



LINUX

Ubuntu ISO Customization & Installation Script Development

Project 2: Ubuntu ISO Customization and Installation Script Development

Objective:

The aim of this project is to develop a script that modifies an Ubuntu installation ISO to include the installation of custom applications, download files, run scripts, and modify settings. This is a significant step towards automating and customizing the Ubuntu installation process.

Requirements:

1. The script must download a specific version of the Ubuntu ISO.
2. The script must be able to mount the ISO, modify it, and then save the changes.
3. The script must configure a custom CSI Linux grub2 boot screen.
4. The script must incorporate the installation of custom Debian (.deb) packages (see Project 1). These packages should be installed automatically during the Ubuntu installation.
5. The script must include the downloading of additional files from specified URLs and place these files in a specific directory `/opt/csitools/`.
6. The script should run additional shell scripts as part of the installation process. The paths to these shell scripts will be in `/opt/csitools/build/`.
7. The script should create the user “csi” with the password “csi” and add that user to the sudoers group.
8. The script should modify specific system settings like timezone, locale, and keyboard layout.
9. The script should create an output ISO, preserving the original bootable nature of the input ISO.

Deliverables:

1. A shell script satisfying the requirements.
2. A comprehensive step-by-step documentation on how to run the script, how the script works, and any configuration files created.
3. A custom Ubuntu ISO created using the script for both AMD64 and ARM.

Evaluation Criteria:

1. Correct downloading and mounting of the specified Ubuntu ISO.
2. Successful installation of the Debian package during the Ubuntu installation.
3. Correct downloading of additional files and execution of shell scripts.
4. Appropriate modification of system settings.
5. Quality and clarity of the step-by-step documentation.

Instructions for Volunteers:

Please begin your work by reviewing the requirements and evaluation criteria above. Upon completion of the project, you will need to submit the shell script and the custom Ubuntu ISOs, along with your step-by-step documentation on how to use the script. We look forward to your contributions and thank you for your support in advancing Ubuntu customization.

Resources:

- Ubuntu ISO: <https://ubuntu.com/download/desktop>
- ISO Master: <https://sourceforge.net/projects/isomaster/>
- ISO Modification:
<https://help.ubuntu.com/community/InstallCDCustomization>
- System Settings: <https://help.ubuntu.com/stable/ubuntu-help/prefs-system-time.html.en>