

Directory Backup Python Script

Software Name: Directory Backup Python Script

Version: 1.0

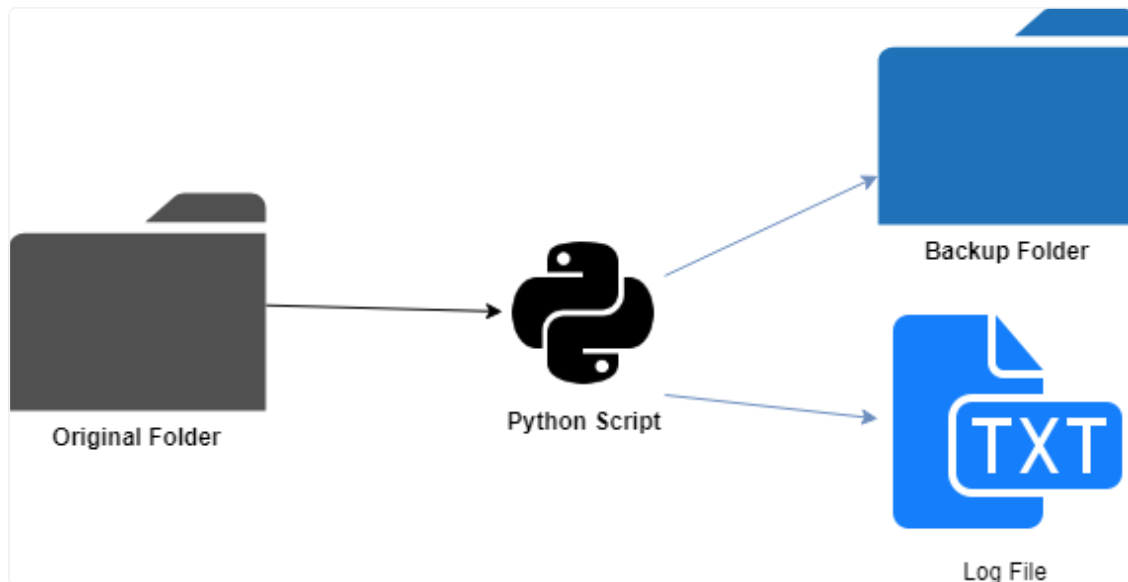
Date: 📅 Dec 26, 2022

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Software summary

This is a short Python Script that allows users to create backup directories out of existing directories and also automatically backup any additions or changes to the original directory. All actions are being logged.



CHANGELOG

Version 1.0 (26 Dec 2022)

- Software Launch

Requirements

- **One Way Synchronization:** During initialization, the content of the replica folder should be modified to exactly match content of the source folder.
- **Synchronization** should be performed periodically.
- **Synchronization:** File creation/copying/removal operations should be logged to a file and to the console output
- **User Inputs:** Folder Paths, Synchronization interval and log file path should be provided using the command line arguments.
- **No usable of third-party libraries** that implement folder synchronization.

How-to guide

In order to utilize the Python Script and backup your desired directories you can follow these simple steps:

Step 1: Interval Time

For this step you're required to provide an integer. This integer represents the amount of seconds between the backup intervals.

For Example, if you want to synchronize your backup folder every minute you can type 60 and press Enter.

```
-----Welcome-----  
How often would you like to perform a backup (in seconds)
```

Right after the input:

```
-----Welcome-----  
How often would you like to perform a backup (in seconds)  
5  
Your interval time has been set to : 5
```

Step 2 : Original Folder Path

In this part, you'll have to provide the path to the folder you want to back up

```
Please provide the path to the original folder
```

- 1 //You can enter a folder path like the following one underneath
- 2 C:\Users\Theofanis\Desktop\Python Project\original_folder

```
Please provide the path to the original folder  
C:\Users\Theofanis\Desktop\Python Project\original_folder  
Original Folder Path set to: C:\Users\Theofanis\Desktop\Python Project\original_folder
```

Step 3 : Backup Folder Path

In this part, you'll have to provide the path to the new backup folder.

```
Please provide the path to the new backup folder
```

```
Please provide the path to the new backup folder  
C:\Users\Theofanis\Desktop\Python Project\backup_folder_123  
Original Folder Path set to: C:\Users\Theofanis\Desktop\Python Project\backup_folder_123
```

Step 4: Log File Folder Path

In this part, you'll have to provide the path to a folder that the log file will be created in.

```
Please provide the folder path to the new log file location
C:\Users\Theofanis\Desktop\Python Project
Log File Folder Path set to: C:\Users\Theofanis\Desktop\Python Project
Initializing Backup... Time: 2022-12-26 22:12:05.061048
```

Right after entering the log file folder, the script runs and keeps synchronising the folders

Examples of what the console looks like during usage

```
Initializing Backup... Time: 2022-12-27 01:10:58.601053
---DIFFERENT FILES DETECTED--- Backup Complete Time: 2022-12-27 01:11:13.009057
---DIFFERENT FILES DETECTED--- Backup Complete Time: 2022-12-27 01:11:16.015894
---DIFFERENT FILES DETECTED--- Backup Complete Time: 2022-12-27 01:11:19.023063
---DIFFERENT FILES DETECTED--- Backup Complete Time: 2022-12-27 01:11:28.035022
```

Examples of what the log file looks like during usage

```
File Edit Format View Help
Initializing Backup... Time:27-Dec-2022 (01:10:58.601053)
---DIFFERENT FILES DETECTED--- Backup Complete Time:27-Dec-2022 (01:11:13.009057)
---DIFFERENT FILES DETECTED--- Backup Complete Time:27-Dec-2022 (01:11:16.015894)
---DIFFERENT FILES DETECTED--- Backup Complete Time:27-Dec-2022 (01:11:19.023063)
---DIFFERENT FILES DETECTED--- Backup Complete Time:27-Dec-2022 (01:11:28.035022)
```