SMART HELMET (NO BIKE RIDING WITHOUT HELMET)

Prof. N. B. Kodam

Sangameshwar College of Arts and Science, Solapur, Maharashtra

ABSTRACT:

Street auto collisions (RTAs) are a noteworthy reason for incapacity and passing everywhere throughout the world especially the creating nations. World Health Organization (WHO) has perceived RTAs as a noteworthy issue. WHO ventures HIV/AIDS, Unipolar depressive issue, Ischemic coronary illness and Road car crashes to be the four driving reasons for weight of infection by the year 2030. Bike wounds and mankind are distinctive in various nations relying upon the utilization of a head protector. In India a huge number of individuals kick the bucket each year as a consequence of street car crashes. Countless passings happen among motorcyclists riding their bicycles without head protectors. Thinks about demonstrate that nations where the utilization of protective cap is not mandatory or if this standard was canceled the quantity of deadly wounds or passing because of it expanded numerous fold. In Pakistan the utilization of head protector is a necessary for motorbike riders however poor consistence is a noteworthy issue and is a disappointment with respect to the movement police .

KEYWORDS:

Alcohol Sensor, GSM, GPS, Microcontroller, , Smart helmet.

INTRODUCTION:

The considered building up this task comes to benefit a few things towards the general public. Step by step the bike mischances are expanding and prompts loss of numerous lives. Accord to a review of India there are around 698 mishaps happening because of bicycle accidents every year. The reasons might be numerous, for example, no legitimate driving information, no wellness of the bicycle, quick riding of bicycle, inebriated and drive and so forth. Some time the individual harmed, the mishap may not be specifically reliable for the mischance, it might be blame of rider, however end of the day it's both the drivers included in the mischances why should going endure. On the off chance that mischances are one issue, absence of treatment in appropriate time is another purpose behind passings. By study India 698 mischances happen every year, almost a large portion of the harmed individuals bite the dust because of absence of treatment in legitimate time. The numerous purposes behind this, for example, late happening to emergency vehicle, no persons at spot where the mishap occur to offer data to the rescue vehicle or folks. This is a circumstance we distinguish our everyday life, a considered finding some answer for decide this issue concoct this thought of giving the data about mischance at the earliest opportunity and in TIME….!!!!Because after untouched matters a great deal, if everything is done in time, at any rate we can spare a large portion of the lives that are lost because of
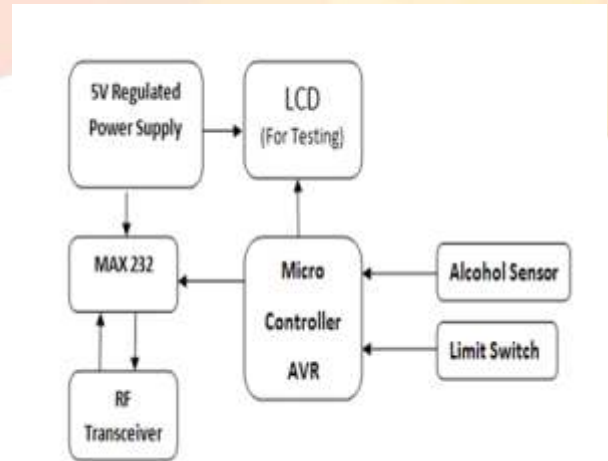
bicycle mishaps . Considering three main considerations for keeping away from the mishap causes, for example, I. Make wearing the head protector necessary. II. Dodge tipsy and drive. III. In the event that individual meet with a mischance, nobody arrives to help him. Essentially leaving or overlooking the individual he might kick the bucket. In such circumstance, illuminating to emergency vehicle or relatives through versatile to protect him for a degree. The thought of this work is to give data about the rider wearing the cap or not, whether the rider smashed or not furthermore, he met with a mishap it gives a data about area where he is met with a mischance through GSM module to versatile numbers relatives, so I have picked GSM innovation to give the data by sending SMS, utilizing GSM module which has SIM card space to put the SIM and send SMS. Sending SMS alone can't help the driver, on the off chance that we send and a SMS saying that mischance had happened where the rescue vehicle will come without knowing the area of the mishap. So to follow out the area where precisely mishap happen utilizing GPS module, and provides for microcontroller, then it sends the SMS which contains the scope and longitude of a zone to relatives versatile numbers For this we utilize GPS module to take out the area of the mischance, the GPS information will contain the scope and longitude values utilizing which we can locate the right position of the mischance place.
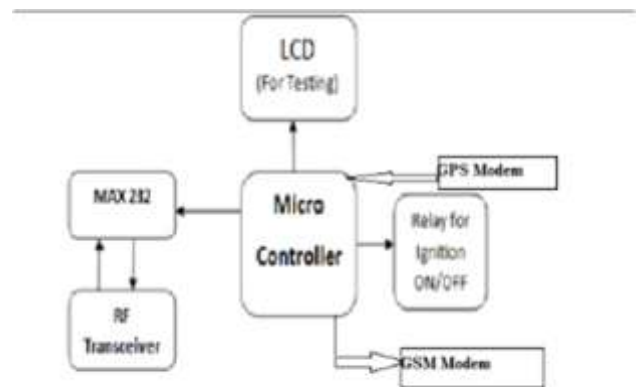
II. PROBLEM FORMULATION

