Managing Your Photos

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Image Storage Formats

- Photo file formats
  - You may notice that the photo files on your computer end with a suffix such as *.JPG*, *.PNG*, or *.BMP*.
  - What are the meanings of these suffixes?
    - Each suffix represents an *image file format.*
    - Each file format has its own strengths and weaknesses.
- Understanding the JPG format
  - The *JPG* or *JPEG* file format (pronounced *"Jay-Peg"*) is the format usually used for digital photos.
    - If you take a photo with your phone or digital camera, it almost certainly will be stored in JPG format.
  - JPG is a file format that uses file compression so that the photos take up less storage space.
  - JPG uses *lossy compression*, and when dealing with them, you may see a property called *quality* or *compression*.
    - This is a numeric property; the lower its value, the greater the level of compression – but the lower the quality of the stored image.
    - A value of *8 is good*, a value of *10 is very good*, and a value of *12 is excellent*.

Digitizing Your Photos

- Why do we digitize?
  - Paper photos, slides, and negatives are subject to damage and degradation over time.
  - By digitizing the photos we cherish, we not only preserve them for the future, but it becomes easier to share them with others.
- Scanning photos
  - Using a home scanner is one of the most cost-effective ways to digitize paper photos.
    - Your scanner likely has a setting specifically for color or black & white photos.

    - Depending on the number of photos you have, this can be a time-consuming process.
        - Rather than being overwhelmed by the process, set a goal of scanning a certain number of pictures each day or week.
        - You may wish to scan the back of the photo also, if notes about the photo are written on the back. Or you could save this information in a separate text file.
    - Many of today's scanners include *multi-scan* capabilities.
        - Multiple photos (perhaps of differing sizes) can be scanned in one take.
        - One photo file will be created for each photo, cropped to its edges.
    - There also are free and commercial software packages that break up a single, scanned image file that contains multiple photos into separate photo files.
        - This is like the multi-scan feature but found on the computer instead of the scanner.
- Scanning slides and negatives
    - You can purchase (relatively) inexpensive, specialized scanners for your slides and negatives, or adapters for your home scanner.
        - Once you've finished your scanning, you could pass the equipment along to someone else or sell it. (Do you *eBay*?)
- Scanning services
    - If you have neither the desire nor the time to scan photos yourself, there are many reputable *scanning services online* (and, perhaps, locally) that will take care of the task for you.
        - As with any service, you will want to read reviews of the service before you commit and send them your valuable photos.

Storing Your Photos

- Home storage
    - Now that you've digitized your hundreds or thousands of photos, where will you store the files?
    - The simplest solution is to purchase two *flash drives* (a.k.a. *thumb drives*) or two *external hard drives*.

    - Store the photos on both drives (i.e., duplicate the drive contents), keep one at home for easy access, and move the other off-site, say to a safe deposit box.
- Cloud storage
    - *Cloud storage* is a better solution.
        - No worries about backing up your latest photos.
        - Reduces the chances of losing your photos.
        - Makes it easier to share photos with others.
    - There are several "free" Cloud storage solutions, including:
        - Dropbox Basic – *2GB*
        - Google Drive – *15GB*
        - Amazon Drive (a part of Prime) – *"Unlimited"*
    - There also are many subscription-based services.

Organizing Your Photos

- For your computer
    - Microsoft Photo Organizer is a free product that you can download if you run Windows. (https://www.microsoft.com/en-us/p/photo-organizer/9wzdncrdp2tr)
    - There are many solutions, some free and some commercial.
        - Take a look at *Best Free Photo Organizing Software in 2022.* (https://fixthephoto.com/best-free-photo-organizing-software.html)
- Content-based search
    - More and more Cloud-based services are moving to the use of *content-based search*.
        - Rather than searching for an online photo based on its file name, these services use *artificial intelligence (AI)* tools to analyze the contents of the photo.

Google Drive is a good example of this.

Duplicate removal

Some Cloud-based solutions have the ability to identify and hide/remove duplicate images.

- Unfortunately, this usually only works for identical duplicates.

- But what about photos that are the same but are in different formats (for example, .JPG vs .PNG) or differing sizes? Such solutions are still not widely available.
- I expect this to be addressed in the near future.

Thanks!

Any questions?

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