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Engineering, Design & Innovation - EE391

Traffic Signal Light Controller Budget

Under/Over : $308.00

Budget summary

Category	Total	Description
Total Budget	1,000.00	
Electronic Components - Resistors, Capacitors, Diodes, 555 Timer IC, Potentiometers, LEDs, 4017 IC Counter, Batteries, etc.	15.00	Components required to construct the conctroller circuit.
Inductive Loop Sensor	485.00	For vehicle detection using an inductive loop beneath the road.
Gate Driver Circuitary	2.00	For high speed switching application.
Touch ID Sensor	5.00	To check whether the sensor is being used by an authoritative person only
GPS Tracker	30.00	To detect the device location if it is lost.
Software Liscence	50.00	To avoid use of pirated and cracked software, and obtain access to complete module and libraries of the software.
Controller Casing	20.00	Use for the design purpose, making the controller lightweight and portable.
Arduino UNO Microcontroller	10.00	A microcontroller can be considered a self-contained system with a processor, memory and peripherals and can be used as an embedded system. To programm the circuitry.
Wireless Bluetooth Module: HC-05	5.00	In order for the controller to work wirelessly.
PCB	5.00	The base for the entire circuitry.
Soldering Material	5.00	For the current flow between electronic components.
Documentation	10.00	Printing costs.
Miscellaneous Expenses	50.00	Miscellaneous travelling, parking and food expenses.

Note: The costing of the controller may be reduced by a couple of hundreds of dollars if we built the inductive loop ourself.

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