

# QuadraCopter project

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## 1 Project plan

### 1.1 Milestones

This is a list of the milestones for the project. Most of them can and will be executed in parallel.

MS1 Technical specification on hardware (based on soft constraints), along with suppliers

MS2 Assembled hardware, ready to install operative system

MS3 Create an embedded linux kernel, that complies with the hardware

MS4 Implemented test software that can access and control all necessary hardware in every intended way

MS5 Implement control software to hover in place

## 2 Technical documentation

loose specifications:

- being able to fly horizontally through door openings
- being able to manouver with an external load of 2 kg
- fast wireless communication
- possibility to extend unit with a robotic arm
- possibility to extend unit with autonomous navigation and manouverability
- awesome looks

- speaker
- possibility to extend unit with computer vision
- operating on embedded linux
- usb port
- reasonable air time
- easy to exchange battery pack

## 3 Documentation

logins:

root: root

developer: developer

### 3.1 packages post installed

- full system update pacman -Syu”
- sudo pacman -S sudo”
- gcc pacman -S gcc”
- unzip pacman -S unzip”
- downloaded pigpio library. <http://abyz.co.uk/rpi/pigpio/download.html>
- make pacman -S make”