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# IOT Vehicular Assignment Implementation

**Components**

1. Proteus 8.6 SP2(for simulation)
    a. Arduino
    b. Temperature Sensor
    c. Potentiometer in place of Accelerometer
    d. Sounder (To alert overheating)
    e. LED (for testing)
    f. Compim (In place of esp8266 to access a server port)
2. Android Mobile
    a. Blynk App
3. Goormide Cloud IDE
    a. Hosting a flask web server to view the temperature and acceleration data
4. Virtual Serial Ports Emulator.

**Implementation**

1. Download Blynk App and create a new project with arduino as the main component and then copy an authentication on the app.
2. Add button and live chart to the project and assign D13 pin to button and V1 and V5 as the virtual pin in the live chart.
3. In computer open a new project in proteus and add arduino (after downloading arduino library) add a LED to D13 pin and connect compim component to the arduino
4. Add a temp sensor and potentiometer to arduino and read their values.
5. Open the arduino ide and compile the code then add the compiled code to the arduino.
6. Go to documents where you will find the arduino folder browse through the library then enter blynk. Go to the script folder and run the command prompt.
7. Open Virtual Serial Ports Emulator and add pair connection between com3 and com1.
8. In command prompt enter blynk-ser.bat -c COM1 -p 8442. This runs a server replicating esp8266 functionality.
9. Run the proteus simulation and see the results in the app.
10. Copy the web server code and host from wherever you want but there is the issue of it being a local server and won't be able to view anywhere. So run it on goormide or wordpress to view the site.