

File & Directory Paths

When you accidentally say “folder” instead of “directory” in a Linux group.



Navigating Files & Directories

Definitions

Files

- Objects on a computer that store data, information, settings, or commands used with a computer program.

Directories

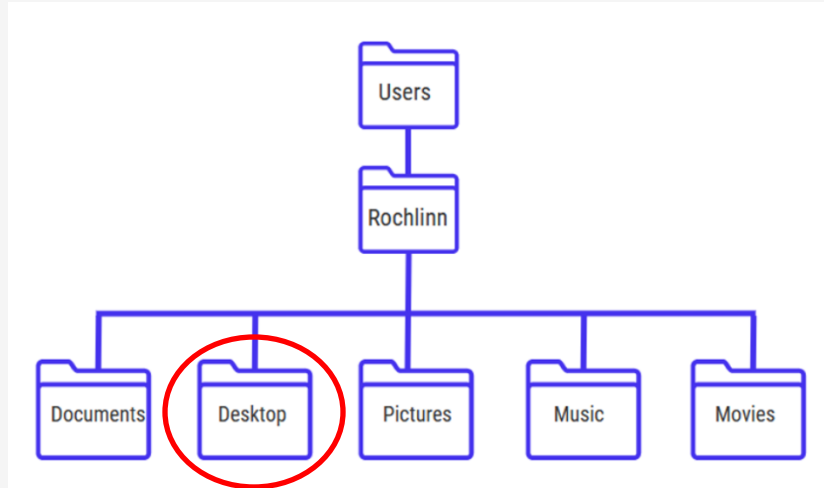
- Also called "folders", are the units that hold files or other directories

Paths

- A string of characters that specifies a unique location in a directory hierarchy.
- A path specifies the location of a directory/file in a machine's file system structure.

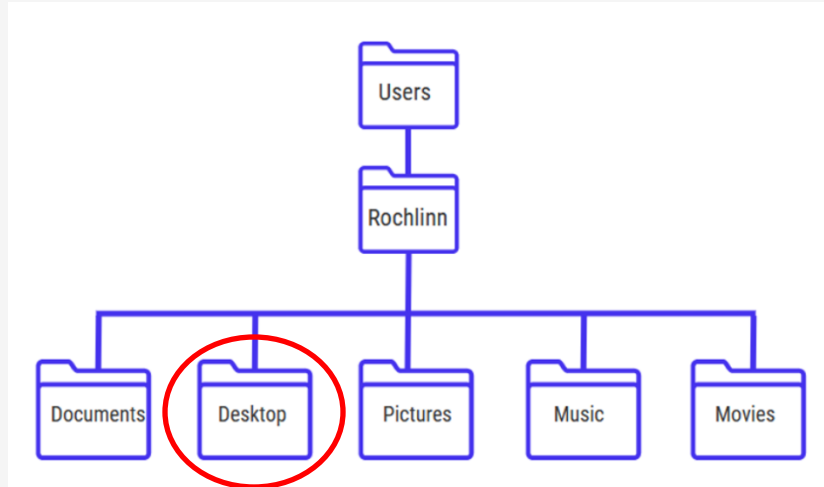
Paths

- The picture below illustrates the directory structure of a typical computer.
- Within this structure, the path to my Desktop would be:
 - **/Users/Rochlinn/Desktop**



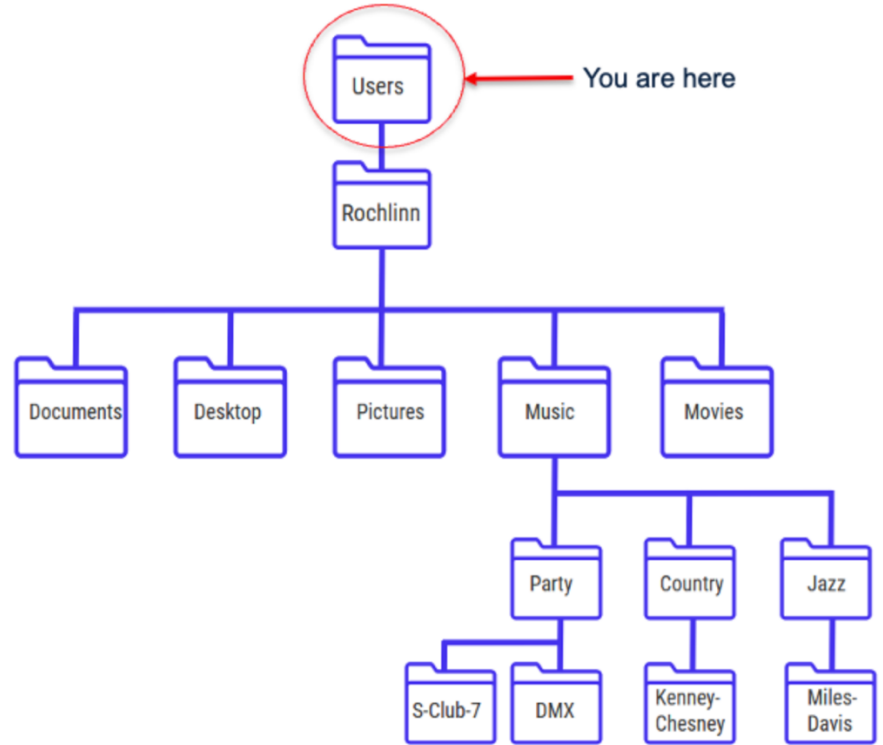
Paths

- When dealing with file paths, directories are denoted by a slash /, and each "layer" or the directory hierarchy is separated by a slash.
 - **/Users/Rochlinn/Desktop**



Exercise

- What's the path to the Music directory?
- What's the path to the S-Club-7 directory?



