Computer Science   Worksheet—Organizing Files

BACKGROUND

Keeping files organized on a computer can be extraordinarily challenging. It's not enough to have all of your work stored in one giant folder called MyStuff. You need to create folders ("directories") that organize your files into logical groups.
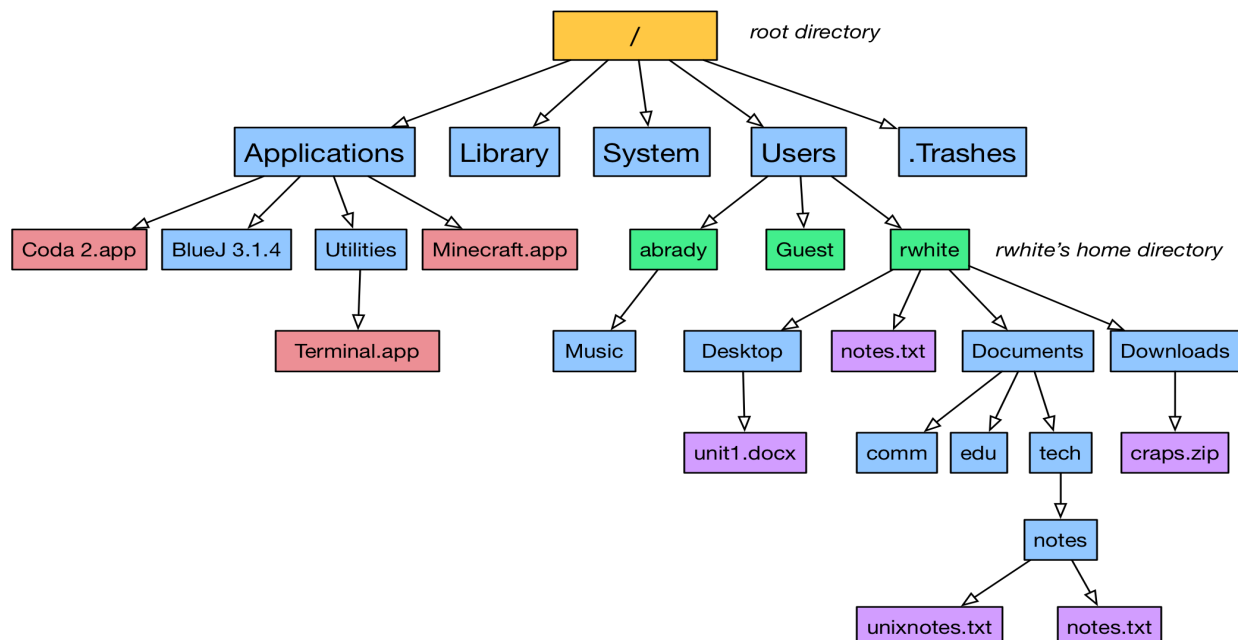
ORGANIZING THINGS

Whenever you have multiple "things," there are multiple ways to organize them. If you have a bunch of LP records (shown here), you can line them up in lots of different ways: by Style of music, alphabetically by Artist, or even by the Color of the cover.

Likewise, there are a variety of strategies that can be used to organize the files on your computer.

In the diagram shown here, there are 7 vertical layers of files. This computer operating system will determine some of this structure, particularly the first 3 levels. You should never rename, rearrange, or delete files and folders in these system directories!

