Intro Linux Project

Using Oracle VM VirtualBox, build a minimal install of Ubuntu server 16.04. This means that you should not be using a Graphical User Interface (GUI), everything MUST be done through command line only.

Using the "NAT" network interface is probably the best way to ensure that your project will work regardless of what network it is connected to (I.e at home vs on campus.) Even though you may be given a DHCP IP address initially, you **MUST CONFIGURE A** STATIC**, PRIVATE IP ADDRESS AFTER INSTALLATION.**

Immediately after installation is complete, set up a basic IPtables firewall to allow SSH, loopback, and HTTP connections.

You will need to use PuTTy (or your preferred SSH client) to configure your server. The VirtualBox console interface should be used only for the initial installation, networking, and SSH setup, so you should be exclusively using the SSH window from this point onward.

Create three groups titled “grad”, “ugrad”, and “staff”

Grant your staff group Super User (sudo) privileges.

Create three users and assign the first to have “grad” as the primary group, the second to have “ugrad” as the primary group, and the third to have “staff” as the primary group.

Create three directories: /grad, /ugrad, and /everyone

You will need to configure permissions correctly so that users in the grad and ugrad groups are the only ones who can write to their respective directories. Anyone should be able to write to the /everyone directory, but they should not be able to delete files belonging to other users.

Using a package manager or by compiling from source, install a LAMP stack.

Create a MySQL database and write a very simple website in PHP that interacts with your MySQL database in some way. Reading information, adding information, etc.

Your Apache installation will be used to host the website, which should be viewable through a web browser on your host computer.

This will demonstrate that your compiled programs are working correctly.

Be able to explain the steps you took to accomplish these tasks and what you learned from this project. You will also need to complete this project in such a way that you can show us the results in person, such as on a laptop or on a desktop computer that can be remotely accessed.