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EMTY PETROL TANK INDICATOR WITH SMARTPHONE APPLICATION IN VECHICLES

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ABSTRACT:

There are many sensor based techniques available in the market to measure the liquid level and gives you a close idea of quantity of the liquid, however can provide you an exact approximation of quantity as in cars by fuel meters by which we can get an idea of whether tank is full, half full or empty etc. The liquid level detector and optimizer play an important role in tanks to indicate the level of liquid of a particular density. In this paper we have proposed a technique to give the level of petrol present in tank also gives the indication in the mobile with location link.

Keywords: - Liquid Detector, mobile with location link

I. INTRODUCTION

A fuel level detector (fuel gauge) is a device inside of a car or other vehicle that measures the amount of fuel still in the vehicle. This type of system can be used to measure the amount of gasoline or some other type of liquid. It will typically consist of a sensing or sending unit that measures the amount of fuel actually left and a gauge or indicator that relays this information outside the fuel container. A fuel gauge can be designed in a number of different ways and many gauges have several flaws that can make the readings less than accurate. The two parts of a fuel gauge are the sensing or sending unit and the indicator or gauge. A sensing unit is the part of a fuel gauge found within or connected to the actual fuel storage container on a vehicle. In a car these days, for example, the sensing unit will consist of a float inside the fuel tank, which is connected to a metal rod that runs to a small electrical circuit. The float raises or lowers depending on the amount of gasoline in the fuel tank. But in our case there are three basic parts of fuel gauge .It is all about the past method which gives only the petrol level present in the tank .but no one gives the indication in the mobile. for improving this method our proposed method is work.

II. PROPOSED TECHNIQUE

There are many sensor based techniques available in the market to measure the liquid level and gives you a close idea of quantity of the liquid, however can provide you an exact approximation of quantity as in cars by fuel meters by which we can get an idea of whether tank is full, half full or empty etc. The liquid level detector and optimizer play an important role in tanks to indicate the level

of liquid of a particular density In this we have proposed a technique to measure the amount of liquid available in tank also give the knowledge about their chemical composition as well as purity level of fuel & it is the first device which can give the accurate knowledge about of how much the vehicle can run. This device digitally displays the level of liquid inside the tank, fuel composition & running capability of vehicle by using load sensors. The measurements are taken so the accuracy level is of 95% - 98%. Thus it is an efficient device made by keeping in mind the *petroleum thefts at the various petrol pumps at the time of filling of tanks.* A fuel level detector (fuel gauge) is a device inside of a car or other vehicle that measures the amount of fuel still in the vehicle. This type of system can be used to measure the amount of gasoline or some other type of liquid. It will typically consist of a sensing or sending unit that measures the amount of fuel actually left and a gauge or indicator that relays this information outside the fuel container. A fuel gauge can be designed in a number of different ways and many gauges have several flaws that can make the readings less than accurate. The two parts of a fuel gauge are the sensing or sending unit and the indicator or gauge. A sensing unit is the part of a fuel gauge found within or connected to the actual fuel storage container on a vehicle. In a car these days,for example, the sensing unit will consist of a float inside the fuel tank, which is connected to a metal rod that runs to a small electrical circuit. The float raises or lowers depending on the amount of gasoline in the fuel tank. But in our case there are three basic parts of fuel gauge Sensing Computing (E.C.U. + C.P.U. + modulator) Indicator A sensing unit is the part of a fuel gauge found within or connected to the actual fuel storage container on a vehicle. In a car these days, for example, the sensing unit will consist of a float inside the fuel tank, which is connected to a metal rod that runs a small electrical circuit. The float raises or lowers depending on the amount of gasoline in the fuel tank, wheel speed, braking torque, load (vehicle itself + occupants + luggage) & acceleration ratio etc. We are introducing one more element in the branch of fuel gauges is the COMPUTER which is a programmed based micro processing unit. It is consist of E.C.U., C.P.U. & Modulator. E.C.U. receives information from each individual sensor, the signal is sent to the C.P.U. which collects data & computes it then send to the modulator which module the signals and display it to the indicator. It works as a computer for fuel gauge. In sense of the mileage of any vehicle is affected by some factors which we have consider in and also take most economical, useful, intelligent and quick responding sensors to calculate the effect of the all the factors directly as well as indirectly too. All the sensors are situated on their particular separate place to perform their operation. Sensors are very efficient quick responding units. The sensors collect all the data in running vehicle and then the collected information moves up to the E.C.U. E.C.U. is controlling unit which make command on all the individual sensors give them power to run and forward the collected data to the C.P.U. The E.C.U. is electronic control unit. Then the data moves up to the central processing unit i.e. C.P.U. at this unit the data finally computed into the numeric form by the mean of programming. All the data from the sensors is converted into the one form of mileage means HOW MUCH VEHICLE CAN RUN? All the information is in coded form which moves towards the modulator. Modulator is the unit to modulate the information and finally the

data in display on the digital fuel indicator in a numeric form.[1].

III. SYSTEM ARCHITECTURE

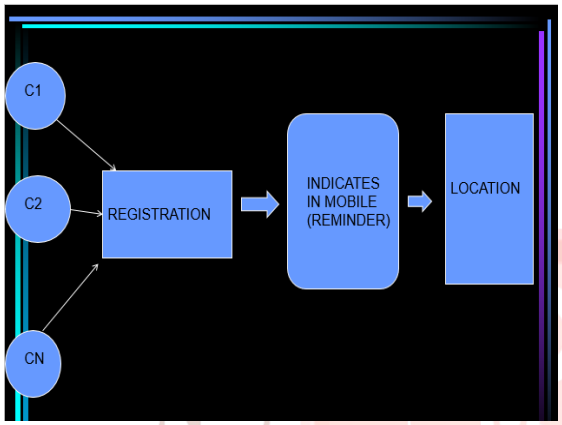
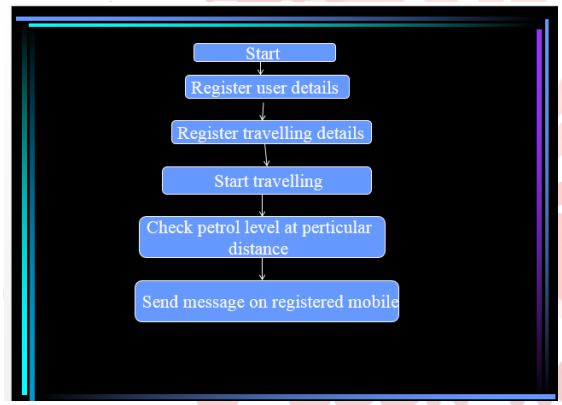


Fig1:-System Architecture



In this topic we are designing the four modules in which firstly we have to enter the user detail. such as name, address, mobile no, and all personal detail. After that the journey detail we have to give. In that petrol level and source and destination must be added. Then click on start journey it automatically starts the journey then if the level of petrol goes down below the level then it gives indication in the registered mobile number. with this it gives url for the location of nearby petrol pump. And the location gives with the help of Google map.

Technology Used

1. JAVA (Swing & AWT , JDBC , CORE)

2. MySql DataBase

3. Google Map Library

4. Online SMS Binding

5. Mandril library for Email Sending and mvaayoo for messaging

6. Magic Link Creator For Open App On click / tinyURL

IV. CONCLUSION

In this paper we have proposed a technique to give the level of petrol present in tank also gives the indication in the mobile with location link. Provide indication with location of petrol pump. Consume time. Provide convenience to people.

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