UNIX PROJECT

DEMO

**unxazu01**:**~/Project**$ cd ..

**unxazu01**:**~**$ touch testfile

**unxazu01**:**~**$ cd Project

**unxazu01**:**~/Project**$ ls ..

**NewClass** bbc **datFiles.txt** f6 f9 **ls** **mydir1** nf testfile **tradingSystem**

**Project** **bigfile.txt** f10 f7 **hardlink1** **myProgram** **newHomeList.txt** **recyclebin** tf4

**accounts** **bin** f5 f8 **homeList.txt** **mydir** **newUsers.txt** **sortedByName.txt** tf5

**unxazu01**:**~/Project**$ bash recycle ~/testfile

**unxazu01**:**~/Project**$ ls ~/recyclebin

**file1** **file3\_915315** **file4\_915604** newfile\_914420 testfile\_913525 tf1\_917347 tf2\_917435 tf3\_917436 tf4\_917437

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**unxazu01**:**~/Project**$ cat ~/.restore.info

Filename : AbsolutePath

f5\_917350 : /home/local/FDMGROUP/vinaya.krishna/f5

f6\_917448 : /home/local/FDMGROUP/vinaya.krishna/f6

testremove\_914420 : /home/local/FDMGROUP/vinaya.krishna/testremove

testremove\_914420 : /home/local/FDMGROUP/vinaya.krishna/testremove

newfile\_914420 : /home/local/FDMGROUP/vinaya.krishna/newfile

newfile\_914420 : /home/local/FDMGROUP/vinaya.krishna/newfile

nf\_917314 : /home/local/FDMGROUP/vinaya.krishna/nf

testfile\_913525 : /home/local/FDMGROUP/vinaya.krishna/testfile

**unxazu01**:**~/Project**$ bash restore testfile\_913525

Do you want to restore the file?

y

Restoring file

**unxazu01**:**~/Project**$ cat ~/.restore.info

Filename : AbsolutePath

f5\_917350 : /home/local/FDMGROUP/vinaya.krishna/f5

f6\_917448 : /home/local/FDMGROUP/vinaya.krishna/f6

testremove\_914420 : /home/local/FDMGROUP/vinaya.krishna/testremove

testremove\_914420 : /home/local/FDMGROUP/vinaya.krishna/testremove

newfile\_914420 : /home/local/FDMGROUP/vinaya.krishna/newfile

newfile\_914420 : /home/local/FDMGROUP/vinaya.krishna/newfile

nf\_917314 : /home/local/FDMGROUP/vinaya.krishna/nf

**unxazu01**:**~/Project**$ ls ..

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**Project** **bigfile.txt** f10 f7 **hardlink1** **myProgram** **newHomeList.txt** **recyclebin** tf4

**accounts** **bin** f5 f8 **homeList.txt** **mydir** **newUsers.txt** **sortedByName.txt** tf5

**unxazu01**:**~/Project**$ ls ~/recyclebin

**file1** **file3\_915315** **file4\_915604** newfile\_914420 tf1\_917347 tf2\_917435 tf3\_917436 tf4\_917437

**unxazu01**:**~/Project**$

**Recycle script**

#!/bin/bash

#To recycle a file i.e, to move a file to recycle bin directory

#check if file is passed

if [ $# -eq 0 ];

then

echo "No filename provided"

exit 1

fi

#check for every file in the argument

for file in $\*

do

if [ ! -e $file ]

then

echo "File does not exist."

exit 1

fi

if [ -d $file ]

then

echo "Cannot remove Directory"

exit 1

fi

if [ $file = "recycle" ]

then

echo "Attempting to delete recycle - Operation aborted"

exit 1

fi

if [ ! -d ~/recyclebin ]

then

mkdir ~/recyclebin

fi

abs\_path=$(readlink -e $file)

#echo $abs\_path

#get the basename of the file

file\_name=$(basename $file)

#echo $file\_name

#gets the inode of the file

inode=$(stat -c "%i" $file)

#echo $inode

# saves the file as filename\_inode"

name=$file\_name'\_'$inode

#readlink to get the absolute path of the file and store it in a hidden file restore info

if [ ! -e ~/.restore.info ]

then

touch ~/.restore.info

echo "Filename : AbsolutePath " >> ~/.restore.info

fi

#abs\_path=$(readlink -e $file)

sed -i "/$name/d" ~/.restore.info

echo "$name : $abs\_path " >> ~/.restore.info

#move the file to recyclebin

mv $file ~/recyclebin/$name

echo "File removed"

done

RESTORE SCRIPT

#! /bin/bash

# To restore the files from recyclebin to its original place

#check if file is passed

if [ $# -eq 0 ];

then

echo "No filename provided"

exit 1

fi

#check for every file in the argument

for file in $\*

do

# if the file already exists in recycle bin

if [ ! -e ~/recyclebin/$file ]

then

echo "File does not exist."

exit 1

fi

# get file name and file path

file\_name=$(basename $file)

abs\_path=$(grep $file\_name ~/.restore.info | cut -d":" -f2)

file\_path=$(grep $file\_name ~/.restore.info | cut -d":" -f2 | xargs dirname)

file\_n=$(basename $abs\_path)

file\_copy=$file\_n"copy"

#check if the file exists in the directory and overwrite or restore

#delete the info from .restore.info file

if [[ -e $file\_path/$file\_n ]]

then

echo "file already exists"

echo "Do you want to replace the existing file (Y?N)?"

read answer

case $answer in

[yY])echo "Overwriting file"

mv ~/recyclebin/$file $file\_path/$file\_n

sed -i "/$file\_name/d" ~/.restore.info;;

[nN])mv ~/recyclebin/$file $file\_path/$file\_copy

exit 0;;

\*) echo "invalid response"

exit 1;;

esac

else

echo "Do you want to restore the file?"

read response

case $response in

[yY]) echo "Restoring file"

mv ~/recyclebin/$file $file\_path/$file\_n

sed -i "/$file\_name/d" ~/.restore.info ;;

[nN]) echo "Not restored";;

\*)echo "Invalid response"

exit 1;;

esac

fi

done