or clicks inside the control
blur	onblur	The field loses focus when the user tabs from or clicks outside the control
change	onchange	The field loses focus after the contents of the control have changed

B. DROP-DOWN LISTS

```
<select id="id" multiple size="n" >  
  <option value="str1" selected> label</option>  
  <option value="str2" selected> label</option>  
  ...  
</select>
```

B. DROP-DOWN LISTS

CONT.



Properties	
Name	Description
Length	The number of options in the list
selectedIndex	The index number, beginning with 0, of the selected option
options[]	An array of the options in the list. Used to reference properties associated with the options; e.g., options[1].value or options[2].text.
Selected	A true or false value indicating whether an option is chosen.
Value	The value associated with an option. In the absence of a coded value attribute, the text label associated with the option.
Text	The text label associated with an option.

B. DROP-DOWN LISTS

CONT.



Events	
Event Handler	Description
onfocus	The control gains focus.
onblur	The control loses focus.
onchange	A different option from the one currently displayed is chosen.

C. RADIO BUTTON

```
<input type="radio"  
      id="id"  
      name="name"  
      value="string"  
      checked  
/>
```

C. RADIO BUTTON

CONT.



Properties	
Name	Description
length	The number of radio buttons with the same name
checked	A true or false value indicating whether a button is checked
value	The value attribute coded for a button. A checked button with no assigned value is given a value of "on"

C. RADIO BUTTON

CONT.



Events	
Event Handler	Description
onfocus	The control gains focus.
onblur	The control loses focus.
onclick	The button is clicked.

D. CHECKBOX

```
<input type="checkbox"  
      id="id"  
      name="name"  
      value="string"  
      checked  
/>
```

E. BUTTON

```
<input type="button"  
      id="id"  
      value="string"  
/>
```

E. BUTTON

CONT.

Events	
Event Handler	Description
onclick	The mouse is clicked and released with the cursor positioned over the button.
ondblclick	The mouse is double-clicked with the cursor positioned over the button.
onmousedown	The mouse is pressed down with the cursor positioned over the button.
onmouseout	The mouse cursor is moved off the button.
onmouseover	The mouse cursor is moved on top of the button.
onmouseup	The mouse button is released with the cursor positioned over the button.