



LINUX



Modular Debian Package Creation and Installation

Project 1: Modular Debian Package Creation & Installation

Objective: The objective of this project is to develop a Debian (.deb) package that installs three specific applications into the /opt/csitools directory and seamlessly integrates these applications into a custom menu system. This work will contribute significantly to making CSI Linux more modular, thus better meeting the diverse needs of its users. Furthermore, the completion of this task will also be a significant step towards streamlining the process of building an installation .iso for CSI Linux.

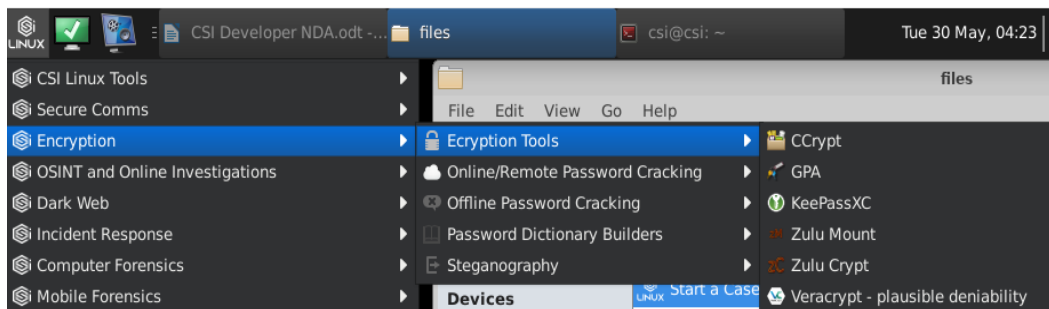
Requirements:

1. The .deb file must install three applications into /opt/csitools, with executable flags set for each application.
2. The .deb file must incorporate three application icons into the menu system, under a custom .menu (CSI Linux) and custom .directory (CSI Tools), and new .desktop file per application following the provided structure:

```

    \ \ \
    [CSI Linux]
      |
      |---[CSI Tools]
          |
          |---[Application 1]
          |---[Application 2]
          |---[Application 3]
    [Settings]
    [Accessories]
    \ \ \
  
```

Like this example:



3. The .deb file must contain a copyright file:

4. The software needs to be “non-free”.
5. The package priority must be “required”.
6. The package needs to install an icon called “CSI-logo.ico” to be used in the .menu, .directory, and .desktop so they all have the same icon.
7. Owner of the installed software should be “root” with SUID set so all users can execute them.

Deliverables:

1. A .deb file satisfying the requirements.
2. All the source files in the correct directory structures that were used during the build.
3. A comprehensive step-by-step documentation on how to create the .deb file using `dpkg-deb --build`.

Evaluation Criteria:

1. Correct installation of the three applications into /opt/csitools with appropriate executable flags.
2. Successful integration of application icons into the menu system, following the specified hierarchy.
3. Quality and clarity of the step-by-step documentation on creating the .deb file.

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 .deb file and source files/folders, along with your step-by-step documentation on how the .deb file was created to support@csilinux.com. We look forward to your contributions and thank you for your support in advancing CSI Linux.

Project 1 Resources:

- Menu Specification:
<https://freedesktop.org/wiki/Specifications/menu-spec/>
- xdg-desktop-menu
<https://man.archlinux.org/man/xdg-desktop-menu.1>
- Debian Packages:
<https://www.debian.org/doc/debian-policy/ch-archive.html#s-subsections>
- Creating Debian Packages:
<https://www.iodigital.com/en/history/intracto/creating-debianubuntu-deb-packages>
- Debian New Maintainers' Guide:
<https://www.debian.org/doc/manuals/maint-guide/build.en.html>
- Guide to Build Binary Debian (.deb) Packages:
<https://www.internalpointers.com/post/build-binary-deb-package-practical-guide>