On the off chance that individual met with a mishap, nobody arrives to help him.

III. BLOCK DIAGRAM AND EXPLANATION

HELMET UNIT:

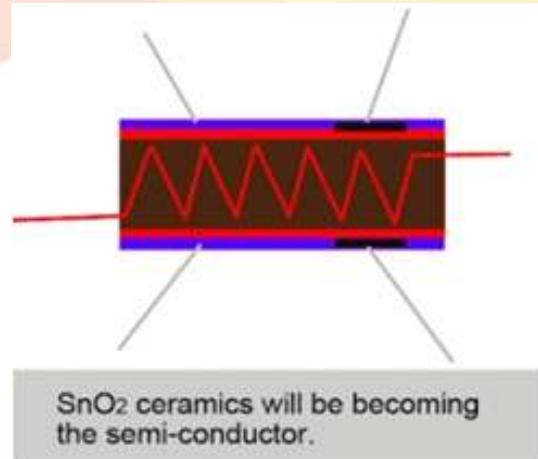
BIKE UNIT:

Microcontroller

The AT89S52 is a superior CMOS 8-bit microcontroller, low-power, with 8K bytes of EPROM. These are components of AT89S52 microcontroller: 256 bytes of RAM, 8K bytes of Flash, , three 16-bit clock/counters, 32 info/yield pines , two information pointers, Watchdog clock. six hinder of two level construction modeling, serial port, oscillator . the AT 89C52 is effective MC which gives an adaptable and
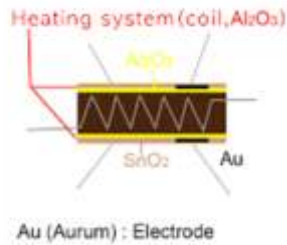
modest result to numerous installed framework applications.

LCD (Liquid Crystal Display) –

LCD which is regularly known as Liquid Crystal Display &Alphanumeric Presentation it implies that it can demonstrate Letters, Amounts and also diverse codes in this manner LCD is a client insightfully Show technique which can be utilized for indicating numerous interchanges different seven area show which can demonstrate just amounts and a portion of the letters.

Au (Aurum) : Electrode

Liquor SENS

Working Process :

If coil is heated,

If the coil is heated up, SnO2 earthenware production will turn into the semi - conductor, so there are more portable electrons, which implies that it is prepared to make more present stream.
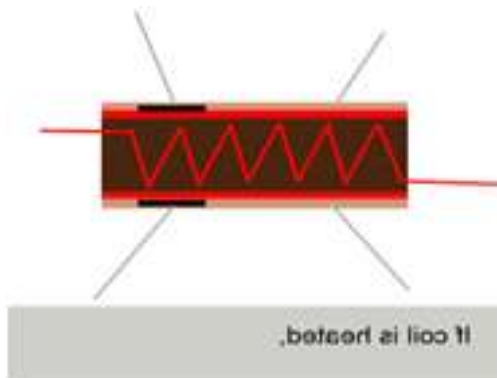

SnO2 ceramics will be becoming the semi-conductor.

At that point, when the liquor particles noticeable all around meet the anode that is in the middle of alumina and tin dioxide, ethanol blazes into acidic corrosive then more present is delivered. So the more liquor atoms there are, the more present we will get. Due to this present change, we get the distinctive qualities from the sensor.
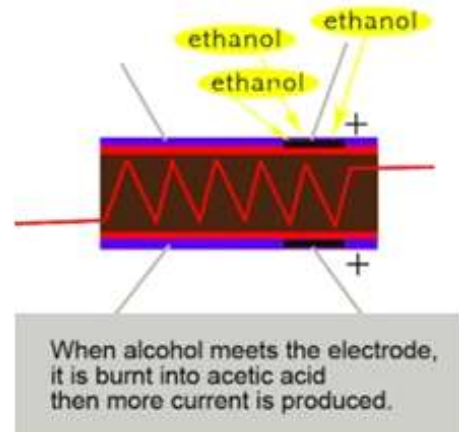

When alcohol meets the electrode, it is burnt into acetic acid then more current is produced.

