**Wireless Car**

Semester Project 2015

Team 09

Date: 22nd Oct 2015

## **Executive Summary**

Our main aim is to create a wireless car using motors and beagle bone and also Raspberry pi.

The gpio pins are used to control the motor on the car to remote it. We will connect to our server to control directions using server-client method. Some additional interfaces, such as a IR sensor to control the moving direction of the car, an analog input to control the speed of the car and we will connect the pi/beagle bone to internet to control the car remotely ,control the motor speed ,are considered to be done based on the progress of the project.

[Source: [source](http://elinux.org/ECE497_Project_Electric_Car) ]

## **Team Structure or Members**

1. M.R.Srinath B12035 CSE
2. Sanjeev Raydu B12029 CSE

## **Equipment needed**

**Electronic Equipment’s -**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Item** | **Quantity** | **Site** |
| 1 | 12V DC Motor | 2 | [link\_to\_motor](http://robokits.co.in/motors/high-torque-dc-geared-motor-100rpm) |
| 2 | Servo Motor | 2 | [link](http://robokits.co.in/motors/rc-servo-motors/standard-economy-servo-motor-4.5kgcm?zenid=tpf21be62dqja1djmasnb5e9b6) |
| 3 | Blue LED | 5 | local vendor |
| 4 | Red LED | 5 | local vendor |
| 5 | Green LED | 5 | local vendor |
| 6 | Potentiometer | 2 | local vendor |
| 7 | 1k Ohm Resistor (1/4 watt) | 15 | local vendor |
| 8 | WiFi Module | 1 | [link\_to\_wifi\_module](http://www.flipkart.com/tp-link-150mbps-high-gain-wireless-usb-adapter/p/itmdzusgbtfhhadq?pid=USBDZUSDGUZBGBXR&al=t5w0DIVzFxz%2BH7cXiXLmtcldugMWZuE77x17v9FMUpnp0uJZv6WK0%2BVwi03Q4lxzraJ%2BtMtw%2F60%3D&ref=L%3A1239205346428339212&srno=b_4) |
| 9 | PCB Board | 2 | [link\_for\_PCB](http://www.google.co.in/aclk?sa=l&ai=CE55nIG0lVoTQK9auuATRgrSgBNGqttMKoYK4mbICiYab_40ECAYQASDBwtgXKAhg5YKAgOApoAHfxLC9A8gBB6kCDuE6zFqLUD6qBChP0MjrHnvjD0xW7STcThfqlhOBcEzDUt31I91CHAHwGhXw1dL42keegAWQTsAFBaAGJoAHibvPQogHAZAHAqgHpr4b2AcB4BLM_eeo4ZTioa0B&sig=AOD64_30DeQr8v6h597JB4UHYK-rwvJ03g&ctype=5&clui=6&rct=j&q=&ved=0CHEQuxdqFQoTCMLenaPJz8gCFYS2jgodFJYKkg&adurl=https://www.industrybuying.com/printed-circuit-boards-pcb-pcb-EL.PR.375868/) |
| 10 | L293 H-Bridges | 2 | [link\_to\_motor\_driver](https://www.robomart.com/l293d-motor-driver-arduino-v2.0) |
| 11 | Ultrasonic Sensors | 2 | [link\_for\_ultra\_sonic](http://www.google.co.in/aclk?sa=l&ai=CpZ3cvm0lVtKlNNPQuATU1Y3ACdHiv98Hsf-8xr8CyfqNyecDCAQQASDBwtgXKAVg5YKAgOApoAHUyr_JA8gBB6kCoukFxsOMUD6qBChP0ExP6_JbRdNm7hjfV8s_iKGFvVd6Hv6_QlatssftXPzjqIwh3iQggAWQTsAFBaAGJoAH-bP5NYgHAZAHAqgHpr4b2AcB4BLy5JiE7Zm7_dsB&sig=AOD64_0YzDJWo5uq0RNwNpuC72Qb_JT65Q&ctype=5&clui=1&rct=j&q=&ved=0CCMQvhdqFQoTCNGr0-7Jz8gCFUKPjgodAJ0Phw&adurl=https://paytm.com/shop/p/robomart-ultrasonic-sensor-module-hc-sr-04-KIDROBOMART-ULTBOTK1082478C108C19) |
| 12 | Gauge Connector Wires | 30 | local vendor |
| 13 | Raspberry Pi | 1 | [link\_to\_raspberrypi](http://www.amazon.in/Raspberry-Pi-Model-Revision-512MB/dp/B009SQQF9C) |
| 14 | Batteries | 4 | local vendor |

**Hardware Equipment’s-**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Items** | **Dimensions** | **Quantity** |
| 1 | Robot Car Kit | ... | 1 |