



Developing Database-resident Help for Customizable Web-based Applications

Scott DeLoach

userfirst
s e r v i c e s



Overview

- Using a database
 - Storing topics in a database
 - Opening help topics from an application
 - Reading the help from the database
 - Formatting the help

- Customizing help topics
 - Hiding links based on the user's login
 - Modifying topics on the fly
 - Allowing users to modify and add topics

- Recommendations and sample system



Sample application

Login as "user" or "admin." The password is not really used.

Name:

Password:

Note: This application only supports IE 4+
with JavaScript and cookies enabled.

sample_login.htm



Sample application

Sample App [Home](#) [Tutorial](#) [Help](#)

03/30/2004 You are logged in as: admin

Create Project

Create project

View projects

View schedule

Search

Project Number: ?

Description:

Start Date:

Completion Date:

Requestor:

Priority:

Tasks:

page-level help

field-level help



Storing topics in a database

FieldID	FieldLabel	HlpText	HlpTextCustom
ProjectNumber	Project Number	The number	Note: 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.	
Requestor	Requestor	The person	Requestors must be managers.
Priority	Priority	The importance	
Tasks	Tasks	What should	

- "HlpText" is used to store default topics.
- "HlpTextCustom" is used to store modified topics.



ASP

Opening help topics

Create Project

Project Number: 

```
<a href="#" onClick="openFieldHelp('ProjectNumber')">  
  
</a>
```

```
<script>  
function openFieldHelp(topic) {  
window.open('fieldhelp.asp?' + topic, 'helpwin', 'toolbar=0, ↵  
location=0, directories=0, status=0, menubar=0, scrollbars=1, ↵  
resizable=0, width=600, height=400');  
}  
</script>
```



ASP

Turning HTML files into ASP files

```
<%@ Language=VBScript %>  
<% Option Explicit %>  
<!--#include file="adovbs.inc" -->
```

```
<html>  
<head>  
</head>  
<body>  
  Hello!  
</body>  
</html>
```

defines VBScript constants
that make code easier to read



ASP

Opening the database

```
Dim objConn
```

```
Set objConn = Server.CreateObject("ADODB.Connection")
```

```
objConn.Open "DRIVER={Microsoft Access Driver (*.mdb)};
```

```
DBQ=" & Server.MapPath("\db\fieldhelp.mdb")
```

```
Dim objRS
```

```
Set objRS = Server.CreateObject("ADODB.Recordset")
```

```
objRS.Open "Tutorial", objConn, , , adCmdTable
```




ASP

Finding and formatting the help

```
Do While Not objRS.EOF
```

```
If Request.QueryString = objRS("FieldID") Then
```

```
If objRS("HlpTextCustom") <> "" Then
```

```
    Response.Write "<b>" & objRS("FieldLabel") & "</b><br>" &  
    objRS("HlpTextCustom")
```

```
Else
```

```
    Response.Write "<b>" & objRS("FieldLabel") & "</b><br>" &  
    objRS("HlpText")
```

```
End If
```

```
End If
```

```
objRS.MoveNext
```

```
Loop
```



JavaScript

Opening help topics

Create Project

Project Number: 

```
<a href="#" onClick="openFieldHelp('ProjectNumber')">  
  
</a>
```

```
<script>  
function openFieldHelp(topic) {  
window.open('fieldhelp.htm?' + topic,'helpwin','toolbar=0, ↵  
location=0,directories=0,status=0,menubar=0,scrollbars=1, ↵  
resizable=0,width=600,height=400');  
}  
</script>
```



JavaScript

Creating a hidden frame (fieldhelp.htm)

```
<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", "Note: 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.",

....



JavaScript

Finding and formatting the help

```
var topic = location.search.substring(1);
```

```
function getTopic() {  
var allTopics = db.document.body.innerHTML;  
allTopics = allTopics.split("\");
```

