

CMPE 230 HW2 Filelist Project

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How to run

Download the 'filelist.py' file. Use these commands in the console after replacing the location of the file in the command.

```
chmod +x filelist.py
export PATH=$PATH:/<INSERT THE LOCATION TO HERE>
```

Implementation

Our code can be summed up to this.

1. Detect the options and their parameters from the given arguments.
2. Keep the needed info in variables.
3. Put rest of the arguments in a list since these are the directories.
4. Acquire the files in this directories and put them in a list.
5. Apply the options.

Options

“-before <datetime>” and “-after <datetime>”

Uses `getmtime()` function to get last modified of given files and compares them with given parameter date.

“-match <pattern>” Uses regular expression matching on every file found.

“-bigger <int>” and “-smaller <int>” Uses `os.path.getsize()` function to find every file in filelist's size in bytes, then compares with given parameter.

“-delete” Uses `os.remove()` function to delete files in filelist.

“-zip <zipfile>” Uses zipfile library to create archive of given files.

“-duplcont” and “-duplname”

Uses disjoint set data structure to group files into sets then sorts them in the needed order.

“-stats” Keeps track of every stat necessary while traversing the system for files or after applying given parameters. Prints the stats after the filelist.

“-nofilelist” No file listing will be printed

Conclusion

We learned about file manipulation through python code.