JavaScript Programming Basic Skills (2)

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Object

- Object = Property + Method

```
<script language="javascript">
  var e= new Array("a","b","c","e","f","d");
  alert(e.sort());
  alert(e.reverse());
  len=e.length;
</script>
```

- **Window Object** have 4 major sub-objects
  - Document
    - **Anchor, Area, Applet, Image, Link, Form**
  - Frame
  - History
  - Location
  - **[Ex]java4-1-object.htm**

Window Object (1)

- **Method**

Method	Examples
open(URL,name,features,replace)	**w=window.open("part1-1.htm", "win","width=200, height=100");**
window_name.close()	**w.close();**
prompt(display_text,default_value)	prompt("Input account","f1234");
alert(message)	alert("welcome!");
confirm(message)	confirm("are you sure?")

```
<script language="javascript">
  var name= window.prompt("Please input your
    name");
  window.alert("Hello "+name);
</script>
```

Window Object (2)

- **Method**

Method	Examples
moveTo(x,y)	moveTo(20,20)
moveBy(x,y)	moveBy(-20,-20)
resizeTo(w,h)	resizeTo(1024,768)
resizeBy(w,h)	resizeBy(-100,100)
scroll(x,y)	scroll(20,20)
scrollTo(x,y)	scrollTo(20,20)
scrollBy(x,y)	scrollBy(-20,-20)

Window Object (3)

- **Method**

Method	Examples
setTimeout(statement,time)	timer1= setTimeout("alert("wait 3 sec…",3000);
clearTimeout(timeobject)	clearTimeout(timer1);

setInterval(statement,time)	function movewindow(){
	        moveBy(-20,-20); }
	timer2= setInterval("movewindow()",5000);

clearInterval(timeobject)	clearInterval(timer2);

Features of Open Method (1)

- **Feature property**

Feature	Examples
left	open("part1-1.htm", "win","left=100");
top	open("part1-1.htm", "win","top=200");
height	open("part1-1.htm", "win","height=300");
width	open("part1-1.htm", "win","width=600");
menubar	open("part1-1.htm", "win","menubar=yes");
location	open("part1-1.htm", "win","location=yes");

Features of Open Method (2)

- **Feature property**

Feature	Examples
toolbar	open("part1-1.htm", "win","toolbar=yes");
titlebar	open("part1-1.htm", "win","titlebar=yes");
scrollbars	open("part1-1.htm", "win","scrollbars=yes");
directories	open("part1-1.htm", "win","directories=yes");
resizeable	open("part1-1.htm", "win","resizeable=yes");
status	open("part1-1.htm", "win","status=yes");

- **[Ex]`java4-2-open-window.htm`**

Location Object

- **Display HTML source code**
  - **[Ex]java4-3-window-location.htm**

Document Object (1)

- **Method**

Method	Examples
open(mine-type,replace)	w=window.open("part1-1.htm", "toolbar=yes"); w.document.open("text/html",replace");
close()	w.document.close();
write(string)	write("welcome!");
writeln(string)	writeln("welcome!");

Document Object (2)

- **Property**

Method	Examples
bgColor	document.bgColor="red";
fgColor	document.fgColor="yellow";
linkColor	document.linkColor="yellow";
alinkColor	document.alinkColor="blue";
vlinkColor	document.vlinkColor="green";

- **[Ex]java4-4-document-object.htm**

Document Object (3)

- **Property**

Property	Examples
URL	alert(document.URL);
title	alert(document.title);
cookie	alert(document.cookie);
domain	alert(document.domain);
lastModified	alert(document.lastModified);
anchors	alert(document.anchors);
forms	alert(document.forms);
images	alert(document.images);
applets	alert(document.applets);

Document Object (4)

- Method
  - getElementById
  - getElementsByName
  - getElementsByTagName
  - getElementsByClass
- Examples
  - **java4-5-innerText.htm**

Note

- <td id="XXX">YYYY</td>

obj.id="XXX"

obj.**innerHTML**="YYYY"

Form Object

- Examples
  - **[Ex]java4-6-form-radio.htm**
  - **[Ex]java4-7-online-test2.htm**

String Object

- Methods
  - link("URL")
  - fontcolor("color")
  - fontsize(size)
  - strike(), sub(), sup(), blink()
- Examples
  - **[Ex]** java4-8-string-object.htm

Image Object

- Method
  - Image()
- Property
  - src
- Examples

  ```
  var  img1= new Image();
  img1.src="../HTML/planets.gif";
  ```

  - **[Ex]java4-9-image-object.htm**

Date Object

Methods
getDate(), setDate()
getFullYear(), setFullYear()
getHours(), setHours()
getMonth(), setMonth()
getYear(), setYear()
getMinutes(), setMinutes()
getSeconds(), setSeconds()
getTime(), setTime()
getDay(), setDay()
toString()

```
var  t= new Date();
t_year=t.getFullYear();
t_date=t.getDate();
t_day=t.getDay();
t.setMonth(10);
```

User-Defined Object

- Example: **java4-10-userdefined-object.htm**

```
<script language="javascript">
    var notebook= new Object();
    notebook.brand="ASUS";
    notebook.price=25000;
    notebook.color="black";
    notebook.display= show;
    notebook.display();  //execute method
    function show(){
        document.write("brand:"+this.brand+"<br>");
        document.write("price:"+this.price+"<br>");
        document.write("color:"+this.color+"<br>");
    }
 </script>
```