How to Develop a File Naming Convention for a Digital Exhibit

By Kate Thornhill and Gabriele Hayden

Why should digital exhibit file names be standardized?

Digital exhibits interpret and deliver digital media and writing virtually. When building a digital exhibit, you will need to gather and organize your sources before uploading to Omeka, WordPress, or another digital exhibit delivery system. Those historical materials might be born-digital, such as a photograph taken with a digital camera, or digitized, such as a physical photograph that has been digitally scanned. Often, you will have gathered these resources from a number of different sources, such as digital special collections and archive repositories, personal historical collections, disciplinary digital repositories, the Digital Public Library of America, etc.

When you have gathered your digital resources, you will notice that each digital file has its own digital file name and file name structure. Renaming all your digital files to reflect your group's specific organizational practices will allow you to streamline your work, improve communication across your group, and track different versions of your digital files. If you are unsure what your organizational practices are, this is a perfect moment to clarify and codify your workflow with your collaborators.

PROTIP: NEVER LOOK IN SOMEONE ELSE'S DOCUMENTS FOLDER.

Source: xkcd https://xkcd.com/1459/

What is a file naming convention?

A file naming convention, sometimes called file naming standard, allows users to succinctly communicate information about the content of a digital file. It does so in a way that's consistent over many files, allowing files to be easily sorted and organized. A file naming convention also includes a short document explaining the convention, often called a "readme" file, so that more than one person can use or understand it.

File Naming Convention Example

File Naming Convention:
nameofexhibit_year_titleofobject_number.jpg

File Naming Convention Defined:

- nameofexhibit_: A very short title representing the digital exhibit
- year_: The year the file was added to your collection of historical sources

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Titleofobject_: A very short title for the object, e.g., the title given to the object by the original source you got the object from

- Number: Three-digit number starting with 001 for every image. If more than one image with a similar filename exists, apply a numerically ordered sequence

File Naming Convention in Practice:

- outliers_2020_ sojournertruth_001.jpg
- outliers_2020_angeladavis_001.jpg
- outliers_2020_angeladavis_002.jpg
- outliers_2020_rosaparks_001.jpg

Why use a file naming convention?

File naming conventions are useful for any project that will generate a significant number of files, from a series of homework assignments to a large group project. They make life easier when you are organizing or finding collected content for use in a digital exhibit. A file naming convention will

- Help you find your digital files
- Help others find your digital files
- Help track which version of a digital file is most current

Elements of a successful file naming convention

Make it human-useable and -readable

A human-readable naming convention will allow users to understand at a glance essential information about your files. While users may need to consult your guide or "readme" the first few times they interact with your file naming system, it shouldn't be so complicated that they are tempted to give up on the convention altogether.

- Define conventions for your directory structure, folder names, and file names at the start of your project and follow them consistently.
- Include a text file, often called a readme, in your file directory that describes the naming conventions you are using to new project participants.
- Use short, descriptive file names that are meaningful to you and your team. This might include the project name, subject, or acronym.

Make it machine-readable

A machine-readable naming convention will allow you to more easily find and sort files. It can also sometimes allow for the bulk uploading of files or groups of files organized into directories. The digital exhibit tool—usually called a content management system—to which you are hoping to upload your files will specify if it supports bulk upload. Bulk uploads require a specific filename structure specified by the content management system.

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- Think about how you want your files to appear when your computer sorts them.
    - Consider starting with the most general category and ending with the most specific, so that related files will sort together. For example**:** nameofexhibit_year_titleofobject_number.jpg
    - For dates, this means starting with the year rather than the day: yyyymmdd.
    - If you decide to track versions or revisions to a file in addition to dates, use leading 0's: _01 or _001 instead of _1.
- Keep file names relatively short: some software will only accept file names up to 32 characters.
- Use hyphens or underscores instead of spaces; otherwise, in your digital exhibit url spaces will be replaced with "%20" or "+".
- Avoid special characters in your file names such as: "/ \ : * ? " < > [ ] & $. These characters have specific meanings for various operating systems and could result in your files being deleted or misplaced.
- Use all lowercase letters with file names that will later become part of a URL, since URLs are case sensitive. All lower case can also help avoid confusion on teams using more than one operating system. Windows sometimes changes file names to lower case without your permission, which can lead to confusion for Mac and Linux users, where not only are case-sensitive, but sorting is often case-sensitive as well. If you decide to use capitalization (for files not destined for a digital exhibit), be clear about how cases will be used and avoid having file names that differ only in their capitalization.

This explanation is inspired by the following documents

Boston University Libraries. "Designing a Naming Convention." Accessed March 19, 2021. https://www.bu.edu/data/manage/naming-convention/.

DataONE Best Practices Working Group, DataONE (July 01, 2010) "Best Practice: Assign descriptive file names". Accessed through the Data Management Skillbuilding Hub at https://dataoneorg.github.io/Education/bestpractices/assign-descriptive-file on Aug 31, 2020.

Ornbo, George. "Linux and Unix Sort Command Tutorial with Examples." *George Ornbo* (blog), November 16, 2019. Accessed March 30, 2021. https://shapeshed.com/unix-sort/.

Recollection Wisconsin. "The Toolkit: File Naming," September 24, 2020. Accessed March 19, 2021. https://recollectionwisconsin.org/the-toolkit-file-naming.

Research Data Services. "LibGuides: Introduction to Data Management for Undergraduate Students: File Naming Conventions." Accessed March 19, 2021. https://guides.library.illinois.edu/introdata/filenames.

Rogers, Jessica. "File Naming Standards for Digital Collections." *B Sides: FieldWork*, January 1, 2014, 1–15. Accessed March 19, 2021. https://ir.uiowa.edu/bsides/35 Accessed March 19, 2021.

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