```
for (var i=0; i < allTopics.length; i++) {
```

depends on your delimiter

```
if (allTopics[i] == topic) {  
help.document.body.innerHTML = "<h1>" + allTopics[i+2] +  
"</h1>" + "<p>" + allTopics[i+4] + "</p>";
```

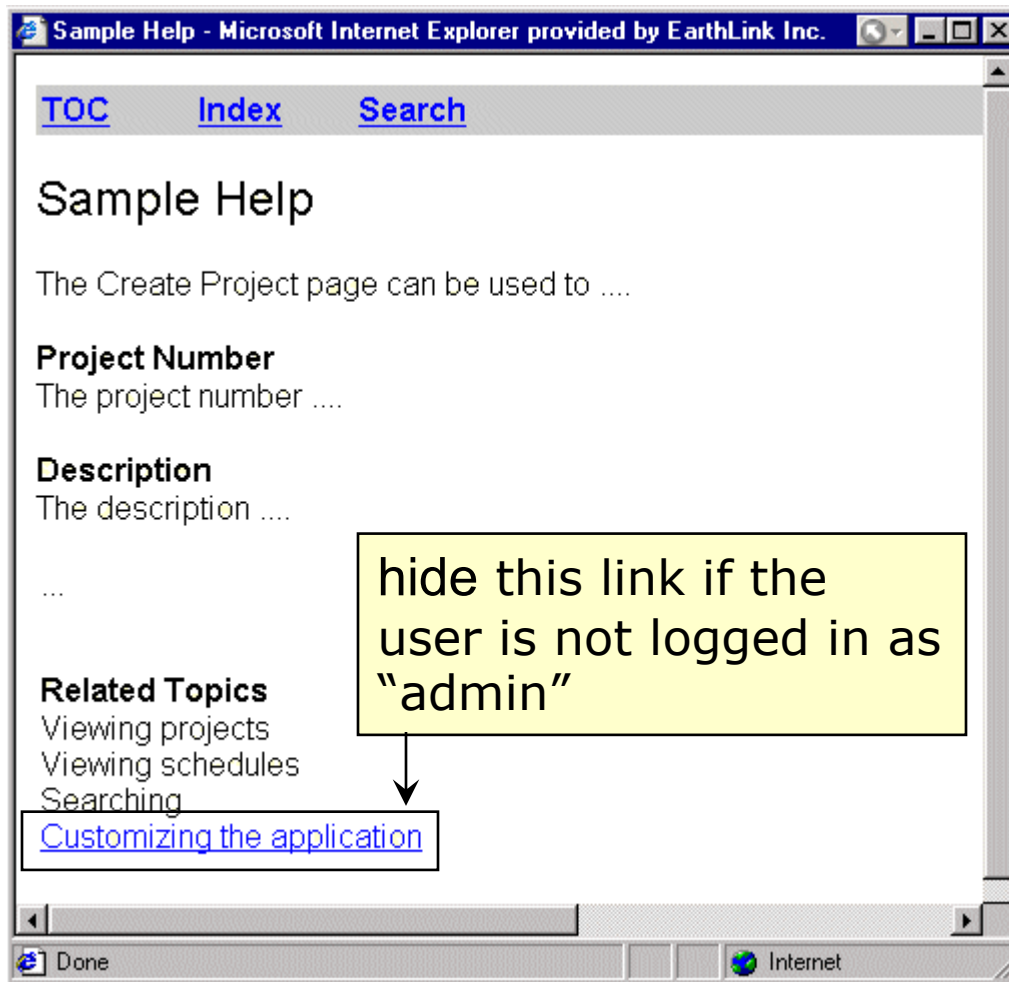
```
break
```

```
}}}
```

depends on how you save the file



Hiding links based on the user's login



sample_help.htm



ASP

Hiding links based on the user's login

Code to hide links

(in sample_help.asp)

```
<%
```

```
If Session("security") = "admin" Then
```

```
Response.Write "<a href= 'link.htm'>Customizing the  
application</a><br>"
```

```
End If
```

```
%>
```



JavaScript

Hiding links based on the user's login

Code to write the cookie

(in sample_login.htm)

```
var today = new Date();
var expires = new Date(today.getTime() + (60 * 86400000));

function set() {
var cookieID = document.form.name.value;
Set_Cookie("security",cookieID,expires); }

function Set_Cookie(name,value,expires) {
document.cookie = name + "=" + value + "=" + "; path=/" + ((expires==null) ? "" : ";
expires=" + expires.toGMTString()); }
```

number of days to store the cookie



code for the "Submit" button:

```
<input type="button" name="submit" value="Submit" onClick="set()">
```



JavaScript

Hiding links based on the user's login

Code to tag links

(in sample_help.htm)

