## Raspberry Pi

## What is Raspberry pi?

- It's a credit card size computer. Which you can carry around in a pocket. It's made in U.K. You can buy this device for \$35.

## Specification

- 256 mb
- 2 full-size USB Ports
- 1 HDMI output
- 3.5 mm jack for audio
- Runs linux

## Tools/parts needed

- need SD card that functions as the disk (Class 4 and 6 are most suitable)
- A key board and a mouse, with 2.0 USB adapter a usb hub may be useful.
- T.V/ Monitor
- Micro USB connector (power supply)
- Ethernet Cable (for Internet)

Now you have to put the operating system to the Micro SD card.

Go to <a href="http://www.raspberrypi.org/downloads">http://www.raspberrypi.org/downloads</a>

Under this website you'll find different types of Linux software that you can get for Raspberry pi. If you want get Wheezy and you're using windows, follow this guidelines.

- To download Raspbian "wheezy". You can either choose Torrent download or Direct Download. There are several OS's currently available, but 'wheezy' seems to us to be the best developed.
- After it has been downloaded you can't just cut and paste on you SD card. So you'll be needing "Win32Diskimager" which is located in the download website given above (or other imager for other OS's like Linux and MacOSX, whose use is also described at the raspberrypi site.
- To extract Debian on your desktop. Go to the folder Debian and you'll see an image file, just drag it to your desktop so it can extract. (so now you have the operating system)
- For Windows users, open Win32Diskimager archive. Click on the exe. file which is located all the way in the bottom. Your computer will quickly extract it. And it will run the program. Uuse this program to transfer Debian to your SD card. By browsing the debian file and choosing your Micro SD card. The click on write and you will have the operating system on your SD card. If you're using Linux or apple operating system, use 'dd', e.g.

dd bs=1m if=(debian image file) of=(path to your SD card)

 If you are a beginner and don't know these command well enough consider the tutorial at <a href="http://www.linuxuser.co.uk/tutorials/how-to-set-up-raspberry-pi">http://www.linuxuser.co.uk/tutorials/how-to-set-up-raspberry-pi</a> After putting Linux in your Micro SD card. Connect usb, display, and so on -- but connect your Power cable at last. Otherwise it won't start up correctly.

After your screen is loaded it will ask you to login

Log in : pi

Password: raspberry

(The 'pi' user can use 'sudo' to perform priviliged commands.)

Then type in "startx" to run the X windowing system.

After you get the home screen, you may need to configure network to get the Internet. <a href="http://wiki.debian.org/NetworkConfiguration">http://wiki.debian.org/NetworkConfiguration</a> can guide you with that.

After you're done working with the Pi, go to start menu click on log out. Then type "exit", and just pull the power cord (the micro-usb) out.