Javascript Interview Questions and Answers

What is JavaScript?

A1: JavaScript is a general-purpose programming language designed to let programmers of all skill levels control the behavior of software objects. The language is used most widely today in Web browsers whose software objects tend to represent a variety of HTML elements in a document and the document itself. But the language can be--and is--used with other kinds of objects in other environments. For example, Adobe Acrobat Forms uses JavaScript as its underlying scripting language to glue together objects that are unique to the forms generated by Adobe Acrobat. Therefore, it is important to distinguish JavaScript, the language, from the objects it can communicate with in any particular environment. When used for Web documents, the scripts go directly inside the HTML documents and are downloaded to the browser with the rest of the HTML tags and content.

A2:JavaScript is a platform-independent, event-driven, interpreted client-side scripting and programming language developed by Netscape Communications Corp. and Sun Microsystems.

How is JavaScript different from Java?

JavaScript was developed by Brendan Eich of Netscape; Java was developed at Sun Microsystems. While the two languages share some common syntax, they were developed independently of each other and for different audiences. Java is a full-fledged programming language tailored for network computing; it includes hundreds of its own objects, including objects for creating user interfaces that appear in Java applets (in Web browsers) or standalone Java applications. In contrast, JavaScript relies on whatever environment it's operating in for the user interface, such as a Web document's form elements.

JavaScript was initially called LiveScript at Netscape while it was under development. A licensing deal between Netscape and Sun at the last minute let Netscape plug the "Java" name into the name of its scripting language. Programmers use entirely different tools for Java and JavaScript. It is also not uncommon for a programmer of one language to be ignorant of the other. The two languages don't rely on each other and are intended for different purposes. In some ways, the "Java" name on JavaScript has confused the world's understanding of the differences between the two. On the other hand, JavaScript is much easier to learn than Java and can offer a gentle introduction for newcomers who want to graduate to Java and the kinds of applications you can develop with it.

What's relationship between JavaScript and ECMAScript?

ECMAScript is yet another name for JavaScript (other names include LiveScript). The current JavaScript that you see supported in browsers is ECMAScript revision 3.

How do you submit a form using Javascript?

Use document.forms[0].submit();

(0 refers to the index of the form - if you have more than one form in a page, then the first one has the index 0, second has index 1 and so on).

How do we get JavaScript onto a web page?

You can use several different methods of placing javascript in you pages.

You can directly add a script element inside the body of page.

```
1. For example, to add the "last updated line" to your pages, In your page text, add the following:

blah, blah, blah, blah, blah.
<script type="text/javascript" >
<!-- Hiding from old browsers
document.write("Last Updated:" +
document.lastModified);
document.close();
// -->
</script>
yada, yada, yada, yada.
```

(Note: the first comment, "<--" hides the content of the script from browsers that don't understand javascript. The "// -->" finishes the comment. The "//" tells javascript that this is a comment so javascript doesn't try to interpret the "-->". If your audience has much older browsers, you should put this comments inside your javascript. If most of your audience has newer browsers, the comments can be omitted. For brevity, in most examples here the comments are not shown.)

The above code will look like this on Javascript enabled browsers,

2. Javascript can be placed inside the <head> element

Functions and global variables typically reside inside the <head> element.

<head>

```
<title>Default Test Page</title>
<script language="JavaScript" type="text/javascript">
var myVar = "";
function timer(){setTimeout('restart()',10);}
document.onload=timer();
</script>
</head>
```

Javascript can be referenced from a separate file

Javascript may also a placed in a separate file on the server and referenced from an HTML page. (Don't use the shorthand ending "<script ... />). These are typically placed in the <head> element.

<script type="text/javascript" SRC="myStuff.js"></script>

How to read and write a file using javascript?

I/O operations like reading or writing a file is not possible with client-side javascript.

However, this can be done by coding a Java applet that reads files for the script.

How to detect the operating system on the client machine?

In order to detect the operating system on the client machine, the navigator.appVersion string (property) should be used.

How can JavaScript make a Web site easier to use? That is, are there certain JavaScript techniques that make it easier for people to use a Web site?

JavaScript's greatest potential gift to a Web site is that scripts can make the page more immediately interactive, that is, interactive without having to submit every little thing to the server for a server program to re-render the page and send it back to the client. For

example, consider a top-level navigation panel that has, say, six primary image map links into subsections of the Web site. With only a little bit of scripting, each map area can be instructed to pop up a more detailed list of links to the contents within a subsection whenever the user rolls the cursor atop a map area. With the help of that popup list of links, the user with a scriptable browser can bypass one intermediate menu page. The user without a scriptable browser (or who has disabled JavaScript) will have to drill down through a more traditional and time-consuming path to the desired content.

