

Bill Menke's "slideshow" Builder

January 2018

I am often faced with the need to build a web-accessible slideshow in a hurry, without excessive attention to each of its many images. I need the slideshow to have a high probability of working on anyone's computer, irrespective of operating system or browser type. Furthermore, I need it to be easy to update and to archive.

This bare-bones software fills this need for me. It creates an HTML-based slideshow from a set of JPEG images. Almost all of the processing is handled automatically; the only exception is the preparation of captions, which are created by the user with an ordinary text editor. The results are a simple set of HTML files and low-resolution JPEG's that implement the slide show. They are all in a single folder that can be copied to a web-server and installed in seconds.

The software, all of which is freely-available, consists of two scripts that run under the BASH shell and which use the ImageMagick image manipulation software. It will run under Windows using the freely-available Cygwin Terminal.

A collection of the slideshows are displayed on my web site at:

<http://www.ldeo.columbia.edu/users/menke/slides/public/index.html>

Windows Installation

1. Download and install the Cygwin shell from <http://cygwin.com/install.html>

The purpose of this software is to provide the "Cygwin Terminal", a UNIX-like command interpreter capable of executing BASH-shell programs.

2. Download and install ImageMagick from <http://www.imagemagick.org/script/binary-releases.php>

The purpose of this software is to provide the "convert" utility for manipulating JPG images.

3. Download the ZIP file <http://www.ldeo.columbia.edu/users/menke/slideshow.zip> and extract the slideshow directory to some convenient place on your computer.

The purpose of this software is to provide the decimate.bash and slideshow.bash BASH-scripts. For the purpose of this tutorial, let's assume that the directory is c:/bill/slideshow.

Making a SIMPLE slideshow

1. Place all the JPG images that constitute your slide show in a folder and give the folder an appropriately descriptive name (for example, vacation14). I recommend that you use a name that contains no embedded spaces and no special characters. Your image files should have extensions ".jpg" or ".JPG". I use the names as they come out of the camera. Again, I avoid names with embedded spaces or special characters.

2. Run the Cygwin Shell and change directory to the folder containing your images

```
cd c:/bill/vacation14
```

3. Execute the decimate.bash BASH-script

```
../slideshow/decimate.bash
```

This script creates a sub-folder named DECIMATED within the vacation14 folder and puts within it low-resolution versions of the images, as well as a text file, "list.txt" that lists the images.

4. The script creates a "list.txt" file in the DECIMATED directory that lists the image files. Edit this file (say with NotePad or WordPad) and add a caption to the end of each line. Insert a space between the end of the JPEG file name and the start of the caption. The caption may be of any length, but must be exactly one line long. Captions may be omitted. You may find convenient running the "Windows Photo Viewer" while you're creating the captions. Save the file when you're done, keeping the same name. Be sure to save it as text, so that its filename remains "list.txt".

You can move lines around in the "list.txt" file, if you want to change the order of the slides.

You can duplicate a line in the "list.txt" file, thus creating two slides that show the same image but have different captions. I always do this for the first slide: the first slide has a caption that describes the slide show as a whole and the second has a caption that describes that image, in particular.

You can delete a line from the "list.txt" file and the corresponding slides will be excluded from the slide show (but the JPG image will not be deleted from the directory).

5. In the Cygwin Shell, cd to the DECIMATED folder

```
cd DECIMATED
```

and execute the slideshow BASH-script. It has two arguments: the first argument is the name you want to give to the slide show; and the second argument is the URL that the slide show should exit to when the person viewing it is done. I always use the folder name for the slide show name ("vacation14" in this example). And I always exit to an "../index.html"; that is, the directory above the slideshow folder, because my slides are organized as in SLIDES/14/vacttion14, and I have the slide show exit to an annual index that lists all my slide shows for that year. So

```
../../slideshow/slideshow.bash vacation14 ../index.html
```

The script creates HTML files within the DECIMATED folder that implement the slideshow, one for each slide (named vacation14_0.html, vacation14_1.html, etc.) plus two other useful files. One is called "index.html" and is an index to the images in the slideshow. The other is called "icon.jpg" is a very low resolution version of the first image in the slide show, which can be used as a thumbnail. I always use a landscape-orientation image for the first image in the slide show, so that the thumbnail comes out longer than it is wide.

6. Copy the DECIMATED folder to the web-server (e.g. with ftp). I always change the name to the album name ("vacation14" in this case).

7. Copy the cascading style sheet file slides.css to the directory two up from your slideshow. (This location is hardwired in slideshow.bash, because my slides are organized SLIDES/14/vacation14, with slides.css in SLIDES . You can change the path by editing the slideshow.bash, if you want a different organization.

The slide show can be referenced in many ways. For instance, the first image in the slideshow can be anchored to a descriptive title

```
<a href="vacation14/vacation\_0.html">My Vacation 2014</a>
```

or to the thumbnail:

```
<a href="vacation14/vacation\_0.html"></a>
```

or to both, using an HTML TABLE construct

```
<table cellpadding="20%">
<tr>
<td><a href="vacation14/vacation14\_0.html"><br>Vacation '14</td>
</tr></table></p>
```

Making an EXTENDED slideshow

1. You can group several "simple" slideshows into an "extended" slideshow. Create each simple slideshow using the instructions above, except substitute the command "slideshowXC.bash" for the command "slideshow.bash":

```
../../slideshow/slideshowXC.bash vacation14 ../index.html
```

2. Move the group of simple slideshows into a directory whose name starts with "XC_", e.g. "XC_trips14". E.g.

```
mkdir XC_trips14
mv vacation14 XC_trips14
```

3. Create a text file in this directory. Line 1 is a one-line title; each of the next several lines contains the directory name of a simple collection followed by a very short caption; the last line is the filename of a journal (if you have one) or the word "none" if you don't. A journal is just a file of textual material that documents the extended collection. It can be in HTML, PDF or TXT format. For example:

```
My 2014 Trips
mom14 Visiting Mom
newyork14 New York
vacation14 My vacation
journal.htm
```

4. Change to the XC directory and run the script XC.bash:
cd XC_trips14
../XC.bash

This script used the list.txt creates an index.html file within the XC directory. It also copies the icon.jpg thumbnail image from the first simple collection referenced in the list.txt file to the XC directory.

5. Copy the Cascading Style Sheet xc.css to two directories up from the XC directory.

6. The extended slide show can be referenced in many ways. Several possibilities are:

```
<a href="XC\_trips14/index.html">My 2014 2014</a>
```

or to the thumbnail:

```
<a href="XC\_trips14/index.html"></a>
```

Acknowledgement. I wrote the original bash scripts back in 2006. In 2017 and 2018, Josh Menke reworked them, greatly improving the quality of the slideshow presentation. Thanks, Josh!

Bill Menke
August 2017