Basics Exercise: Mr File Finder

Covers

* Git
* Bash Scripting
* Docker

Introduction

You are a very important person in charge of managing the shared drive at a office, but someone’s messed up the shared drive, panic !

Create a simple program that will scan a folder, and organise all the files, copying files by type into folders.

Aka copy all the .jpg files into a sorted/jpg/ folder etc

Steps

* Setup a Github project for your work
* Create a bash script called “mr-file-finder.sh”
* Implement the following commands :  
  --version == prints out version of the application  
  create a variable called APPLICATION\_VERSION with a value of your choosing  
  print out the variable and exit, when –version flag sent

--help == prints out application help  
print of the instructions howto use this script and exit, when the –help flag sent

--scan-folder=DIR == folder to scan for files  
when –scan-folder=DIR given, make it scan that folder

* Dockerise command  
  create a dockerfile containing “mr-file-finder.sh”

Should scan mounted volume /data for files

* Put Dockerised command on dockerhub

Hints

* Git 101

<https://docs.github.com/en/get-started>

* How to get a list of files  
  <https://man7.org/linux/man-pages/man1/find.1.html>
* How to create command line flags   
  <https://linuxhint.com/getopts-usage-example-linux/>
* How to find patterns in bash  
  <https://www.cyberciti.biz/faq/howto-use-grep-command-in-linux-unix/>
* Regular Expressions  
  <https://en.wikipedia.org/wiki/Regular_expression>
* How to loop in bash

<https://www.cyberciti.biz/faq/bash-for-loop/>

* Dockerfile reference

<https://docs.docker.com/engine/reference/builder/>

* How to push/create repo in docker-hub

<https://docs.docker.com/docker-hub/repos/>