

A Smartphone controlled car:

Project Proposal

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by,

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Introduction

In this project we are going to build an RC car which will be controlled by a smartphone with the help of Bluetooth module. We have taken the reference from Andriy Baranov's project a Smartphone-controlled Arduino 4WD robot car. Here the car is controlled over Bluetooth by an application in the smartphone.

Modification

We would like to go with same project without any modification, but instead an addition of a wireless camera to it. Camera will help finding the path and, we are going to add the sensors in a way to try out the line detection to equalize the concept of lane driving. The whole car would be controlled by an application and a different device is required for the camera.

Motivation

This idea was discovered a few days back when I was driving my friend's new car "Honda Civic 2017 hatchback". The car had the concept of lane driving which was sick. As soon as the car hits the white/yellow line off the lane the steering automatically brings the car in lane without the use of hand. So, we are going to try something like this if it works out properly.

Materials required

- Arduino Uno and Genuino Uno
- Wireless Bluetooth transceiver
- 4WD smart robot car chassis kit
- Dual H-bridge motor drivers
- LED
- Buzzer
- Resistor 221 ohm

Also, other required materials

- Soldering iron.

Milestones

If the project works out properly and the materials are received on time, then the following milestones will be met:

Milestone 1	November 12th	All parts to be expected.
Milestone 2	November 19th	Initial setup - No code yet.
Milestone 3	November 21st	Working camera installed on car.
Milestone 4	November 27th	Code ready, downloading app and connecting Bluetooth module.
Milestone 5	November 30th	Finish. Fingers crossed.

Hopefully, everything works according to the plan with the completion of the driving on line too.

Group roles

We are two of us in this group, so we are making sure work is divided equally so not one has to more work. One is good with writing code where other is going to look out the assembly of parts. Ordering of the parts will be done together so will be the documentation part.

Summary

If everything goes on accordingly the car will be operated from the smartphone application, with camera working on other device and the code will make the car move in line only if the sensor is on.

[1] https://create.arduino.cc/projecthub/andriy-baranov/smartphone-controlled-arduino-4wd-robot-car14d239?ref=platform&ref_id=424_trending___&offset=296