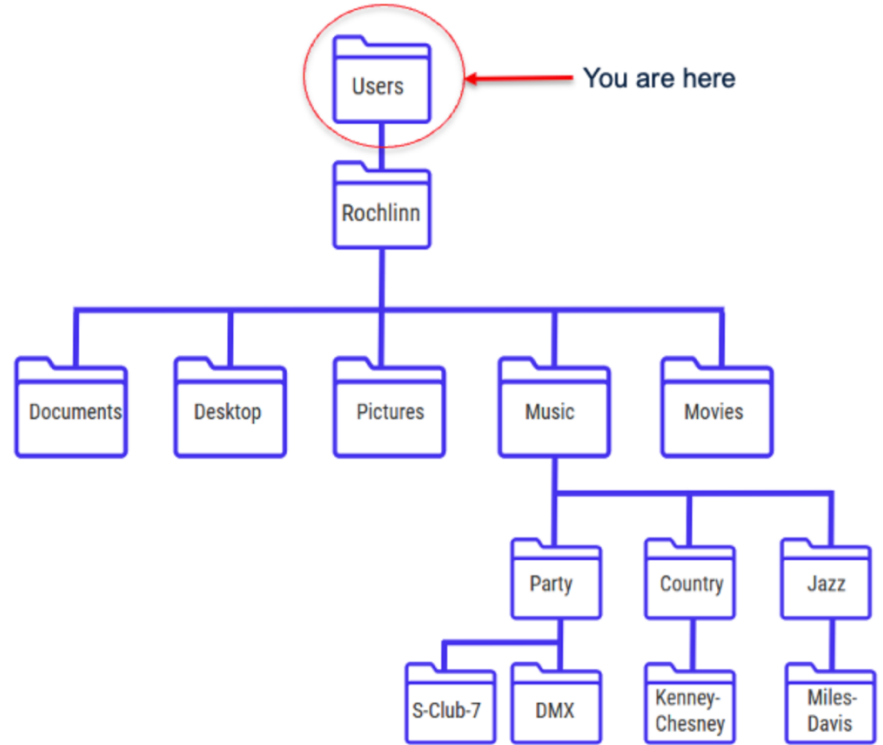
Answers

- What's the path to the Music directory?

/Users/Rochlinn/Music

- What's the path to the S-Club-7 directory?

/Users/Rochlinn/Music/Party/S-Club-7



Absolute vs. Relative Paths

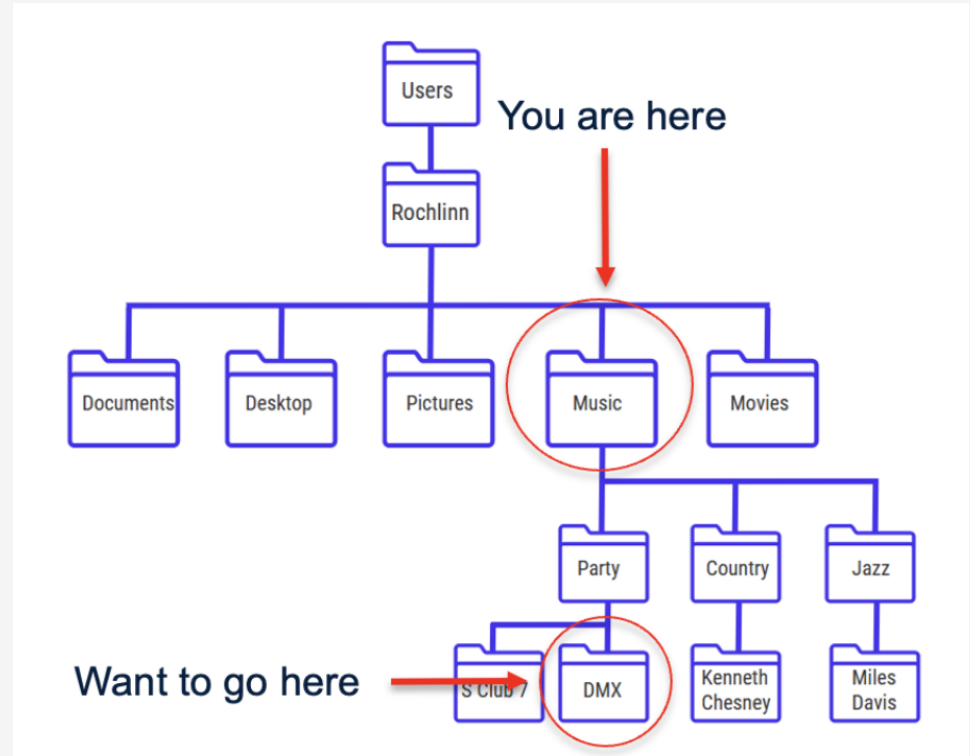
- When thinking about navigating through your files and directories, there are two paths that can be used:

Absolute paths: Includes the entire path from the root directory

Relative paths: Includes the path relative to where you are

Absolute Paths

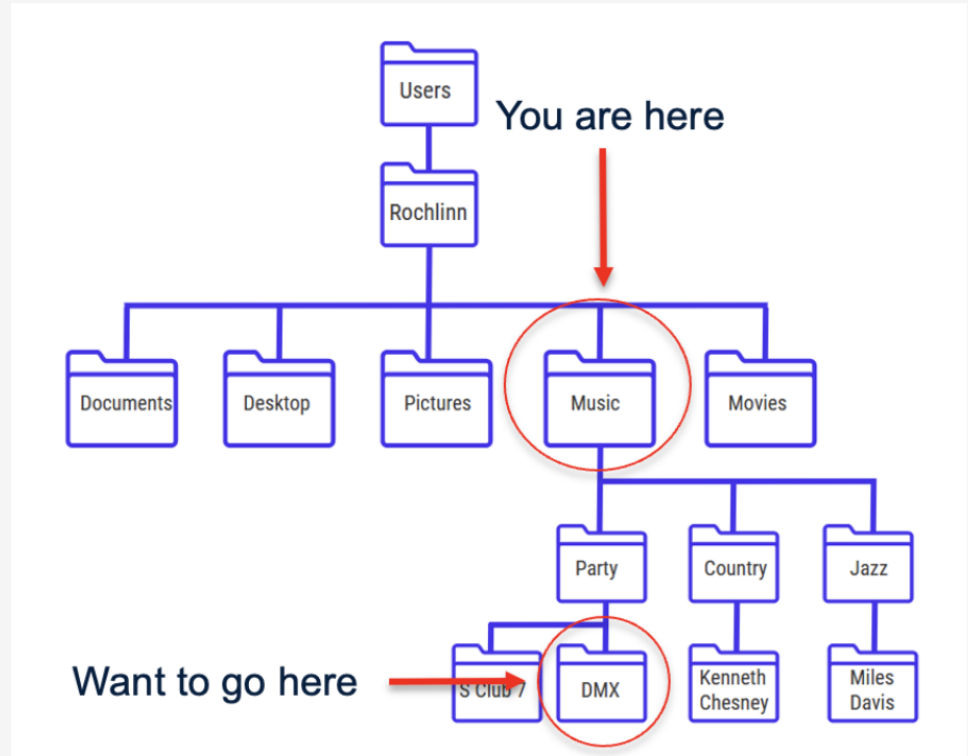
`/Users/Rochlinn/Music/Party/DMX`



Relative Paths

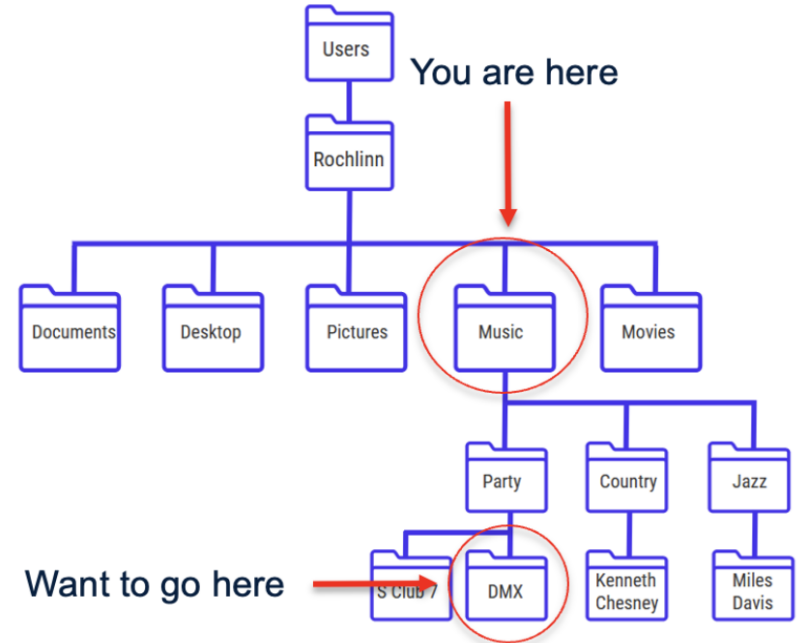
/Party/DMX

The path already assumes your location, so you don't need to write **/Users/Rochlinn/Music**



Note

It should be noted that relative paths only work going down the hierarchy, and not upwards.



Why Should You Care?



[source](#)

Why Should You Care?

- File paths tend to be a key point of struggle/issues for those learning coding languages.
- To import a dataset into RStudio (or other IDEs), and to export/save derived datasets, images, etc., you need to specify the file path.
- You don't need to be an expert in paths, but having a basic understanding of how this works is very helpful when approaching these tasks, and is something we'll start doing in the next block!

Questions?