```
<a href="javascript:void()" id="admin1">Customizing the  
application</a>
```




JavaScript

Hiding links based on the user's login

Code to hide links

(in sample_help.htm)

```
<script>
var security=unescape(document.cookie);
if (security.indexOf('admin') == -1) {
for (var i=0; i < document.links.length; i++) {
if (document.links[i].id.indexOf("admin") != -1)
document.links[i].innerText = "";
}}
</script>
```



Modifying topics on the fly

sample_home.asp

Sample App
01/06/2002 You are logged in as: sss

[Create project](#) **Create Project**

[View projects](#)

[View schedule](#)

[Search](#)

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.asp



ASP

Modifying topics on the fly

```
Do While Not objRS.EOF
```

```
Response.Write "<font face='Arial'><b>" & objRS("FieldLabel") & "</b><br>"
```

```
If objRS("HlpTextCustom") <> "" Then
```

```
    Response.Write objRS("HlpTextCustom") & "</font></p>"
```

```
Else
```

```
    If objRS("HlpText") <> "" Then
```

```
        Response.Write objRS("HlpText") & "</font></p>"
```

```
    Else
```

```
        Response.Write "No Help has been written for this  
field.</font></p>"
```

```
    End If
```

```
End If
```

```
objRS.MoveNext
```

```
Loop
```



JavaScript

Modifying topics on the fly

Code to tag application elements

(in sample_home.htm)

```
<span id="projectnumber">Project Number</span>  
<input type="text" name="name_projectnumber">
```



JavaScript

Modifying topics on the fly

Code to read from application and modify Help (in sample_help.htm)

```
var projectnumber = "The " +  
(opener.document.all.projectnumber.innerText).toLowerCase() + " ....</font></p>";  
  
// repeat above for each field on page
```

```
var form = opener.document.forms[0];  
for (i= 0; i < form.elements.length-1; i++) {  
var elemspan = (form.elements[i].name).substr(5);  
document.write("<p><font face='Arial, Helvetica, sans-serif'><b>" +  
opener.document.all[elemspan].innerText + "</b><br>");  
document.write(eval(elemspan));  
}
```

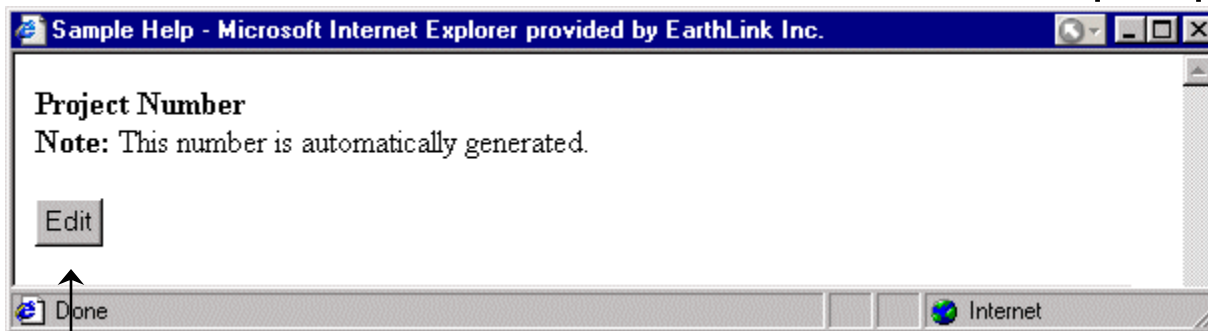
chops off "name_"



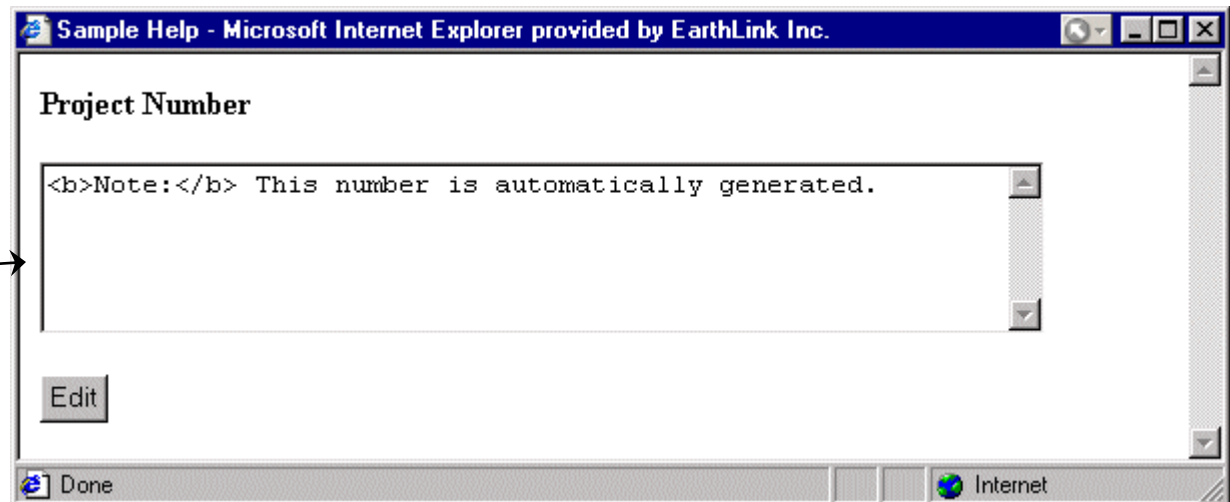


Allowing users to modify/add topics

fieldhelp.asp



fieldhelp_edit.asp



administrators see the Edit button, which they can use to add or change the field help topics.



ASP

Allowing users to modify/add topics

Code to show the Edit button

(in fieldhelp.asp)

