Unix 420-321-VA

Section: 00001

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Lab #10

## Project description/goals

Our goal is to present a desktop built specifically for the media industry using the debian operating system. We will create a working iso image with specific packages for media professionals. This includes providing them with software combinations that are customized to them (such as Photoshop alternatives, video and audio editing, painting tools, etc).

## Platform of choice

This project will be completed on Github and will be updated to the most recent version. We will be building the system using Oracle VM Virtual Machine. We found some packages suitable for users with professional needs for video, audio, and photo editing on linux distributions after conducting some online research. GIMP, Pinta, MyPaint, Audacity, and Shotcut are some of the applications that are available.

## Requirements

• *The creation of multiple user accounts:* When using our specific target operating system, account creation is required. Users can create as many accounts as they want. We will also use different accounts to assess the usability of this project during development.

• *Process or service management*: We'll keep track of the progress during the creation process and record it. In order to avoid running into the same issue again. At the end, we'll provide

step-by-step installation instructions as well as some additional information to cover as many possibilities as possible.

• *Basic system security*: The Debian distribution can guarantee basic system security. Backup data to prevent data loss due to system failure. Establish strong passwords to enhance the confidentiality and availability of the system.

• *Automated tasks using a script language*: Shell Scripting will be used in the linux terminal for this project. We'll provide you with the commands you'll need to achieve our task.

• *Custom Live Image:* We will be using Debian distribution to create a live image of a media-based OS of our own.

**Major technical solutions compared**

Solution 1 -Debian :

Debian has the advantage of being faster, lighter, and more stable than Ubuntu. It's also the distribution to which we've been exposed the most this semester. However, Debian does not necessarily target the most recent version of the package. Debian will require more experienced operators, as it will be more complicated than Ubuntu, with manual configuration.

Soulution 2 -Ubuntu:

Ubuntu offers the advantage of having Ubuntu Studio, which integrates photo, video, and audio editing functions. It has an easy installation procedure. Ubuntu isn't overly demanding on the hardware in your PC. It is quite easy for members of the community to become involved in addressing pertinent issues. Its disadvantage is that some applications are incompatible with Ubuntu.

## Timeline

Week 1: Setting up Github repository + Research + Try to create a Live Iso Image

Week 2: Adding features and application for media domain (Optional: upon System Installation: audio only apps, image only apps, etc).

Week 3: Implementing guided installation for the first time (or the option for a typical installation for the experienced one).

Week 4: Project Closing (License) and Presentation Preparation

## Team composition:

Jiamin Yuan & Jonathan Dimitriu