



# Practical JavaScript for User Assistance

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**user**first  
s e r v i c e s



# Session Overview

## **JavaScript 101**

- Where to place your scripts
- Events, objects, and variables
- Common "gotchas"

## **Opening help**

- Popup window
- DHTML layer
- Embedded panel

## **Creating dynamic topics**

- Using variables
- Automatically matching help to an application
- Storing UA information in a database



# Where to Place Your Scripts

## Inside a tag

```
<html>
```

```
<head>
```

```
</head>
```

```
<body onBlur="javascript>window.close()" >
```

```
<p>hello, world!</p>
```

```
</body>
```

```
</html>
```



# Where to Place Your Scripts

## In a function

```
<head>
```

```
<script>
```

```
function closeHelp() {
```

```
  window.close();
```

```
}
```

```
</script>
```

```
</head>
```

```
<body onBlur="closeHelp()">
```



# Where to Place Your Scripts

## **In a JavaScript file (ex: myscripts.js)**

```
function closeHelp() {  
  window.close();  
}
```

## **This script can be 'called' with...**

```
<head>  
<script src="myscripts.js"></script>  
</head>  
<body onBlur="closeHelp()">
```



# JavaScript Events

- onLoad
- onFocus
- onKeyPress
- onMouseOver
- onChange
- onHelp
- onUnload
- onBlur
- onClick
- onMouseOut
- onSubmit



# JavaScript Objects

## **Everything is an object**

- Window
- Document
- Headings (h1) and paragraphs (p)
- Tables
- Links (a)
- Forms and form elements
- `<span>`s and `<div>`s



# JavaScript Object IDs

```
<p id="projectNumber">Project Number</p>
```

```
<script>
```

```
alert(document.getElementById('projectNumber'));;
```

```
</script>
```





# JavaScript Variables

## Creating variables

```
<script>  
var myNumber = 11;  
var myString = "hi there!";  
</script>
```

## Sending a variable to a function

```
<a href="javascript:openHelp('fieldname')">help</a>
```

## Receiving a variable in a script

```
function openHelp(id) { ... }
```



# JavaScript Gotchas

## Syntax

- Script lines should end with a ;
- `function example() { your code here }`
- `if (this == that)`
- `var myExample = 11;`

## Names

- Must start with a letter
- Are case sensitive



## Opening Help

### **When a button is clicked**

```
<form>
```

```
<input type="button" value="help" onClick="openHelp()">
```

```
</form>
```

### **When a link is clicked**

```
<a href="javascript:openHelp()">Open Help</a>
```

### **When the user presses F1**

```
<body onHelp="openHelp();return false">
```



## openHelp() Function

```
function openHelp() {  
    window.open('helppage.htm','helpwin','toolbar=0, ↵  
location=0,directories=0,status=0,menubar=0, ↵  
scrollbars=0,resizable=0,width=500,height=600');  
}
```



# Opening Help in a Popup Window

The screenshot shows a web browser window titled "Help Sample - Microsoft Internet Explorer". The main content area is titled "Sample App" and has a "Home" link in the top right. On the left, there is a navigation menu with the following items: "Create project", "View projects", "View schedule", and "Search". The main content area is titled "Create Project" and contains several form fields: "Project Number:", "Description:", "Start Date:", "Completion:", "Requestor:", "Priority:", and "Tasks:". A "Submit Project" button is located at the bottom of the form. A mouse cursor is hovering over a question mark icon next to the "Project Number" input field. A popup window titled "Sample Help - Microsoft Internet Explorer" is open, displaying the text "Project number" and "The Project number is the number of the project."



## Opening Help in a Popup Window

```
<a href="javascript:openCSHelp('projectnum')">help link</a>
```

```
<script>
```

```
function openCSHelp(id) {
```

```
  helpurl = location.href;
```

```
  begin=(helpurl.lastIndexOf('/') + 1);
```

```
  end=(helpurl.lastIndexOf('m') + 1);
```

```
  helpurl = "h_" + id + "_" + helpurl.substring(begin, end);
```

```
  helpWin = window.open(helpurl,'CShelpwin','toolbar=0, ↵
```

```
location=0,directories=0,status=0,menubar=0,scrollbars=1, ↵
```

```
resizable=1,width=500,height=600');
```

```
  setTimeout('helpWin.focus()',250);
```

```
}
```

```
</script>
```



# Closing a Popup Help Window

```
<html>
<head>
<script>
function closeHelp() {
var key = event.keyCode;
if (key==27) window.close();
}
</script>
</head>
<body onBlur="javascript>window.close()" onKeyPress="closeHelp()">
...
</body>
</html>
```



# Opening Help in a DHTML Help Layer

Help Sample - Microsoft Internet Explorer

## Sample App Home

**Create project**  
**View projects**  
**View schedule**  
**Search**

**Description**  
A short description of the project.

### Create Project

Project Number:  ?

