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Media Center Use Guide

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1 Introduction

A multimedia center is an adapted computer intended to play music, watch movies, and photo albums that are stored on a local device or that come from an external one plugged into the system. With this project we intended to create as software capable of doing all these tasks using what we learned during the course and applying a few more concepts.

The idea was to show a UI that can handle different approaches, for example, connecting the users to a streaming service site or allowing them to insert an external device and be able to watch their personal media files, such as music, videos, or photos.

With this guide you're going to be able to understand the construction of the UI, it's capabilities and understand the reasoning behind its construction.

2 Using the program

2.1 Preamble

Before going deep into the program, let's have into consideration the basic requirements to compile and run the program.

First, you're going to need either a raspberry Pi or a computer with a Linux distribution installed, also it must be connected to the internet in order to download all the required libraries and software required for its execution. Also, if you want to access any of the streaming services sites.

Here's the **list of dependencies and it's commands** that you need to have installed on your device:

• Programs

sudo apt-get update //If you're using Ubuntu this line gets you the latest Firefox version sudo apt-get install firefox //Just in case you don't have it sudo apt-get install vlc sudo apt-get install git

• Libraries

pip3 install python-vlc sudo apt-get install libx11-dev apt-get install xauth dbus-x11 apt-get install python sudo apt-get install python3-tk

sudo apt-get install python3-pygame

3 User Interfaces

• Step 1: When executing the following command in the console, a window will open, showing the start screen.

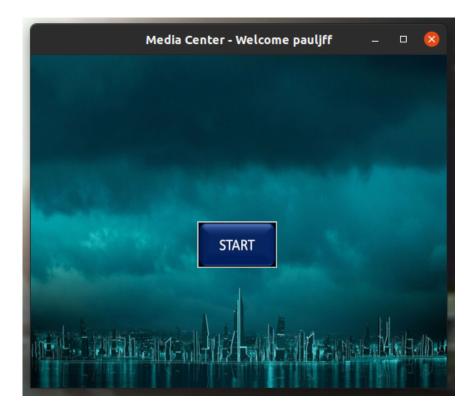


Figure 1: Start screen

• Step 2: When clicking the start button, it will show us the following screen, each of the buttons takes us to the respective streaming service's home page and, at the same time, we can see the USB management button.



Figure 2: Home screen

• Step 3: In this window we can see the USB selection screen, if we do not find any USB connected, the system will not show us anything, as you can see in this image:



Figure 3: Empty USB selection screen

Device: KINGSTON

Device: KINGSTON

Return to previous menu

• Step 4: In this image we can see that the system recognized a few USB devices:

Figure 4: USB selection screen

• Step 5: In this image we can see that once a USB is selected, it will show us 3 buttons with the interactions that our multimedia system can manage, such as listening to music, watching videos or watching images as a slideshow.



Figure 5: Media player screen

• Step 6: In this window we can see the music player, this will get us all the music in our USB recognizing only the mp3, in this window it shows us the music that is played, so we can play the previous song, pause the song, put play and put the next song.

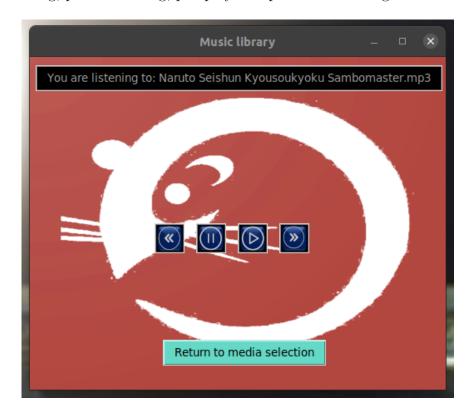


Figure 6: Music player screen

• Step 7: In this window we can see the video player, this will get us all the videos in our USB recognizing only the mp4 format and will not show them and will be able to play them.



Figure 7: Video player screen

• Step 8: When selecting the images button, it will show us all the images that were obtained in our USB, it will only show us the following images with extension .jpg and .png, in turn it will show us a slide each 3 seconds.

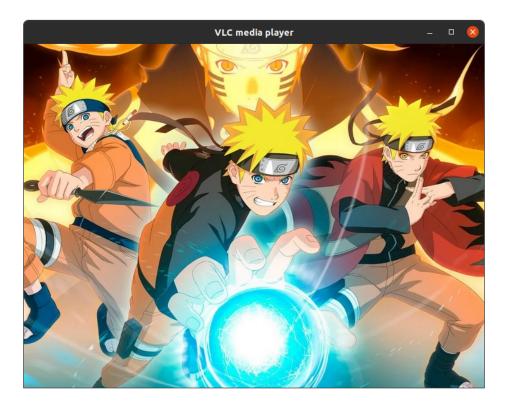


Figure 8: Photo player screen