VANIER OS – PROJECT PROPOSAL

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I. Description:

Vanier OS is a Linux distribution that will be Debian-based and use the Debian Live Tool Kit. We chose Debian instead of Ubuntu (which was one of our choices) because Debian is more lightweight and since we're considering running our system at school, it would be more reliable to go for Debian since the school computers are old (hardware-wise). Furthermore, the Debian Live Tool Kit corresponded better to our needs than the Ubuntu one.

Design idea for Desktop:

II. Functionalities & Features:

VanierOS will come pre-installed with all the software needed in our Computer Science programs at Vanier (examples: Greenfoot, Eclipse, Netbeans, VMWare, VirtualBox, Visual Studio, Visual Studio Code, Xampp, etc). We also want to add built-in features to better support Git and GitHub.

Ideas for scripting part of the project:

- Alerts when the user has committed but not pushed changes or automatically push changes once a certain period of time has gone by after commit.
- Having “tip” alerts for IDEs & Git functionalities (like recommended uses).
- Displaying a message asking if the user wants to connect their current “project” to a GitHub repository and automatically staging changes (obviously dependent on what ide or interface is being used – some have git support, others don’t).
- Having a timer displaying how long the system has been running (pauses when AFK)
- We can also use the session timer to display user-friendly messages such as (when timer > 3h, take a break you worked hard!, if it’s ~1pm, “don’t forget to eat lunch”)
- Send an automatic “greetings” email whenever a new user downloads or uses our system and adds in their email at registration.
- At power up, check local weather and display message (if it’s rainy, “Bring an umbrella”, if it’s cold, “Don’t forget your jacket!”, etc).
- Implement auto-completion features (for command line mostly)
- Automatically update pre-installed software
- Keep track of user “active times” – most likely using our timer
- Keep track of downloaded files (in case the same one is requested to be downloaded a second time)
- Clean out recycle bin when applicable

Observations: these are some of the ideas we had and some of them are extremely challenging and may require use of other resources that we haven't necessarily learned. We were just brainstorming on how to make a more user-friendly Linux distribution that could someday be used at our school (especially since it will come pre-installed with all the needed software for our Computer Science programs). This was an idea we had outside of the class scope for our club but that we hope we will be able to achieve (at least partly). We want this project to be something we can keep working on gradually over our time at Vanier and even after we graduate.

It will also be hosted on GitHub and be licensed under a FLOSS license (obviously).

Check out Softwares for the list of software we use in our program and that we might add to our system (list compiled by our club members).

III. Why We Chose This:

This whole project stemmed from our participation in the FLOSS club at school. We were thinking of making a live system that could be used instead of the Windows image we have running on the school computer (it would be a FLOSS alternative but would still contain needed tools + would be educational for students starting out in Computer Science) - kind of like a first introduction to Linux and FLOSS.