Description:

Start Date:

Completion Date:

Requestor:

Priority:

Tasks:





## Opening Help in a DHTML Help Layer

```
<script>  
function helpSHOW(fieldID) {  
fieldID = "help" + fieldID;  
if (document.all) document.all(fieldID).style.visibility = "visible";  
else document.layers[fieldID].visibility = "show";  
}
```

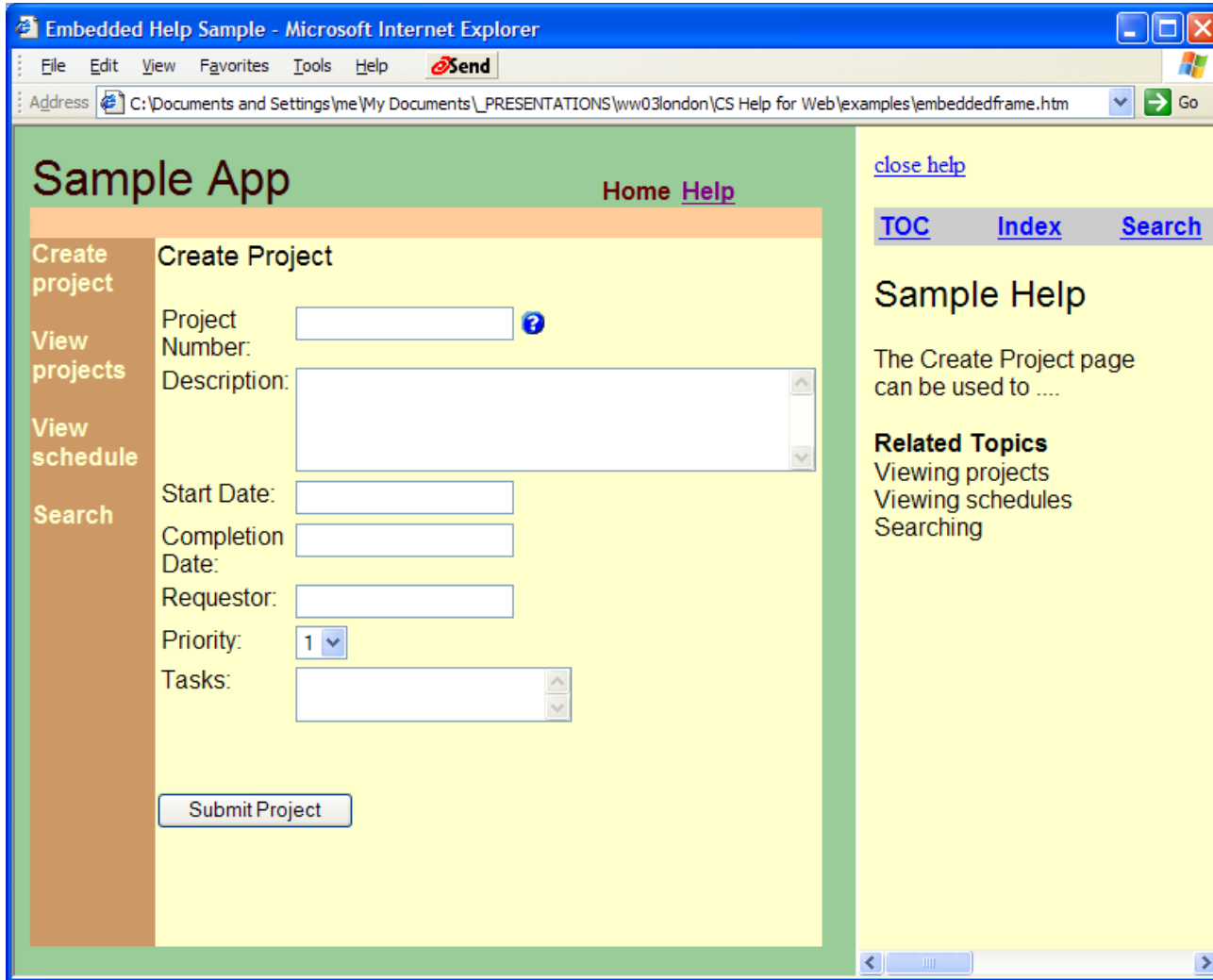
```
function helpHIDE(fieldID) {  
fieldID = "help" + fieldID;  
if (document.all) document.all(fieldID).style.visibility = "hidden";  
else document.layers[fieldID].visibility = "hide";  
}
```

```
</script>
```

```
<span id="description" onMouseOver="helpSHOW(this.id)"  
onMouseOut="helpHIDE(this.id)">Description</span>
```

Frame example

# Opening Help in a UA Panel



The screenshot shows a Microsoft Internet Explorer browser window titled "Embedded Help Sample - Microsoft Internet Explorer". The address bar displays the URL: "C:\Documents and Settings\me\My Documents\\_PRESENTATIONS\ww03london\CS Help for Web\examples\embeddedframe.htm".

