GPS and RC

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Project Purpose

The purpose of our project is to create a wireless communication system between a PC and and RC car. Through the use of an app the user would be able to not only track the car's movement but also set a customized route for it to follow.

Approach

Connecting
Pi to Power
Source (Pi
is on)

Connec
t Pi to
PC
through
SSH

Display location on a map, while also detecting keyboard input for direction

App Exit

Stop Displayin g Images receives the commands through Wifi and motors start moving according to the commands

Car with Pi

Send user's keyboard input as commands to the car

Progress and current status

- We have designed the user interface through which the car can be located based upon longitude and latitude.
- Hardware components are now wired and functioning properly to send data from Raspberry Pi and GPS Module back to PC.
- Currently implementing method to combine our user interface with Python code running on Raspberry Pi and connecting Pi to car.
- By the end of this quarter, we want to attach our parts to the RC car and be able to control the car from a PC.

Challenges

- ☐ Implementing
 Google Maps API
 in Python
 Program
- Assembling the parts and soldering
- Setting up the Raspberry Pi

In the next quarter, we hope to add a camera on the car and be able to set a route for the car to follow.

Hardware & Software







