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CS419: Computer Security

September 30, 2020

Assignment 3 – Project 1 ReadMe

Info:

This program was run and tested on the Rutgers iLabs and uses Python 2. There are no other packages that need to be installed in order to run the program. The program will create all the necessary files to store data and read from it.

Before running the program:

Please put the file, “portal.py”, into an **empty** folder/directory before running the commands.

Examples of running the program:

I = Input | O = Output

General (checks to make sure a command and arguments are given)

I: python portal.py

O: Error: Please include a command and the proper arguments.

AddUser

I: python portal.py AddUse

O: Error: Please use a proper command.

I: python portal.py AddUser "C"

O: Error: Missing arguments.

I: python portal.py AddUser "" ""

O: Error: Username cannot be empty.

I: python portal.py AddUser "Chris" ""

O: Success

I: python portal.py AddUser "Chris" ""

O: Error: User already exists.

I: python portal.py AddUser "Mark" "pass"

O: Success

Authenticate

I: python portal.py Authenticate "" ""
 O: Error: Username cannot be empty.

I: python portal.py Authenticate "Chris" ""
 O: Success

I: python portal.py Authenticate "Mark" ""
 O: Error: Password incorrect.

I: python portal.py Authenticate "Time" "pass"
 O: Error: User not found.

SetDomain

I: python portal.py SetDomain "" "dom"
 O: Error: Username is empty.

I: python portal.py SetDomain "Chris" ""
 O: Error: Domain name is empty.

I: python portal.py SetDomain "Chris" "Secret"
 O: Success

I: python portal.py SetDomain "Jack" "Secret"
 O: Error: User not found.

I: python portal.py SetDomain "Mark" "Secret"
 O: Success

*** will report "Success" if a User is inserted into a domain that he/she is **already** in ***

*** can successfully add multiple users into a domain***

DomainInfo

I: python portal.py DomainInfo ""
 O: Error: Domain name is empty.

I: python portal.py DomainInfo "random"
 O:

I: python portal.py DomainInfo "Secret"
 O: Mark
 Chris

SetType

I: python portal.py SetType "" ""
 O: Error: Object name is empty.

I: python portal.py SetType "SFile1" ""
 O: Error: Type name is empty.

I: python portal.py SetType "SFile1" "Secret"
 O: Success

*** will report "Success" if an Object is inserted into a Type that it is **already** in ***

*** can successfully add multiple objects into a type***

TypeInfo

I: python portal.py TypeInfo ""
 O: Error: Type name is empty

I: python portal.py TypeInfo "Secret"
 O: SFile1

I: python portal.py TypeInfo "Random"
 O:

AddAccess

I: python portal.py AddAccess "read" "Secret" "Secret"
 O: Success

I: python portal.py AddAccess "" "Secret" "Secret"
 O: Error: Operation name is empty.

I: python portal.py AddAccess "read" "" "Secret"
 O: Error: Domain name is empty.

I: python portal.py AddAccess "read" "Secret" ""
 O: Error: Type name is empty.

* will report "Success" if a Domain and Type is inserted into an Operation that it is **already** in *

* can successfully add Domain and Type pairs into an Operation*

* can successfully create new Domains and Types as well *

CanAccess

I: python portal.py CanAccess "" "" ""

O: Error: Operation name is empty.

I: python portal.py CanAccess "write" "" ""

O: Error: User name is empty.

I: python portal.py CanAccess "write" "Secret" ""

O: Error: Object name is empty.

I: python portal.py CanAccess "write" "Chris" "SFile1"

O: Success

* will report "Error: Access Denied." for all other cases *