Components:

* Arduino UNO
* GSM sim900 module
* NEO GPS 6M
* 16 \* 2 LCD
* LCD Breakout Board
* UTSOURCE jumper wire

About:

Global positioning system (GPS) and GSM modules are used in an Arduino-based car tracking system. This connection method makes use of a GSM modem and SIM card. In your car, the system can be hidden or installed. You may easily use a cell phone to track your stolen vehicle after installing this circuit. The school/college bus can also be tracked with this app.

Step 1: GPS TX and RX Pins Should Be Connected to D3 and D4

Software serial has been used by me to communicate with GPS. Connect the TX of the GPS to D4 on the Arduino board by doing as follows. On the Arduino board, RX to D3.

Connect the RX and TX of the Arduino board to the TX and RX of the GSM module.

Step 2: Connect the LCD to the Arduino board's D8 through D13.

A LCD breakout board should be purchased to connect the LCD, in my opinion.

LCD - Arduino

RS - D13,

EN - D12,

D4 - D11,

D5 - D10,

D6 - D9,

D7 - D8

Step 3: Insert Tiny GPS Library

Before creating the code, include the tiny gps library.

Download the library from the website, explore it, and then add it using the add zip to library feature.

Step 4: Add Arduino Code

Step 5: To the Sim on the Sim Module, type "TRACK VEHICLE"

Turn on the equipment. Get the code now. The network led's blinking indicates the GSM module's network range.

Send the SMS message "TRACK VEHICLE" to the sim module in the GSM Modem.

Step 6: From the GSM Module, you can receive the response SMS.

The GPS coordinates can now be sent to you through SMS. The text message contains a web link that leads to the Google Map.

Step 7: Click the Weblink to Track the Vehicle

Lastly, you can view the vehicle's location on a Google Map.