The main content area is titled "Sample App" and features a navigation menu on the left with the following items: "Create project", "View projects", "View schedule", and "Search". The "Create Project" section is active, showing a form with the following fields:

- Project Number:  ?
- Description:
- Start Date:
- Completion Date:
- Requestor:
- Priority:
- Tasks:

A "Submit Project" button is located at the bottom of the form.

On the right side, a help panel is open, titled "Sample Help". It includes a "close help" link, a navigation menu with "TOC", "Index", and "Search", and the following text:

The Create Project page can be used to ....

**Related Topics**

- Viewing projects
- Viewing schedules
- Searching

Frame example



## Opening Help in a UA Panel

### Create a “Top” level frameset

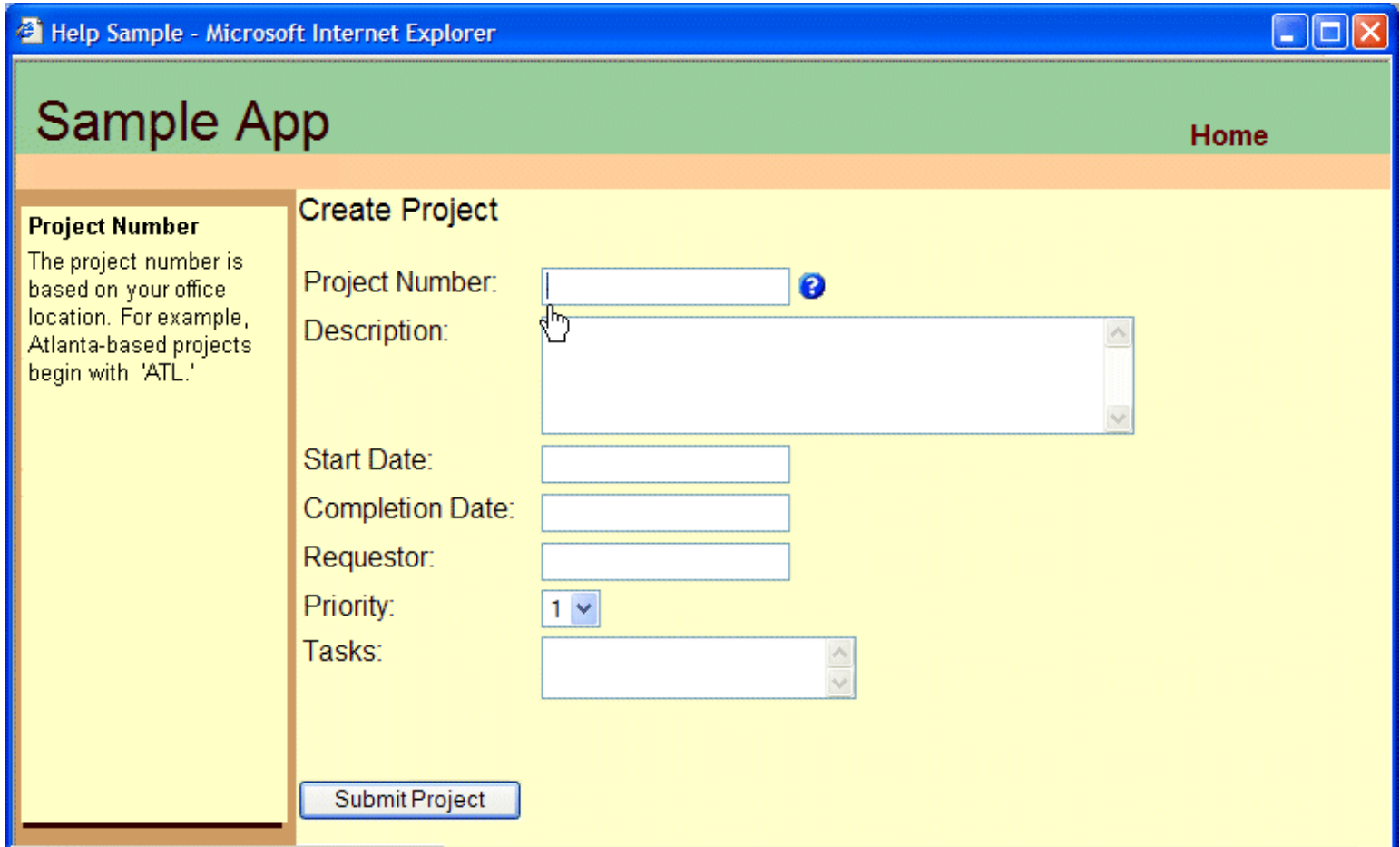
```
<frameset cols="100%,*" rows="*"
frameborder="NO" name="myframes">
<frame src="yourapplication.htm" name="app">
<frame src="helpblank.htm" name="help">
</frameset>
```

