

## Lab 00 - Mac Ver.

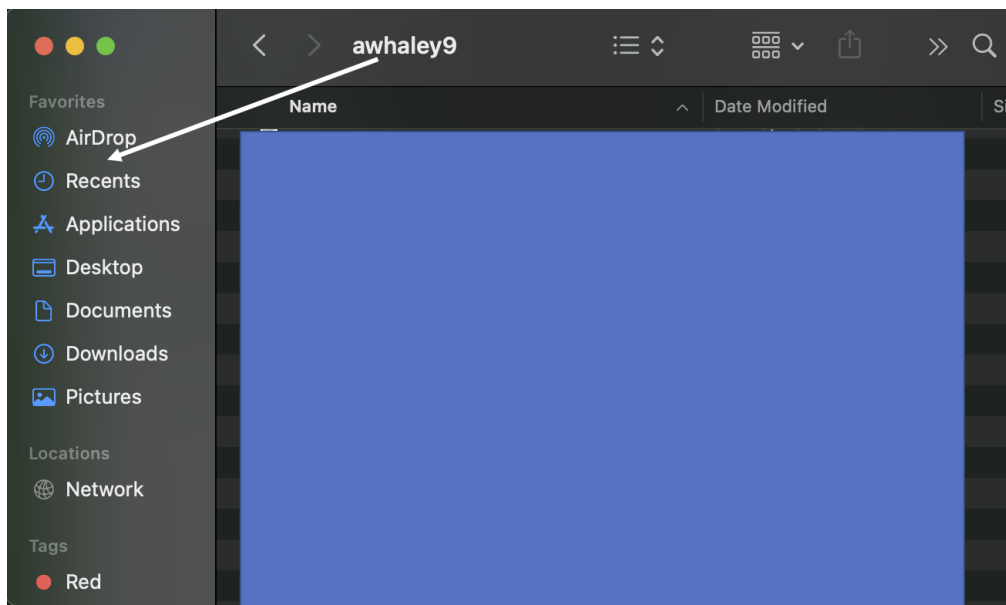
In this lab, we will be walking you through some basic, but essential, skills and concepts related to how you use your computer. Although all of you have used computers for most of your life, there are a lot of intricacies that the average user is not familiar with but as a future computer scientist you will need to know.

### Concepts covered in this lab:

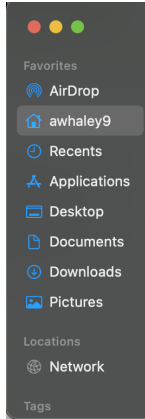
- Understanding your file system
- Setting up a course folder

### Part A

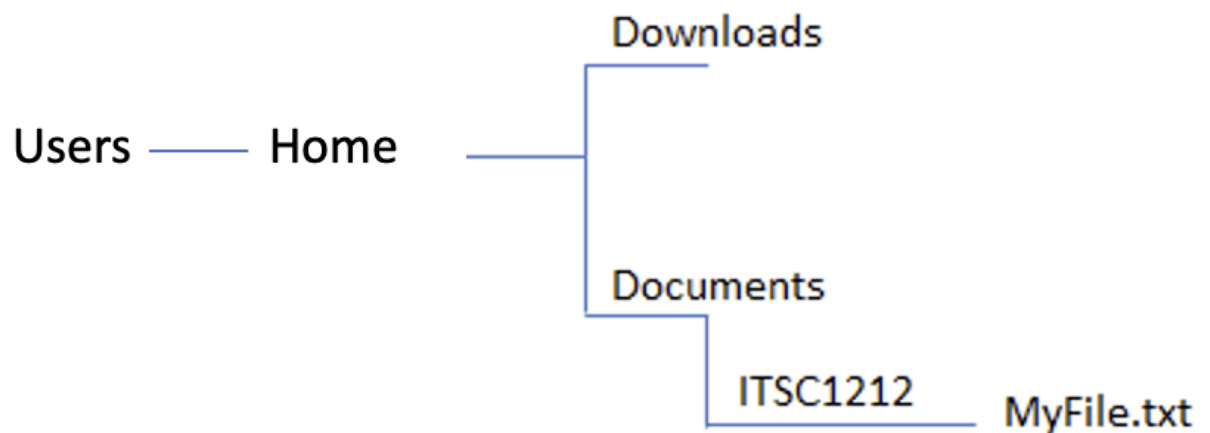
1. The file system on your computer is built in a hierarchical structure, with the hard drive at the base. The part of the hard drive where most of the files and applications you will use are located in what is nicknamed the Home directory, the name of which will match your username. By default, your system will hide this home folder from you, so it can be a good idea to add it to your shortcuts in Finder. Open a Finder window, then Select “Go” at the top of the screen. In this menu, you will see an option for the Home folder with a house icon next to it, click that.



