CENTRE ESPECÍFIC D´EDUCACIÓ A DISTÀNCIA DE LA COMUNITAT VALENCIANA

FIRST TERM

Assessable Activity

Computer Systems
CFGS DAW

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Nomenclature

Throughout this unit different symbols will be used to distinguish important elements within the content. These symbols are:

First Term: Assessable activity

1. Objective

To design and prepare a folder structure by assigning the necessary permissions.

2. Description

The following people work in a repair company:

- **Jackson**, who is the supervisor
- **Jenny**: plumber
- **Harrison**: plumber
- **Brianna**: electrician
- **Edward**: electrician
- **River**: owner of the company (the Boss)

The boss has bought a new disk for the office computer, and from now on they are going to store the data of the jobs they do there. They will access the disk in the folder `/company`

Inside that folder, they want to have a folder `Jobs` where there will be three sub-folders:

1. `Electricity`, where only electricians can read and write.
2. `Plumbing`, where only plumbers can read and write. This folder will have a sub-folder (which no one can delete) called "`no chop here`". In this folder, electricians will be able to read and write, but plumbers will only be able to see it.
3. `Reforms`, where plumbers and electricians can read and write.

In addition, they want a `Holidays` folder (at the same level as `Jobs`) where each worker can create a file with their requested holidays. Nobody should be able to modify the holidays of others.

Supervisors (and the owner) should be able to see everything.

The files created by a user inside a folder should have the same access of that folder. For example, if a plumber creates a file inside `Plumbing` the other plumbers must be able to edit that file, but not the electricians.

You can assume that there won't be any other users in the system, so you can give read permissions to all users if needed.

You don't need to protect the folder "`no chop here`" for deletion.

By "read and write", they mean that they should be able to use the folder normally: create and delete folders and files, rename files, etc. but they should not be able to delete the folder.

3. DELIVERABLES

The deliverable file will be the template file provided with the task filled by you with your own solutions to each section. The extension of the file delivered should be .odt.

3.1 Section 1

Explain how would you do to access the disk, assuming it has been just installed in the computer. Indicate, if needed, what orders would you execute and what files would you modify. The size of the disk will be 10Gb. The disk must be mounted on the required location when the machine boots up.

3.2 Section 2

List the commands you would need to run to prepare the users' structure. You must create the users and groups **in a non-interactive way** (the commands mustn't require any inputs from the user once executed) The users must have `/bin/bash` as their shell.

All the user names must be lowercase.

3.3 Section 3

The users must be able to log into the system. Set the password for all of them in a single command with `chpasswd`, using a file containing the passwords information (you can have one line for each user) The password must be `firstlogin` for each user.

Explain the command needed to do it and the contents of the file.

3.4 Section 4

Show the orders for creating all the other folders from `/company` **using relative paths**.

3.5 Section 5

Show the orders for giving the correct permissions to the different folders.

You must explain what are you trying to achieve with each command, and why.

3.6 Section 6

Display the output of `tree -pugfd /company` (you will need to have the command `tree` available in your system)

You must write all the commands as text. **All the screenshots attached will be removed before correcting the exercise.**