

# Fuel Monitoring System for Vehicle

Rajani K. C<sup>1</sup> Prakruthi T. N<sup>2</sup> Deepica<sup>3</sup>

<sup>1,2,3</sup>Department of Computer Science & Engineering

<sup>1,2,3</sup>PES College of Engineering, Mandya, India

**Abstract**— IoT based fuel monitoring is an well new approach to build a live project which will take fueling .In this project we try to build a software which will help the people provide required support whenever and where ever they need .This project is implementing to avoid actual record of fuel filled and fuel consumption in vehicle is not maintained and also avoid the financial loss. Here we can use the reed switch which works according to the principle of Hall Effect for sensing the amount of fuel filled in the vehicle. So as soon as agent starts to filling petrol in your car. The flow of sensor is activated once the flow ends it will calculate the amount of fuel filled and directly notify on your mobile phone. If the mobile phone is not available then data will be stored on cloud. This will mainly help the people who get out of fuel.

**Key words:** Fuel, IoT, Fuel Monitoring

## I. INTRODUCTION

In[1] this fuel monitoring system is to create an easy and convenient way for the people who get out of fuel or face any sort of usual problem with their vehicle or at any emergency situation where the need First aid service at a place where it is very hard of find these services physically.

The motivation behind this application is to make a simple and helpful route for general population who escape fuel or face any kind of normal issues with their vehicle or at any crisis circumstances where they require emergency treatment benefit at place where it is elusive these administrations physically.

Flow sensor is typically output of pulses proportional to the instantaneous flow rate which means that to interpret them it is necessary to implement simple frequency counter flow rate can be determined by different techniques like change in velocity or kinetic energy.

## II. LITERATURE SURVEY

In literature survey a brief discussion is done based on the various method and techniques which are used in the fuel monitoring system records and hosting it on cloud. This survey done will be used to implement the proposed by considering these problem.

The existing system does not provide 24x7 services. In proposed system the location history of individual fleet vehicles allows precisely time managed current and to reward journey planning responsive to changing travelling condition. To avoid this we are implementing an IOT fuel monitoring and tracking system. This flow sensor will be active till flow ends once flow ends it will calculate the amount of fuel filled and directly notify on yours mobile phone.

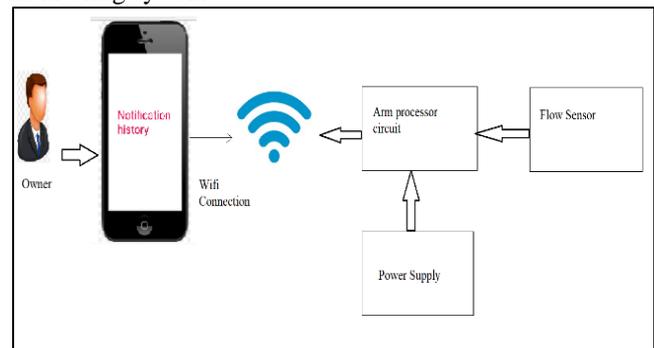
## III. METHODOLOGY

As said in the introduction there are more disadvantages are exists and these disadvantages can be overcome by applying various methods so that less human efforts is required to complete the task. Since this project uses a fuel flow sensor

containing a Hall Effect sensor that output a pulse rate proportional to flow rate so not only it is a useful project in its own right but it also demonstrates a very useful technique.

### A. System Architecture

The following figure shows the brief idea about fuel monitoring system.



We are implementing an IOT based fuel monitoring system to avoid the location history of individual fleet vehicles allows precisely time managed current and forward journey planning responsive to changing travelling conditions when agent start filling petrol in your vehicle flow sensor will get activated. This sensor will active till the flow ends once the flow ends it will calculate how much amount of full is inserted and this information will directly notify on your mobile also location can track via GPS so we know from where we have deposited the fuel.

## IV. RESULT & ADVANTAGES

Result and discussion is used to prove the concept and evaluated it. The application is written in visual studio with addition frameworks ,MYSQL databases is used to store the data in databases, CSS is used for front end design and sql server tag are used.

### A. Advantages

- 1) We get an instant notification.
- 2) We can cross check how much fuel is deposited.
- 3) We can also check where we have deposited fuel.

## V. CONCLUSION

The software mainly depends on the locations provided by the user which are easy to access and sees. The application can be used at its best at the time of travelling this helps the people who travel while they run out of fuel or when the need emergency services .The proposed system will make sure that how much amount of fuel is exactly deposited to avoid loss of amount of money.

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