### Resize the frameset and open the Help

```
<script>
function openHelp() {
parent.myframes.cols="70%,30%";
parent.help.location = "helppage.htm";
}
</script>
```

DHTML example

# Opening Help in a UA Panel



Help Sample - Microsoft Internet Explorer

**Sample App** Home

**Project Number**  
The project number is based on your office location. For example, Atlanta-based projects begin with 'ATL.'

**Create Project**

Project Number:  ?

Description:

Start Date:

Completion Date:

Requestor:

Priority: 1 ▾

Tasks:

Submit Project

DHTML example

## Opening Help in a UA Panel

```
<head>
```

```
<script>
```

```
var help_projectNumber = "<p><b>Project Number</b></p><p>The project  
number is based on your office location. For example, Atlanta-based projects  
begin with 'ATL.'</p>";
```

```
function changeUA(fieldID) {  
document.getElementById('UA').innerHTML = eval("help_" + fieldID);  
}
```

```
</script>
```

```
</head>
```

```
<body>
```

```
<div id="UA"></div>
```

```
<input type="text" name="projectNumber" onFocus="changeUA(this.name)">
```



# Reusing Information across Topics

## In an external JS file

```
function autotext(entry) {  
  if (entry == 'author') document.write('Scott DeLoach');  
  if (entry == 'copyright') document.write('Copyright  
2005, User First Services, Inc.');
```

## In your topic

```
<script>autotext('author')</script>
```



# Matching Help to the Application

sample\_home.htm

**Sample App**

You are logged in as: sss

**Create project**

**Create Project**

Project Number:

Description:

Start Date:

Completion Date:

Requestor:

Priority:

Tasks:

Sample Help - Microsoft Internet Explorer provided by EarthLink Inc.

[TOC](#) [Index](#) [Search](#)

## Sample Help

The Create Project page can be used to ....

**Project Number**  
The project number ...

**Description**  
The description ....

...

**Related Topics**

- Viewing projects
- Viewing schedules
- Searching
- [Customizing the application](#)

Done Internet

Field names need to match between application and help

sample\_help.htm



# Matching Help to the Application

## **Code in application**

```
<span id="projectNumber">Project Number</span>
```





# Matching Help to the Application

## Code in help topic

```
<script>  
opener.document.getElementById('projectNumber').innerText;  
</script>
```

or

```
<script>  
(opener.document.getElementById('projectNumber').innerText).toLowerCase();  
</script>
```



## Storing Information in a Database

```
<frameset rows="100%,*" rows="*" frameborder="no">  
<frame src="fieldhelptopic.htm" name="help">  
<frame src="fieldhelp.txt" name="db">  
</frameset>
```

### **fieldhelp.txt (comma-delimited version of database)**

"projectNumber","Project Number","The number ....", "<b>Note:</b> This number is automatically generated."

"description","Description","A brief ....",

"startDate","Start Date","When the project needs to begin.",

"completionDate","Completion Date","When the project should end.",

....



# Reading Information from a Database

```
function getTopic(topic) {  
  var allTopics = db.document.body.innerHTML;  
  allTopics = allTopics.split("\n");  
  
  for (var i=0; i < allTopics.length; i++) {  
    if (allTopics[i] == topic) {  
      help.document.body.innerHTML = "<h1>" + allTopics[i+2] + "  
</h1>" + "<p>" + allTopics[i+4] + "</p>";  
      break  
    }  
  }  
}
```



## Recommended JavaScript Books

### **JavaScript Visual Quickstart Guide**

Tom Negrino and Dori Smith

### **Designing with JavaScript**

Nick Heinle and Bill Peña

### **JavaScript Bible**

Danny Goodman



# JavaScript Standard Website

European Computer Manufacturers Association  
Standard 262: ECMAScript Language

[http://www.ecma-international.org/publications  
/standards/Ecma-262.htm](http://www.ecma-international.org/publications/standards/Ecma-262.htm) ↵



# Questions?

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