GSM (Global System for Mobile)-

GSM is an additional gathering cell regular progressed to give sentiment offices and records exchange by arithmetical affectation.
GSM Specifications-1RF Spectrum
GSM 900
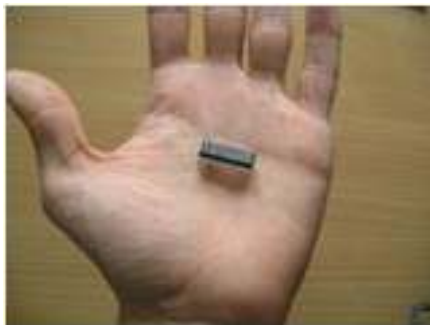Portable to BTS (uplink): 890-915 MHZ
BTS to Mobile (downlink):935-960 MHZ
Data transmission : 2* 25 MHZ
GPS (GLOBAL POSITIONING SYSTEM)

irji.in

The Global Positioning System (GPS) is a space-based worldwide route satellite framework (GNSS) that gives dependable area and time data in all climate and at all times and anyplace on or close to the Earth when and where there is an unhindered observable pathway to four or more GPS satellites.

MAX232

MAX232 is an incorporated circuit that changes over signs from a RS-232 serial port to flags suitable for use in TTL perfect advanced rationale circuits.

WHAT IS RF?

Radio recurrence (RF) is a recurrence or rate of wavering inside of the scope of around 3 Hz to 300 GHz. This extent compares to recurrence of substituting current electrical signs used to create and identify radio waves. Following a large portion of this extent is past the vibration rate that most mechanical frameworks can react to, RF ordinarily alludes to motions in electrical circuits or electromagnetic radiation
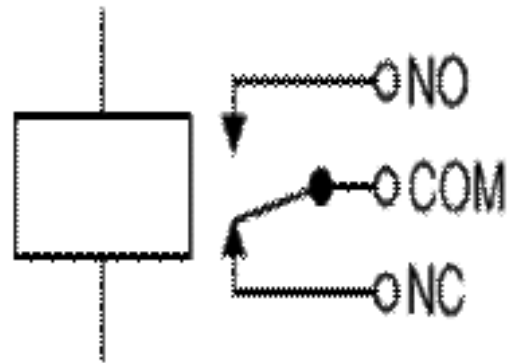
1) RF Advantages:
1. No viewable pathway is required.

2. Not obstructed by basic materials: It can enter most solids and go through dividers.
3. Longer territory.
4. It is not touchy to the light;.
5. It is very little delicate to the ecological changes and climate conditions.

Hand-off

A Relay is an electrically controllable switch broadly utilized as a part of modern controls, vehicles, and so on

Control supply

The A.C. 230 information is given to rectifier circuit and Output acquire from the rectifier is a throbbing D.C voltage. The yield from the rectifier is given to a channel circuit to channel A.C segments present consistent later than amendment. Presently, this voltage encouraged to voltage controller to immaculate steady D.C voltage get.

SOFTWARE DESCRIPTION

This venture is actualized utilizing taking after software's:
1. Express PCB – for outlining circuit
2. PIC C compiler - for arrangement part
3. Proteus 7 (Embedded C) – for reproduction part.

ADVANTAGES

"Liquor Detection System in Cars" gives a programmed security framework to autos and different vehicles also.

irji.in

APPLICATIONS:

1) "Liquor Detector venture" can be utilized as a part of the different vehicles for recognizing whether the driver has expended liquor or not.

2) This venture can likewise be utilized as a part of different organizations or association to identify liquor utilization of work

RESULT

CONCLUSION:

Incorporating elements of all the equipment parts utilized have been created as a part of it. Vicinity of each module has been contemplated out and put painstakingly, hence adding to the best working of the unit. Furthermore, utilizing profoundly propelled IC's with the assistance of developing innovation, the venture has been effectively actualized. In this manner the venture has been effectively composed and tried.

REFERENCES

1. Smart Helmet Using GSM &GPS Technology for Accident Detection and Reporting System
Manjesh N1, Prof. Sudarshan Raj2

2. The 8051 Microcontroller and Embedded Systems Using Assembly and C, ISBN 8131710262, 9788131710265 Mazidi and Mazidi

irji.in