How do you target a specific frame from a hyperlink?

Include the name of the frame in the target attribute of the hyperlink. >>My Page

What is a fixed-width table and its advantages?

Fixed width tables are rendered by the browser based on the widths of the columns in the first row, resulting in a faster display in case of large tables. Use the CSS style table-layout:fixed to specify a fixed width table.

If the table is not specified to be of fixed width, the browser has to wait till all data is downloaded and then infer the best width for each of the columns. This process can be very slow for large tables.

Example of using Regular Expressions for syntax checking in JavaScript

```
var re = new RegExp(''^(&[A-Za-z_0-9]{1,}=[A-Za-z_0-9]{1,})*$''); var text = myWidget.value; var OK = re.test(text); if( ! OK ) { alert(''The extra parameters need some work.\r\n Should be something like: \''&a=1&c=4\''''); }
```

Where are cookies actually stored on the hard disk?

This depends on the user's browser and OS.

In the case of Netscape with Windows OS, all the cookies are stored in a single file called

cookies.txt

c:\Program Files\Netscape\Users\username\cookies.txt

In the case of IE,each cookie is stored in a separate file namely username@website.txt.

c:\Windows\Cookies\username@Website.txt

What does is NaN function do?

Return true if the argument is not a number.

What is negative infinity?

It's a number in JavaScript, derived by dividing negative number by zero.

In a pop-up browser window, how do you refer to the main browser window that opened it? Use window.opener to refer to the main window from pop-ups.

What is the data type of variables of in JavaScript?

All variables are of object type in JavaScript.

Methods GET and POST in HTML forms - what's the difference?

GET: Parameters are passed in the querystring. Maximum amount of data that can be sent via the GET method is limited to about 2kb.

POST: Parameters are passed in the request body. There is no limit to the amount of data that can be transferred using POST. However, there are limits on the maximum amount of data that can be transferred in one name/value pair.

How to write a script for "Select" lists using javascript

1. To remove an item from a list set it to null

mvSelectObject.options[3] = null;

- 2. To truncate a list set its length to the maximum size you desire mySelectObject.length = 2;
- 3. To delete all options in a select object set the length to 0. mySelectObject.leng

Text From Your Clipboard?

It is true, text you last copied for pasting (copy & paste) can be stolen when you visit web sites using a combination of JavaScript and ASP (or PHP, or CGI) to write your possible sensitive data to a database on another server.

What does the "Access is Denied" IE error mean?

The "Access Denied" error in any browser is due to the following reason.

A javascript in one window or frame is tries to access another window or frame whose document's domain is different from the document containing the script.

Is a javascript script faster than an ASP script?

Yes. Since javascript is a client-side script it does require the web server's help for its computation, so it is always faster than any server-side script like ASP, PHP, etc..

Are Java and JavaScript the Same?

No.java and javascript are two different languages.

Java is a powerful object - oriented programming language like C++, C whereas Javascript is a client-side scripting language with some limitations.

How to embed javascript in a web page?

javascript code can be embedded in a web page between <script

langugage="javascript"></script> tags

What and where are the best JavaScript resources on the Web?

The Web has several FAO areas on JavaScript. The best place to start is something called the meta-FAQ [14-Jan-2001 Editor's Note: I can't point to it anymore, it is broken!], which provides a high-level overview of the JavaScript help available on the Net. As for fact-filled FAOs, I recommend one maintained by Martin Webb and a mini-FAO that I maintain. For interactive help with specific problems, nothing beats the primary JavaScript Usenet newsgroup, comp.lang.javascript. Depending on my work backlog, I answer questions posted there from time to time. Netscape and Microsoft also have vendor-specific developer discussion groups as well as detailed documentation for the scripting and object model implementations.

What is the difference between a web-garden and a web-farm?

Web-garden - An IIS6.0 feature where you can configure an application pool as a webgarden and also specify the number of worker processes for that pool. It can help improve

performance in some cases.

Web-farm - a general term referring to a cluster of physically separate machines, each running a web-server for scalability and performance (contrast this with web-garden which refers to multiple processes on one single physical machine).

How to get the contents of an input box using Javascript?

