I Wish I Knew How To …

Begin Programming Xojo Web

November 2014 Edition (1.0)

By Eugene Dakin

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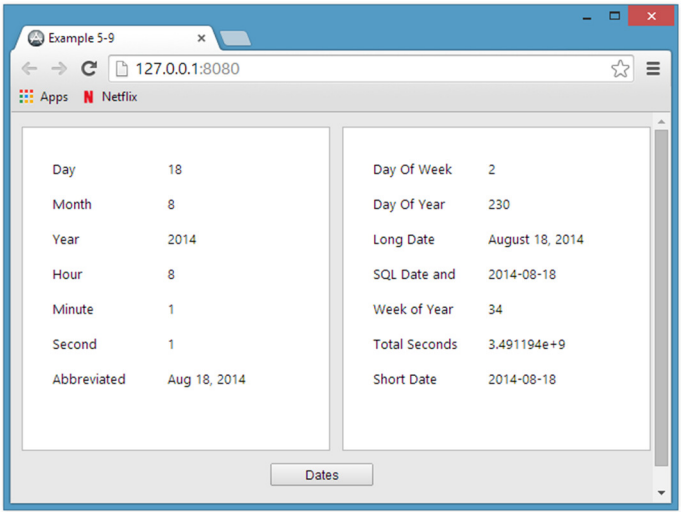
This example shows how to apply different types of format to numbers and shows the results to the formatted number.

Getting a Date

Dates are important to remember, when it is time for your yearly raise, a birthday, or a wedding anniversary to name a few. This example shows some of the functions of the Date object in Xojo[3].

Figure 78. Example 5-9: Dates Screen Grab



Some of the many date formats are shown above. When the date object is first created (called instantiation) then the current date on the computer is used. This date can be modified to whatever date is needed.

To create this example add two rectangles with the following dimensions.

Table 8. Example 5-9: Rectangle Positions

Name	Left	Top	Width	Height
Rectangle1	10	14	300	315
Rectangle2	322	14	300	315

Add 28 labels to the rectangles and a button. Change the button caption to *Dates*. Add an *Action Event* handler to the button and enter the following code.

[3] Xojo Docs: Date Class. 18 August 2014, from http://docs.xojo.com/index.php/Date

Code 35. Example 5-9: Showing Date Code

```
Dim TheDate as New Date

Label1.Text = "Day"
Label8.Text = Cstr(TheDate.Day)

Label2.Text = "Month"
Label9.Text = Cstr(TheDate.Month)

Label3.Text = "Year"
Label10.Text = Cstr(TheDate.Year)

Label4.Text = "Hour"
Label11.Text = Cstr(TheDate.Hour)

Label5.Text = "Minute"
Label12.Text = Cstr(TheDate.Minute)

Label6.Text = "Second"
Label13.Text = Cstr(TheDate.Second)

Label7.Text = "Abbreviated Date"
Label14.Text = TheDate.AbbreviatedDate

Label15.Text = "Day Of Week"
Label22.Text = Cstr(TheDate.DayOfWeek)

Label16.Text = "Day Of Year"
Label23.Text = Cstr(TheDate.DayOfYear)

Label17.Text = "Long Date"
Label24.Text = TheDate.LongDate

Label18.Text = "SQL Date and Time"
Label25.Text = TheDate.SQLDateTime

Label19.Text = "Week of Year"
Label26.Text = Cstr(TheDate.WeekOfYear)

Label20.Text = "Total Seconds"
Label27.Text = Cstr(TheDate.TotalSeconds)
```

```
Label21.Text = "Short Date"
Label28.Text = TheDate.ShortDate
```

A new date object is created with the line of code *Dim TheDate as New Date*, and then the labels are changed for each type of date type. Notice that some of the date data is converted to a string with the *CStr* command and some are not. Some data is returned as an integer, which needs to be converted to a string to be viewed in the text of a label.

Once unique date value is total seconds. Total seconds are the number of seconds since 1 January 1904 at 12:00 AM[4].

The date can be set in a few different ways, which are to assign a number to *TheDate* object.

Code 36. Change the Date

```
TheDate.TotalSeconds = 1 'Sets the date to one second after 1 January 1904 - 12:00 AM
(which is 12:01 AM)
TheDate.TotalSeconds = Calendar.GetDate(TheDate)
TheDate.Year = 2014 'Changes the year to 2014
TheDate.Month = 2 'Changes the month to February
```

The date is changed by changing the number of the date. Modifying the month value to 2 will change the month to February.

[4] Microsoft Support: XL: The 1900 Date System vs. the 1904 Date System: Article 180162. 18 August 2014, from http://support.microsoft.com/kb/180162

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The 'I Wish I Knew' series contains technical data and advice that makes sense and contains practical and numerous examples with explanations to allow you to ease into the steep programming curve. You can create Web applications today!

This book "I Wish I Knew How to … Begin Programming Xojo Web" introduces many of the fundamentals to create webpages which include CGI and Standalone applications. Both HTTP and HTTPS standalone examples are covered and only HTTP CGI's are covered. The many different configurations for a complete HTTPS CGI server are beyond an introductory book and are only lightly discussed. Examples are for the Web class and there are no socket examples as this topic would require a complete book on its own.

The book is written as a guide and introductory reference to Xojo programmers who want to learn to program Web Applications in Windows, Mac OSX, and Linux operating systems. There are no dynamic link libraries (dll), COM, or Active X parts to add. It is suggested that StandAlone applications be studied before Apache CGI applications are used as the concepts are easier to understand. Example programs were checked on Xojo 2014 r2.1.

There are 18 chapters and over 290 pages with greater than 70 example programs. This is an introductory programming book and is for the beginning programmer.

Examples include data types, styles, comparing, object introduction, error handling, sessions, cookies, SSL, screen sizes, maps, SQLite database integration, an example dynamic Blog program and more. Many screenshots have been added to show the results of the code with an index to help find topics quickly.

This is one of many books at Great White Software. This book can be purchased at http://great-white-software.com/rblibrary/ where many great Xojo resources are available.

Happy programming!

Eugene

Eugene Dakin MBA, Ph.D., P.Chem., is an author of Xojo and Real Studio reference materials and has many years of experience in the programming industry.

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