**Build A Raspberry Pi Home Media Center**

**1. Components Needed:**

1. Raspberry Pi (preferably 3 or newer generation, running Raspbian OS)
2. MicroSD card (at least 16GB)
3. HDMI cable
4. USB Keyboard and Mouse
5. Power Supply
6. Ethernet chord or Wi-Fi connection

**2. Software Used:**

1. Kodi
2. WinSCP/FileZilla
3. Kore (Android)/ Official Kodi TV Remote (iOS)

**3. Workshop Skill Break-up**

100% software

**4. Workshop Overview**

In this workshop, we will see the various tools and configurations that can be used to turn your Pi into a robust media center.

**5. Workshop Steps**

5.1. Running Netflix on your Pi

* First run the commands sudo apt update and sudo apt upgrade in the terminal window to make sure all the packages are up-to-date.
* Next install Kodi on your Pi by typing: sudo apt install kodi kodi-peripheral-joystick kodi-pvr-iptvsimple kodi-inputstream-adaptive kodi-inputstream-rtmp , in the terminal window.
* To install the necessary packages for Netflix, now type: sudo apt install build-essential python-pip python-dev libffi-dev libssl-dev libnss3 in the terminal window.
* Rest of the required packages can be installed by typing sudo pip install setuptools wheel pycryptodomex in terminal window.
* Netflix plugin will now be installed by typing:

wget ttps://github.com/castagnait/repository.castagnait/raw/master/repository.castagnait-1.0.0.zip in the terminal window.

* In Kodi, head to the setting menu and in the system tab, enable unknown sources to install the Netflix plugin.
* Next head to add-ons ->install from zip file->home folder. Install the final entry in the list of files and head back to the add-ons menu.
* Now head to install from repository-> CastagnaIT repository-> Netflix and then install. This has add-ons listed which will be installed along with the plugin. In short span, Netflix is now an add-on and can stream content live from your account.

5.2. Watching shows listed in Kodi

Kodi is an open source platform where shows from over 100 channel listings are uploaded, which are free, and you can watch these on your Pi by:

* In the add-ons menu, head to Install from repository.
* Here there may be other listings, but click on All repositories.
* Proceed to Video Add-ons
* This will lead us to all the channels that have their shows uploaded on Kodi.
* Install the repository(or channel) of your choice and once installed, it can play all the content present in the Kodi server under that repository.

5.3. Transferring files from PC/smartphone to Pi and vice versa

Your Pi can send and receive files through a common connection remotely, hence one

of the purposes of setting up a media center. There are 2 approaches to this:

* First is using Kodi itself. Here it is imperative that your Pi have it’s SSH enabled.
* From the settings menu, proceed to Services and toggle UPnP and Share my libraries options on from the UPnP/DLNA tab.
* From the control tab, enable Allow remote access via HTTP.
* Install Kodi on your device and repeat the same procedure.
* Now on your Pi, head to music/ videos -> Add -> Browse -> Share via UPnP.
* This will now display connected devices and directories on the device to be imported to the Kodi library on your Pi.

Another approach is using SFTP protocol to transfer files.

* On your computer install either FileZilla or WinSCP.
* For the host name, add the IP address of your Pi(can be found using ifconfig in the terminal window), username as pi and the password as you may have set while configuring your Pi.
* Once the connection is made, you may transfer files remotely from your computer to the Pi or from it.

5.4. Using your Smartphone as a remote control.

* Download Kore on your android or Official Kodi Remote on your iOS device.
* Once the application is installed, a similar setup to that of WinSCP will take place.
* Click on the device with IP address of your Pi.
* The remote shall now be ready, allowing for directional and media controls.

**References and Tutorials:**

1. <https://pimylifeup.com/raspberry-pi-netflix/>