International Journal of Scientific Research & Engineering Trends
Volume 8, Issue 4, July-Aug-2022, ISSN (Online): 2395-566X

# Ambulence at Traffic Light Yosing IOT

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**Abstract- The idea of this project is to use the each second protectively to save a person Now a days many lives its not saved before the person reaches the hospital in emergency vehicle or the emergency vehicle is delayed to reach the accident zone at time should to such incidents we are in a situation to develop a system which makes us secure and provides us an efficient way in saving human lives the project we have structured a protocol is which that could reduce the delay caused by the emergency vehicle and to save his life of the patients as soon as possible by not disturbing other vehicle the same time alert is also given to other vehicles to make sure that an emergency vehicle is approaching Here we use microcontroller to control the traffic The most role of this project is control the traffic signals from the ambulance and make clearance the way of path automatically without any disturbance of public This project is use to save the time of delay in most efficient to save the life.**

**Keywords- Vehicle , traffic etc.**

## I. INTRODUCTION

With increasing industrialization, urbanization and population, there has been a tremendous growth in traffic. With growing traffic there is increasing in problems which include traffic suffocation accidents importance should be given to ambulance and other emergency vehicles because if they have to wait longer time on the traffic there is increase in the risk. Congestion at traffic light area gives challenge in many countries.The increasing numbers of vehicles not only has a large environmental impact, but also result in loss of lives and time on the road. Besides, there will be huge losses in terms of productivity where it will affect the ability of cities to compete globally.

This situation demands a better approach to handle the situation especially for emergency vehicle like ambulance. There is a need to have a system that can control the traffic light signal at junction in case of emergency Majority of the traffic Light work on simple timers.

Based on the traffic density at a particular intersection, the traffic light will cycle through red yellow and green at regular intervals to ensure a uniform traffic flow in all directions through the intersection?

**1. Problem statement:**
Manual Operation may end up in unpredicted results as the user wants to select location and final destination which makes illiterates not using the above system in a useful way and it is not flexible to each user to have an android app prebuilt hence such things minimizes the users using it which is not a desirable thing for an emergency situation.

As the Internet is used, proper network connection
If is needed by every user in their device to set the arriving location which again minimize numbers of users and it is not a good way to approve this feature in an emergency situations which may end up in failure

**3**\AS for alrming No alarming measures are taken for the other vehicles to ensure that emergency vehicle approaching towards their lane and creates a traffic jam when the emergency vehicle is approaching towards the signal and it adds on risk to the emergency circumistanse.

**2. Objectives of the project:**
- To provide sophisticated control and coordination to confirm that traffic moves as smoothly and safely as possible.
- To clear the traffic and give way to emergency cars to reduce the delay time.

**3. Scope of the project:**
- Signals appearing in the lane are automatically changed when the emergency vehicle enters
- A Fourth light appears in the traffic light system which alerts the vehicles in the lane that an emergency vehicle is approaching

## II. PROPOSED METHOD

This structure spend the daily needs of emergency by agood way and most devices used in this project are less power consumption.The proposed system is designed with two sections Ambulance section and traffic light section where ambulance section acts as a transmitter side and traffic light section acts as a receiver side.

In the ambulance section This transmitter sends the signal to the receiver .In the traffic section signal received from the transmitter. The traffic light changes the lights to red when an emergency vehicle is approaching.

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## III. EXISTING SYSTEM

Emergency responss cars such as ambulances and fire trucks, cannot afford to waste time while waiting on traffic signals These vehicles need a system that would allow them to safely cross the traffic lights without any delay. We propose a smart traffic signals system (STLS) that uses an Android app MQTT (Message Queuing Telemetry Transport) protocol, Google maps, micro-controlled traffic signals and the Internet for connecting them together.

The Android app allows a user

**1. Ambulance/Control unit:**

In control, segment GSM modem gets significance about mischance and sends it to PC.

**2. Traffic Light Unit:**

At all point the emergency cars comes to near the development lights (about 100m), the movement banner will be made to green through RF correspondence.

## IV. COMBONENT SPECIFICATION

- Microcontroller atmega328
- Lcd 16x2 monoclur
- LEDs
- Power Supply 5v DC

**1. Software Requirements:**

- Proteus
- Embadded C

**Proteus:**

This software is mainly used by electronic design engineers and technicians to create schematics and electronic prints for manufacturing printed circuit boards.

**Embadded C:**

Embedded C is an extension of C language and it is used to develop micro-controller based applications.

