**CHAPTER 1**

**INTRODUCTION**

The project “Smart Digital Assistant” is about how to convert the analog process of fuel level indication to smart digital fuel indication, in which the correct measure of fuel is measured in litres or millilitres and the readings are reported to the user using amazon alexa when the vehicle is switched on.

**1.1 Problem Definition**

The existing system needs a human to look into the readings of the fuel level and know the results, which is time consuming and it is also a extra task to the user in the busy routine works . Our proposed system reduces them by automating the whole complete process using a voice user interface(Amazon Alexa echo dot) which will be much faster than the existing system, also reduces the time and man power consumption.

**1.2 Objective of the Project**

The fuel is digitally monitored by using the ultrasonic sensors and accurate results are stored. The alexa enables better advancement of fuel monitoring system by reporting the results to the user immediately after the vehicle is switched on by using voice recognition techniques.

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**1.3 Significance of the Project**

Smart Digital Assistant has a major significance such as follows:

* Minimal man power consumption
* Minimal time consumption
* Computational errors and mistakes are minimized

**1.4 Outline of the Report**

Smart Digital Assistant has a major outline report which is as follows:

* Manual work has to be reduced
* Accuracy
* Result to be received very quickly
* User friendly
* To speed up the operation
* Managing and maintaining data becomes easier.

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