2. When you move your cursor over the name of your Home folder, that house icon will appear again. Click that icon, and drag it into the favorites sidebar pictured above. Do not release the mouse until you see the bar between icons. If done correctly, your favorites bar will look something like this:



3. Now that your sidebar is correctly configured, there's one last thing to understand. The folders on your system are configured in a hierarchical structure, and you can imagine your home folder as the base of this structure (there are technically things that come before the home folder, but they are system level things you shouldn't mess with unless you know what you're doing). Imagine this structure like this



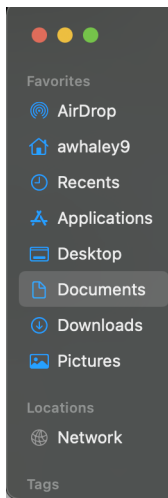
4. Understanding this structure is important, because of *filepaths*. A filepath is the way your system locates and uses files behind the scenes. Sometimes in your programming you'll need to use a filepath in order to point your program towards a file you want your program to use. A filepath to the MyFile.txt in the above example would be

`/Users/Home/Documents/ITSC1212/MyFile.txt`

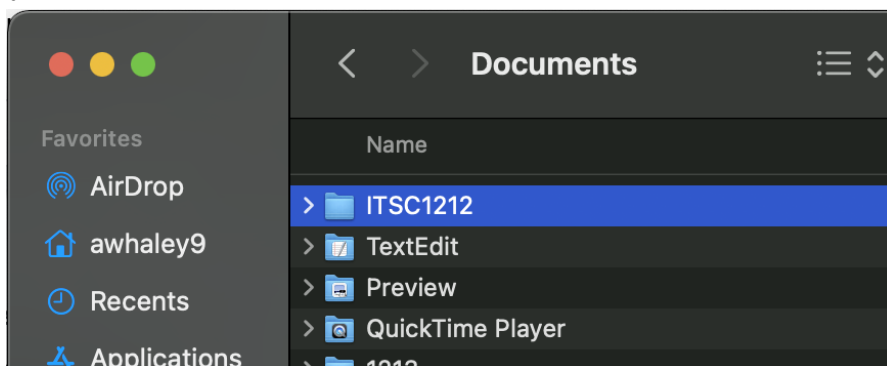
Notice that the folders are separated by forward slashes. Also, Home is in italics because you would need to substitute your actual username in its place.

## Part B - Creating a Course Folder

1. Now that you understand how file paths work, and can use your Finder to navigate your system, we need to create a folder where all the projects and files for this semester can live.
2. There is one important caveat to this however, and this is something you will need to remember for the rest of your time in this program: **Do not put spaces in your folder and file names.** The reason for this is because of the way filepaths are read. When you use a filepath, your system will (most of the time) want to read it as one continuous string of characters. However, if a folder or file name has a space in it, that can cause the system to break it into two pieces, neither of which can be the correct filepath on its own.
3. Launch Finder again if you closed it, and navigate to your Documents folder.



4. Click on File in the Menu bar at the very top of your screen, and choose the second option, New Folder (Shift+Command+N)
5. A new folder will appear at the top of your finder window, it's text highlighted so you can type in a new name for this folder. Name it **ITSC1212**.



6. Lastly, because we're going to be using this folder all semester and you will more than likely need to reference it often, add it to your favorites sidebar the same way you did your Home folder. Press and hold the blue folder icon next to "ITSC1212", and drag the icon below your home folder. If done correctly, your Favorites sidebar should look something like this:

