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INTELLIGENT TRAFFIC CONTROL SYSTEM FOR SMART ABULANCE

Under the Guidance of

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Abstract

“INTELLIGENCE TRAFFIC CONTROL SYSTEM FOR SMART AMBULANCE” is a iot project.It is used for saving lifes as there was an huge traffic in current world. With a large population and large amount of vehicles there is also a big trouble of car accidents or road accidents, and with these overcrowded roads there is a problem of delay in first aid service. To overcome this delay in first aid service this paper describes a solution that is “Intelligent Traffic control system for smart ambulance” which includes automatic traffic light controlling system such that the ambulance can achieve a free way in order to provide the first aid to patient as fast as possible. The main objective of this project is provide basic first aid to every patients on time. If there is heavy traffic and the patient is in severe condition so our job is to attend the patient and send him/her to hospital as soon as possible. In normal scenario the traffic lights are running normally ,if in case any emergency arises in any particular direction there is switch in ambulance ,we have to press that direction switch, then the signal is immediately transmitted from ambulance to receiver of traffic control system

Keywords: Server,Arduino, LCD Display, GPS Tracking System.

Introduction

- One of the widely affected service due to traffic jams is that of an ambulance. Many a times, ambulance consist of emergency or critical patients which needs to be taken to the hospital in minimum amount of time providing proper treatment to the patient so that chances of surviving increases in critical condition. A Patient may lose his life if there is delay in reaching of ambulance to the hospital. According to the surveys 95% of the heart attacks cases can be treated, if the ambulance can reach the hospital at current time without stucking into the traffic. For this, it is needed that the vehicles on the road to make way for the ambulance. But sometimes, the ambulance gets stuck in the traffic which in turn wastes a lot of time waiting for the traffic to get clear. We can overcome these limitations by the emerging technology such as IoT i.e. Internet of Things. Various software implementations and hardware devices can be connected with the help of wireless networking tools or wired tools. In IoT the components are connected and controlled by the internet. In this project, we have come up with the 'Intelligent Traffic Control System for Smart Ambulance'. The main objective of this system is to make it possible for the ambulance to reach a particular location without having it to stop anywhere until the destination is reached.

Existing System

- In normal scenario the traffic lights are running normally ,if in case any emergency arises in any particular direction there is switch in ambulance ,we have to press that direction switch, then the signal is immediately transmitted from ambulance to receiver of traffic control system.And the traffic is cleared by allowing all the vehicles in the road where ambulance was located.when ambulance was out of the way ,the traffic system comes to normal system.But allowing all the vehicles may lead another traffic jam and moving all the vehicles from traffic may take time.to overcome this problem we have created a project.

Proposed System

- To overcome the above problems,we have introduced an iot based idea.whenever there was an emergency the ambulance starts from nearby hospital and a trigger is activated.we are placing LED lamps on roads where there usually heavy traffic is there.whenever trigger is activated the lamps glows on road.It gives the indication to people on the road to move/clear the path for ambulance.

Software/Hardware Requirements

- Arduino.
- LED lamps.
- RFS MODULE 434 MHz.
- RF encoder and decoder.
- AT 89s52 microcontroller.
- Um3561 Ics.
- LANGUAGES:PYTHON.

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References

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Q and A?

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