Use the "value" property.

var myValue = window.document.getElementById("MyTextBox").value;

How to determine the state of a checkbox using Javascript?

var checkedP = window.document.getElementBvId("mvCheckBox").checked;

How to set the focus in an element using Javascript?

<script> function setFocus() { if(focusElement != null) {

document.forms[0].elements[''myelementname''].focus(); } } </script>

How to access an external javascript file that is stored externally and not embedded?

This can be achieved by using the following tag between head tags or between body tags. <script src="abc.js"></script>How to access an external javascript file that is stored externally and not embedded? where abc.js is the external javascript file to be accessed.

What is the difference between an alert box and a confirmation box?

An alert box displays only one button which is the OK button whereas the Confirm box displays two buttons namely OK and cancel.

What is a prompt box?

A prompt box allows the user to enter input by providing a text box.

Can javascript code be broken in different lines?

Breaking is possible within a string statement by using a backslash \setminus at the end but not within any other javascript statement.

that is,

document.write("Hello \ world");
is possible but not document.write \
("hello world");

Taking a developer's perspective, do you think that JavaScript is easy to learn and use?

One of the reasons JavaScript has the word "script" in it is that as a programming language, the vocabulary of the core language is compact compared to full-fledged programming languages. If you already program in Java or C, you actually have to

programming languages. If you already program in Java or C, you actually have to unlearn some concepts that had been beaten into you. For example, JavaScript is a loosely typed language, which means that a variable doesn't care if it's holding a string, a number, or a reference to an object; the same variable can even change what type of data it holds while a script runs.

The other part of JavaScript implementation in browsers that makes it easier to learn is that most of the objects you script are pre-defined for the author, and they largely represent physical things you can see on a page: a text box, an image, and so on. It's easier to say, "OK, these are the things I'm working with and I'll use scripting to make them do such and such," instead of having to dream up the user interface, conceive of and code objects, and handle the interaction between objects and users. With scripting, you tend to write a _lot_ less code.

What Web sites do you feel use JavaScript most effectively (i.e., best-in-class examples)? The

worst?

The best sites are the ones that use JavaScript so transparently, that I'm not aware that there is any scripting on the page. The worst sites are those that try to impress me with how much scripting is on the page.

How about 2+5+"8"?

Since 2 and 5 are integers, this is number arithmetic, since 8 is a string, it's concatenation, so 78 is the result.

What is the difference between SessionState and ViewState?

ViewState is specific to a page in a session. Session state refers to user specific data that can be accessed across all pages in the web application.

What does the EnableViewStateMac setting in an aspx page do?

Setting EnableViewStateMac=true is a security measure that allows ASP.NET to ensure that the viewstate for a page has not been tampered with. If on Postback, the ASP.NET framework detects that there has been a change in the value of viewstate that was sent to the browser, it raises an error - Validation of viewstate MAC failed.

Use <%@ Page EnableViewStateMac="true"%> to set it to true (the default value, if this attribute is not specified is also true) in an aspx page.

How to hide javascript code from old browsers that dont run it?

Use the below specified style of comments <script language=javascript> <!-- javascript code goes here // --> or Use the <NOSCRIPT> some html code </NOSCRIPT> tags and code the display html statements between these and this will appear on the page if the browser does not support javascript

How to comment javascript code?

Use // for line comments and

/%

*/ for block comments

Name the numeric constants representing max,min values

Number.MAX VALUE

Number.MIN_VALUE

What does javascript null mean?

The null value is a unique value representing no value or no object.

It implies no object, or null string, no valid boolean value, no number and no array object.

How do you create a new object in JavaScript?

```
var obj = new Object(); or var obj = {};
```

How do you assign object properties?

obj["age"] = 17 or obj.age How to make elements invisible?

Change the "visibility" attribute of the style object associated with your element.

Remember that a hidden element still takes up space, use "display" to make the space disappear as well.

```
if ( x == y) {
myElement.style.visibility = 'visible';
} else {
```

```
myElement.style.visibility = 'hidden';
}
How to set the cursor to wait?
In theory, we should cache the current state of the cursor and then put it back to its
original state.
document.body.style.cursor = 'wait';
//do something interesting and time consuming
document.body.style.cursor = 'auto';
How to reload the current page?
window.location.reload(true);
how to force a page to go to another page using JavaScript?
<script language="JavaScript" type="text/javascript" ><!--</pre>
```

location.href="http://newhost/newpath/newfile.html"; //--></script>