**Wirelessly Controlled Car**

A CS404 Project Proposal

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## Sample_Car.jpeg

## **Executive Summary**

The goal of this project is to create a Wirelessly Controlled Car using motor-based electronic mini-car interfaced with beaglebone/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/beaglebone to internet to control the car remotely ,control the motor speed ,are considered to be done based on the progress of the project.

## **Current Status**

The way to accomplish the project is known. The required parts for commencing it need to be ordered.

[Above\_Samplephotos\_of\_process\_can\_be\_found\_here](https://drive.google.com/folderview?id=0B8SpJbBa_C7uZzZ0Sk9IVlowN0U&usp=sharing) [ source: [source](http://elinux.org/ECE497_Project_Electric_Car) ]

## **Team Structure**

One team of three students will be working upon it. Their names -

1. Divakar Maurya B12067 EE
2. Himanshu Kamboj B12030 CSE
3. Vinod Kumar B13141 CSE

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## **Equipment needed**

**Electronic Equipments -**

|  |  |  |  |
| --- | --- | --- | --- |
| **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 Equipments-**

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