The files that most users are concerned with are in the home folders listed in the `Users` directory.: `rwhite`, for example, owns the files that are listed below that folder. But then files are organized in a number of ways, including by *where* they are located (on the `Desktop`, for example), or the *context* of the file (communications, education, technology), or what *type* of documents are in the folder ("notes"). You might choose to place all the files from the year 2018 in one folder and the files for 2019 in another.
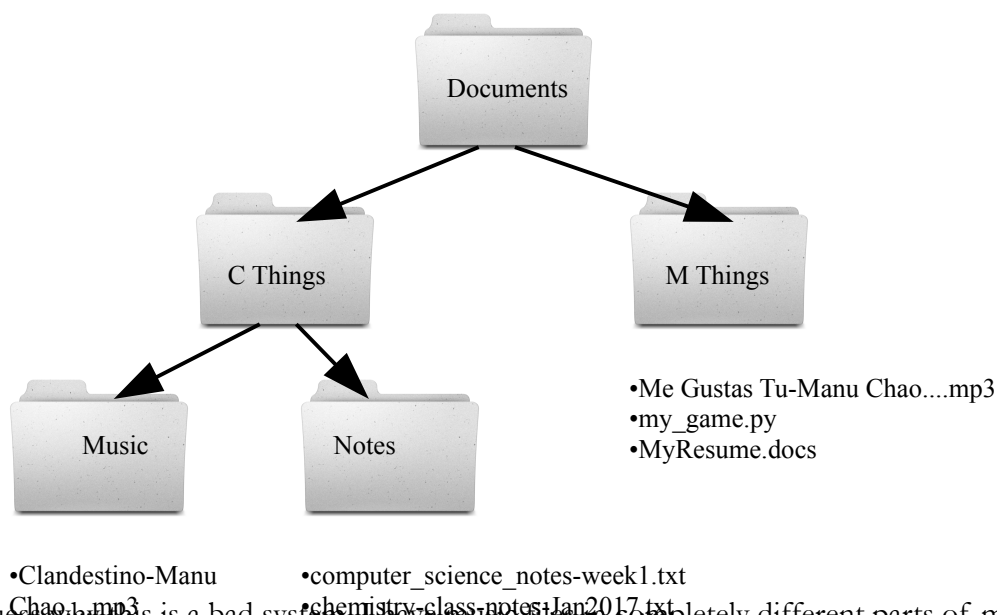
A LIST OF FILES

Consider the list of mixed-up files here that have been stored on the Desktop of your computer. We're going to organize them logically into a series of 5-12 folders based on whatever system or strategy *you* think is appropriate.

1. Begin by noticing similarities in the different types of files, as well as some of the differences.
2. Think of folder names that will do a good job of describing the files they contain.
3. Think about how to place smaller folders into larger folders to get things more organized.

```
computer_science_notes-week1.txt        IMG_2379.jpg
happy_birthday.py                       computer_science_notes-week3.txt
friends_at_beach.jpg                    biology-class-notes-Apr2018.txt
IMG_5048.jpg                            biology-class-notes-Jan2018.txt
Plane Tickets-July 2017.pdf             Internship Application.pdf
MyResume.docx                           Me Gustas Tu-Manu Chao-Proxima Estacion:
Je ne t'aime plus-Manu Chao-Clandestino.mp3    Esperanza.mp3
lola_puppy.jpg                          goodbye_world_program.py
computer_science_notes-week2.txt        hello_world_program.py
Sandcastles-Beyonce-Lemonade.mp3        Love Drought-Beyonce-Lemonade.mp3
packing_list.txt                        my_game.py
chemistry-class-notes-Feb2017.txt       Clandestino-Manu Chao-Clandestino.mp3
YouTube-Fail Army-3.mp4                 EmploymentApplication.pdf
Hotel Reservation-July 2017.pdf         Formation-Beyonce-Lemonade.mp3
lola_puppy2.jpg                         All Night-Beyonce-Lemonade.mp3
IMG_5672.jpg                            Bus tickets-July 2017.pdf
YouTube-How to Study.mp4                biology-class-notes-May2018.txt
chemistry-class-notes-Jan2017.txt       best_program_ever.py
lola_beach.jpg                          IMG_2300.jpg
lola_park.jpg
```

An example of a *bad* organizational system would be organizing them by initial letter, and then maybe by file type.

Documents

C Things   M Things

Music   Notes

•Me Gustas Tu-Manu Chao....mp3
•my_game.py
•MyResume.docs

•Clandestino-Manu   •computer_science_notes-week1.txt
Chao...mp3   •chemistry-class-notes-Jan2017.txt

You can guess why this is a bad system. I have music files in completely different parts of my system, and unrelated things like a game and a resume grouped in the same folder. I'd have a hard time finding anything

if this was my system!

FOLDERS (Activity)

In the space below, draw a nested series of folders to organize the list of files given above, along with the files each folder contains in the space below. You should have 5-12 folders (more is better) organizing the files, and a sample of filenames written into each folder as indicated by the organizational logic you choose.

Then, answer the questions on the next page.

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QUESTIONS

1. What general strategy did you use for organizing your files (by date? by time? by filetype? by context? some combination of the above?)?

2. How many separate folders did you end up organizing your files into? What were those groupings/directories called?

3. How many vertical levels of folders did you end up having in your file organization system?

4. On your own computer, do you tend to keep your files all in one or two directories, or do you have a more complex hierarchy of folders to keep things organized? Why do you use that system?