**Maintaining & Updating the Student Interface**

**Preconditions:**

The web interface is to be hosted in Google Chrome. In order to run the Java program that dynamically generates the interface, there needs to be a Java Runtime Environment installed. This program is a runnable .jar file. It runs as a Chron Job, every time the xml file is updated and saved the program runs and generates an updated interface.

The interface opens educational software when the user clicks the “Start Program” button on the software’s page. This works by calling an application launcher script and a desktop launcher script. The “open\_app.sh” is in the /bin/ folder and the “appurl.desktop” is in the /usr/share/applications/ folder. There is a copy of these in the /Interface/openapp/ folder. These two files need to be copied to their appropriate folder as follows:

/bin/open\_app.sh

/usr/share/applications/appurl.desktop

In order for these two files to work, update the mime types database cache. Run the following command:

sudo update-desktop-database

To grant access privileges to the open\_app.sh script run the following command:

chmod +x ~/bin/open\_app.sh

Further information on how these work can be found here:

<http://askubuntu.com/questions/330937/is-it-possible-to-open-an-ubuntu-app-from-html>

**Maintenance & Updates:**

The Interface is maintained from an xml file containing a list of all the educational software installed on the Ubuntu 14.04 build. The Java program reads through this and generates a page and links to that page for every piece of software. When a new piece of educational software is installed, this xml file must be updated to reflect this.

In the xml file, a software element has four attributes: Name, Category, Description and Level. Name is the title of the program. Category is one of eight options: Numeracy, Literacy, Science, Computer Skills, Art, Resources, Media and Games. Description is a short description of what the program is used for. Level is the age group the program should be used by. When a new piece of educational software is installed, all these fields must be completed accordingly.

Each piece of software has an icon image and screenshot. When a new piece of software is added, the respective icon must be added to the /Interface/images/applications/ folder in .png format. These can be found typing “<Program name> icon .png “into Google search.

The screenshot image must be added to the /Interface/images/screenshots/ folder in .png format. Take a screenshot of the program and save it in .png format. If no icon image or screenshot is added, the Ubuntu logo is set as a default icon and an image reading “No screenshot available” for the screenshot.