AcroTEX.Net

The cntdwn Package
Custom Display of the Long Countdown

D. P. Story

AeB Blog August 23, 2010

http://www.acrotex.net
Published: August 23, 2010

Defining a Custom Display Function

Time until New Years Day. In this article, we discuss how to write a special JavaScript function to display a long countdown. The example being presented in this article is seen to the left; the count is displayed in a vertical alignment. The `picins` package, by Bleser and Lang, is also used here to wrap this paragraph around the display and to insert a drop shadow. The default rendering of the long countdown display may be seen in the example file lcntdwn_tst.pdf.

In the preamble of this document, the timer declaration is given by the `\setLongCntDwn` command:

```
\setLongCntDwn{NewYearsLocal}{%
    date=2011/01/01,
    time=00:01:00,
    displayfunc=myDisplay
}
```

The line of interest is `displayfunc=myDisplay`. The `displayfunc` key is used to designate a JavaScript function to display the count for this timer. There is a default display function that is used if this key is not specified. Here, we assign of value `myDisplay` to the key `displayfunc`. Of course, we must define `myDisplay` function.

```
1  function myDisplay (f,nYears,nDays,nHours,nMinutes,nSeconds) {
2      var strYears=(nYears==0)?"":
3          (""+nYears+((nYears == 1)?" year":" years")+"\r");
4      var strDays=(nDays== 0)?"":
5          (""+nDays+((nDays==1)?" day":" days")+"\r");
6      var strHours=(nHours==0)?"":
7          (""+nHours+((nHours==1)?" hour":" hours")+"\r");
8      var strMinutes=(nMinutes==0)?"":
9          (""+nMinutes+((nMinutes==1)?" minute":" minutes")+"\r");
10     var strSeconds=(nSeconds==0)?"":
11         (""+nSeconds+((nSeconds<2)?" second":" seconds")+"\r");
12     var cCntDwnDisplay=strYears+strDays+strHours+strMinutes+strSeconds;
13     f.value=cCntDwnDisplay;
14 }
```

The `indsljs` package is used to create document JavaScript. Within the `indDLJS` environment (not shown), we defined the function `myDisplay`. The (required) argument lists is seen in line 1. The meaning of all parameters should be obvious, except for the first one, labeled `f`. The `f` parameter is the field object of the target field that holds the display of the countdown; it is the field created by `\lcntdwnDisplay` command.

Lines 2–11 were just copied, with minor modifications, from the default function defined in the `cntdwn` package. They build up the strings to be displayed, for example, lines 2–3, the variable `strYears` will display the empty string is time is less than one year; it will display `1 year` if `nYears==1` and will display `n years` (years is plural) for all other values of `nYears`. When the string is nonempty, `"\r"` is appended to the end of the line, this is the end-of-line control sequence in JavaScript.

Finally, in line 12, we concatenate all the strings together and then pass this value to the display field in line 13.

That's it for now, I must get back to my retirement. 𝔇𝔖