XLRnet

It is a bot similar to xlr8 bot in mechanism. Instead of controlling it from remote controller it will be controlled by windows/internet application. Signal will be sent to the bot via internet connection which means the bot can work wherever wifi/internet is available.

Implementation steps-

1. We will start our project from 6th May and we expect to complete the XLR8 bot in 4-5 days (10th May). By that time we will also buy/order the components which will be required later.
2. Then we have to attach wifi module to a microcontroller on the bot and also make an application that will help to send signals via internet to the bot. This might take around 20-25 days of work as nobody in our team is an expert coder. This is why we have kept our project in WnCC club, so that a WnCC mentor can guide us.

Components required-

Mechanical Parts:

1. Chasis
2. 4 wheels
3. 4 200rpm DC motors
4. 4 clamps
5. Tools: nut-bolts, screw, plier screw-driver etc.

Electronic Parts:

1. Arduino or other microcontroller
2. Arduino Ethernet shield (it connects Arduino to internet) or a wifi module
3. 7812/7805 voltage regulators and heat sinks
4. L293D for differential drive mechanism
5. Battery (probably lead-acid battery)
6. Routers
7. Surveillance camera
8. Tools: soldering iron, multimeter etc.

Coding based Parts:

1. A windows/internet based GUI application for interface
2. An internet based application to show live video feed from bot

What we expect to learn-

To learn coding at an extensive level.

Sources-

1. Basic idea of this project was given by Ranveer Aggarwal. He gave us the idea to make a copter which could be controlled via internet.
2. Reginald: a UDP surveillance bot (http://www.instructables.com/id/Reginald-a-UDP-surveillance-bot-control-via-the-/?ALLSTEPS)