# **DOWNLOADING THE RASPBERRY PI OS**

* Go to <https://www.raspberrypi.org/downloads/raspbian/>
* Click **“Download ZIP”** for the Raspbian Stretch with Desktop
* Unzip the downloaded file and copy the contents of this folder ***as is*** into the newly formatted SD card
* Create a new file name ***“autoboot.txt”*** and write ***“boot\_partition=6”*** in it. (This is required for proper functioning of the Witty Pi)
* Insert the SD card into the raspberry pi and turn the power ON. It should start the installation and follow the steps.
* Choose to download the “Raspberry Pi OS Debian Desktop version if it asks during installation.

# **Downloading the Witty Pi software on raspberry pi**

Once the raspberry pi OS has been successfully installed, connect the raspberry pi with Wi-Fi and then follow the below steps for downloading Witty Pi software.

* Type: wget <http://www.uugear.com/repo/WittyPi2/installWittyPi.sh>
* If the download was successful, type: sudo sh installWittyPi.sh
* If it prompts something regarding ***fake-hwclock*** package, press ***‘y’***. Since we want to remove this package.
* Then it will ask about *Qt 5 GUI installation*, for which press ***‘n’*** since we can use terminal to perform the setup.
* If everything is properly installed, then it will say that you need to reboot the pi.
* Type: reboot, to reboot the raspberry pi.

# **Setting up the witty pi**

* Type: cd wittyPi
* Now type: sudo ./wittyPi.sh
* This should start a wittyPi interface, if it doesn’t then redo the installation steps.
* For the steps for configuring the raspberry pi startup time and shutdown time, <http://www.uugear.com/doc/WittyPiMini_UserManual.pdf> use this manual.

# **Troubleshooting / Checking raspberry pi functioning**

Start the remote session through SSH using the IP address of the raspberry pi. We used ***putty*** software for this, but many other alternatives are available. Once you are able to access the pi, use the below codes for different tasks that you might require to perform.

## Check the name of raspberry pi

Type: cat myname.txt

This gives the number of the raspberry pi.

## See if code was invoked

Type: cat logs.txt

This will display the contents of the logs file and it shows when the code was invoked, and image is taken.

## See the list of images on the pi

Type: ls images/

This will give a list of all images taken and stored in the raspberry pi.

## See the date and time on the pi

Type: date

## Check if code is running

Type: ps -aef | grep python

The first two lines should have “***takeImage.py***” in the end. If not then, there has been some issue and the code has stopped working.