

CIT383 – Scripting 1

Lab 6

User management

Objectives:

- Demonstrate ability to create users with requisite credentials
- Demonstrate ability to modify credentials of existing users
- Demonstrate ability to delete users based on given criteria

Tasks:

In this lab, you will write a Python script that would serve as a tool for managing user accounts on a Linux System. Your script should perform the three basic user management tasks described in the steps below:

1. Implement a function that determines if a username already exists in the system. This function accepts a given username and returns True or False depending on the existence or otherwise of the username in the system. **10 PTS**
2. Implement a function that creates a new user. For this task, your function should accept the new user's full name (first and last names), and username. Your script should prompt for the real name and username for each user. Use an in-built function in python to generate the password for each user. Validate the new user account by using the **function in 1** above to determine if the username already exists or not prior to adding the new user account. Your function should return a Boolean value, indicating the success or otherwise of the operation. Display an appropriate message if the user already exists. **10 PTS**
3. Implement a function that removes a user account from the system. If the user account to be deleted does not exist in the system, display an appropriate message. The home directory and all files for the user must be deleted as part of the removal. Validate the user account to be deleted by using the **function in 1** above to determine if the username already exists or not prior to deleting the user account. **5 PTS**
4. Implement a function that modifies an existing user account. Your function should give the following options:
 - Lock the account
 - Change the real name associated with the account

Validate the user account to be modified by using the **function in 1** above to determine if the username already exists or not. **10 PTS**

5. Implement a function that provides a text-based menu system from which the user can choose any of the functionalities described above. When the user makes a choice, this

function needs to request the information needed from the user and perform the requested functionality. For each requested functionality, print an appropriate response to the user. Remember to validate options selected by the user when your script is run.

10 PTS

6. Comment your code appropriately

5 PTS

NB: Your menu function (described in step 5) should be the first function to be called when your tool is executed. Once the menu function is called, the user will be required to select one of the options and, depending on the user's choice, one of the other functions should be invoked.