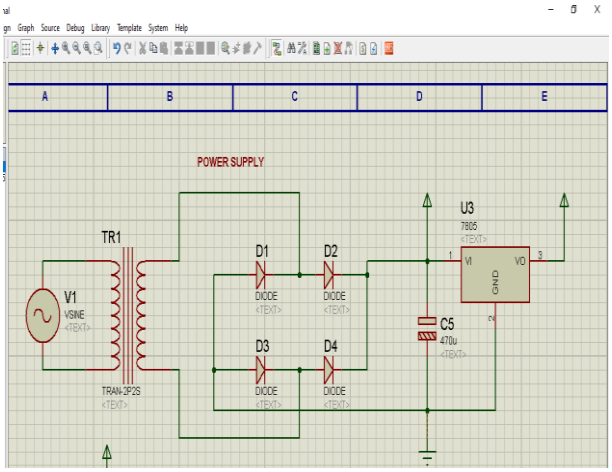


Fig 1. Power Supply.

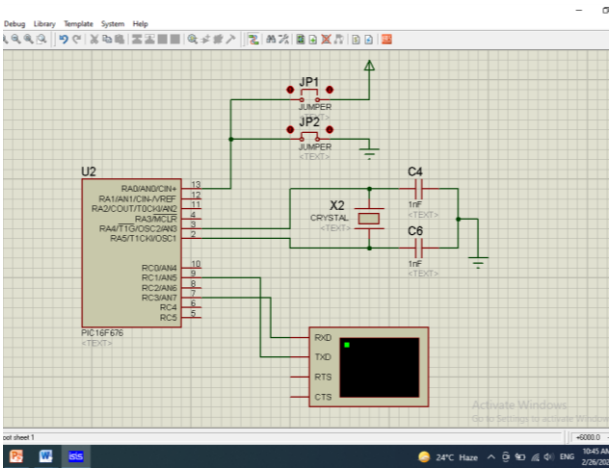


Fig 2. Ambulence Side.

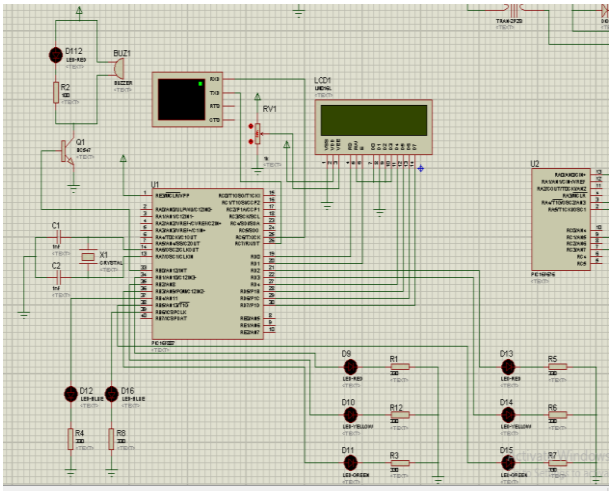

Fig 3. Traffice Light Side.

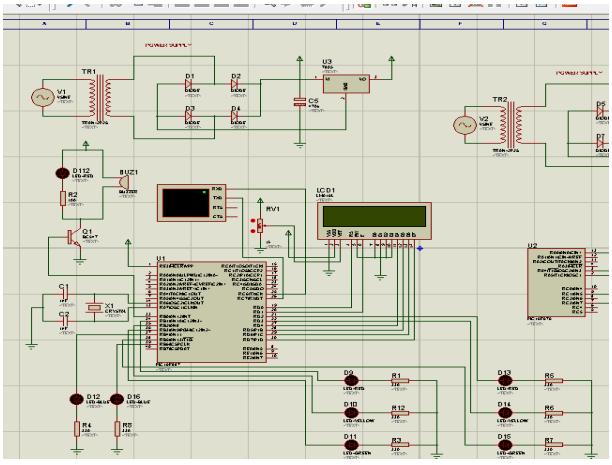

Fig 4. Traffice Light Side with Power Supply

## V. THE PROPOSED WORK

In our proposed framework rescue cars assumes a noteworthy part to convey the harmed patient to the doctor's facility on opportune time Because of movement it make the inconvenience for conveying

the patient the healing facility To maintain a strategic distance from this.

## VI. CONCLUSION

In this project, the system is described which determine the control traffic signal .the traffic control algorithm considers the current & destination location of the ambulance to control the traffic lights. This will help in optimization of the time taken by the ambulance to reach the hospital.

## VII. FUTURE SCOPE

I propose in the future a health monitoring system the patient is monitored in the ambulance and transferd to the hospital before the patient arrives at the hospital. The heart rate sensor and temperature sensor.

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