```
If Session("security") = "admin" Then
```

```
Response.Write "<form name='form' method='post'  
action='fieldhelpedit.asp?' & Request.QueryString & "">  
<input type='submit' name='submit' value='Edit'></form>"
```



ASP

Allowing users to modify/add topics

Code to display the Edit form (1 of 2)

(in fieldhelpedit.asp)

```
Do While Not objRS.EOF
```

```
If Request.QueryString = objRS("FieldID") Then
```

```
Response.Write "<b>" & objRS("FieldLabel") & "</b><br>"
```

```
Response.Write "<form method='post' action='fieldhelpupdate.asp?' &  
Request.QueryString & "">"
```

```
If objRS("HlpTextCustom") <> "" Then
```

```
Response.Write "<textarea name='helptext' cols='60' rows='5'>" &  
objRS("HlpTextCustom") & "</textarea>"
```

```
Else
```

```
Response.Write "<textarea name='helptext' cols='60' rows='5'>" & objRS("HlpText")  
& "</textarea>"
```

```
End If
```




ASP

Allowing users to modify/add topics

Code to display the Edit form (2 of 2)

(in fieldhelpedit.asp)

...

```
Response.Write "<p><input type='submit' name='submit' value='Edit'> </form>"
```

```
End If
```

```
objRS.MoveNext
```

```
Loop
```



ASP

Allowing users to modify/add topics

Code to update the help

(in fieldhelpupdate.asp)

```
Do While Not objRS.EOF
```

```
  If Request.QueryString = objRS("FieldID") Then
```

```
    If Request.Form("helptext") <> "" Then
```

```
      objRS("HlpTextCustom") = Request.Form("helptext")
```

```
      objRS.Update
```

```
    End If
```

```
  End If
```

```
  objRS.MoveNext
```

```
Loop
```



Recommended JavaScript books

JavaScript Visual Quickstart Guide

Tom Negrino and Dori Smith

Designing with JavaScript

Nick Heinle and Bill Peña

JavaScript Bible

Danny Goodman



Recommended VBScript and ASP books

Teach Yourself Active Server Pages in 21 Days

Scott Mitchell and James Atkinson

VBScript in a Nutshell

Matt Childs, Paul Lomax, & Ron Petrusha



Viewing and downloading the sample files

ASP sample files (zipped and live demo)

<http://www3.brinkster.com/userfirst/index.html>

(Brinkster is a free ASP hosting site, so it goes down from time to time.)

Presentation

www.userfirst.net/present.html

Other Demos

www.userfirst.net/tips1.html



Questions?

Feel free to e-mail me. Or, catch me later at the conference!

Scott DeLoach

Founding Partner, User First Services, Inc.

Certified RoboHELP Instructor and Consultant

CIW Master Designer

404.520.0003

scott@userfirst.net