

Overview of Tools and Code Developed for the Zerlot OSS Data Repository
(<http://zerlot.cse.nd.edu>)

“Table Descriptions” Page

This page was created as an extension of the All Tables page. Instead of simply listing the available tables, it has an additional column that contains brief descriptions of the tables. The rationale behind this is to give users a central location for finding table descriptions, instead of having to navigate to the desired table’s page, which can get tedious for multiple searches.

The Table Descriptions page makes use of the wiki’s “Table” syntax, which is relatively straightforward. A simple example of a 3-by-3 table is shown below:

```
{| border="2"  
+ SAMPLE WIKI TABLE...  
-  
! Name  
! State  
! Color  
-  
Michael  
Alabama  
Red  
-  
Joe  
California  
Green  
-  
Susan  
Vermont  
Purple  
-  
}
```

SAMPLE WIKI TABLE...

Name	State	Color
Michael	Alabama	Red
Joe	California	Green
Susan	Vermont	Purple

With the knowledge of the wiki syntax, maintaining the Table Descriptions page is a simple task:

```
{| border="2"  
+ Through November 2007:  
-  
! Table  
! Description  
-  
*[[activity_log]]  
-  
...  
}
```

Table descriptions

Through November 2007:

Table	Description
*activity_log	
*activity_log_old	
*activity_log_old_old	
*activity_log_regs	
*activity_log_regs_tmp	

JavaScript Unix Epoch Converter

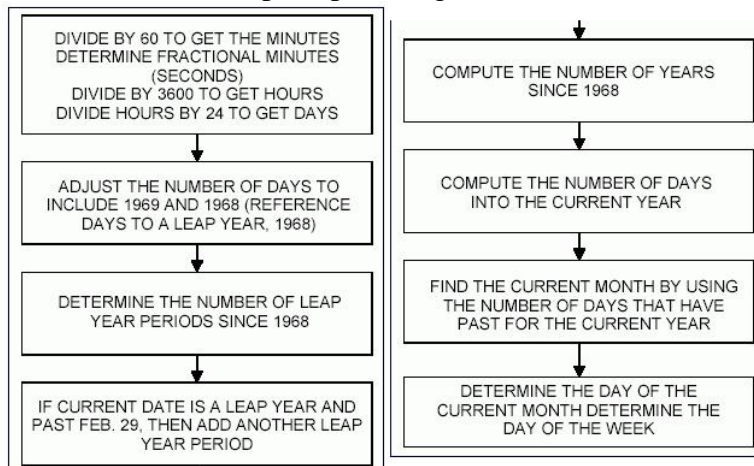
Timestamp:	Month:	Day:	Year:	Hour:	Minute:	Second:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="button" value="convert"/>	/	/	@	:	:	GMT

The converter takes in a user-inputted integer (representative of the number of seconds since midnight on 1/1/1970) and converts it to a standard time format as shown above.

The code consists of built-in JavaScript functions to aid with the conversions. Originally, arithmetic statements determined the number of seconds, minutes, etc, but the built-in functions make the code cleaner and easier to understand. What follows is the conversion script code:

```
<script language="JavaScript">
function convert()
{
    var theDate = new Date(document.form1.timeStamp.value * 1000);
    dateString = theDate.toGMTString();
    arrDateStr = dateString.split(" ");
    document.form1.numMonth.value = getMonthNum(arrDateStr[2]);
    document.form1.numDay.value = arrDateStr[1];
    document.form1.numYear.value = arrDateStr[3];
    document.form1.numHour.value = arrDateStr[4].substr(0,2);
    document.form1.numMinute.value = arrDateStr[4].substr(3,2);
    document.form1.numSecond.value = arrDateStr[4].substr(6,2);
}
function getMonthNum(abbMonth)
{
    var arrMon = new Array("Jan", "Feb", "Mar", "Apr", "May", "Jun",
        "Jul", "Aug", "Sep", "Oct", "Nov", "Dec");
    for(i=0; i<arrMon.length; i++)
    {
        if(abbMonth == arrMon[i])
            return i+1;
    }
}
</script>
...
```

Unix Epoch Algorithm



Details and examples on how to use the converter can be found on the actual HTML page.

Schema Browser Enhancement

At the time this document was written, the schema browser simply lists collections of data, sorted by the month and year of release. When a schema is clicked by the user, a new page opens up with a list of tables that appear in that schema. One of the potential enhancements that were proposed was to edit an existing Perl script in such a way that would turn the tables into HTML-based forms. Users could then check off the tables they wished to search for and click a “Submit” button, which would then open up the query page with the appropriate field already filled in. This would save users time, especially with the table names that are hard to remember.

Due to time constraints, the enhancement was never fully implemented in Perl. However, a JavaScript outline can be seen below – opening the query page with the appropriate field already filled in and allowing multiple entries are the only things left to be completed.

```
<html>
<head>
```

```
<title>Code file</title>
<script language=javascript>
<!--
var field = "";

function updateSV(val) {
    field = val;
}

function setField(what) {
    what.myText.value = field;
}

//-->
</script>
</head>
```

```
<form>
<center>
<h2>SourceForge.net Research Archive Schema Browser</h2>
<hr align="center" width="500">
<table border="2">
<em>sf0807</em>
<tr>
<td><input type="radio" value=1 name="myTick" onClick=updateSV("artifact")> </td>
<td><a href="/cgi-bin/treq.pl?uschema=sf0807&utable=artifact">artifact</a></td></tr>
...
<tr>
<td><input type="radio" value=1 name="myTick" onClick=updateSV("user_role")></td>
<td><a href="/cgi-bin/treq.pl?uschema=sf0807&utable=user_role">user_role</a></td></tr>
<tr>
<td><input type="radio" value=1 name="myTick" onClick=updateSV("users")></td>
<td><a href="/cgi-bin/treq.pl?uschema=sf0807&utable=users">users</a></td></tr>
</table>
</form>

<input onClick="setField(this.form)" type=button value="Query Field"><br><br>
<b>SELECT:</b><input type="text" size=40 name="myText">
</center>
</body>
</html>
```

SourceForge.net Research Archive Schema Browser

sf0807

<input type="radio"/>	artifact
<input type="radio"/>	artifact canned responses
<input type="radio"/>	artifact category
<input type="radio"/>	artifact counts agg
<input type="radio"/>	artifact file
<input type="radio"/>	artifact group
<input type="radio"/>	artifact group list
<input type="radio"/>	...
<input type="radio"/>	user diary
<input type="radio"/>	user group
<input type="radio"/>	user perms
<input type="radio"/>	user role
<input type="radio"/>	users

Query Field