



CAR GREETING SYSTEM

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In the name of Allah, The Beneficent, The Merciful

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ABSTRACT

This project is to design a Car Greeting System model. This project required to use microcontroller as the main component. There are various type of microcontroller such as PIC and Arduino. Microcontroller used in for Car Greeting System application is Arduino Uno. It is an open source device and has its own software that provide a workspace to write the coding. This project required to do the coding on the Arduino software using a computer. After being coding with precise information, the coding will be applied to the 8x8 dot matrix led. The microcontroller will be supply with 5V. Before transfer the coding into the 8x8 dot matrix, the simulation of this project is done using a Proteus Software. By using the Proteus software, this output desired can be test on the Proteus simulation. The application of this project is based on driver reaction. The driver needs to push the button and LED board will display the output. As example, if the driver all of sudden hit the break or emergency break, the driver need to push the 1st button that will display "SORRY" on back of the car, so that the other driver did not feel angry or stress with the action. Next, for the second button is when the other driver give a pleasant feeling to other drivers, it will display "DRIVE SAFE". Lastly the third button, for the other driver that give space for the user, This will display "THANKS" that will give a thank you to the other driver. The advantages of this Car Greeting System are that the user can interact with other driver while driving on the road. Other than that, this project can also remind people to drive carefully and remember to drive carefully on the road. Other advantages of this project are, it can thanks other driver and also apologizes to the driver either we say "TAHNKS" or "SORRY" based on the condition while driving on the road. Other than that, the user can also re-programmed the output desired based on the choices of the user.

There are many advantages of Car Greeting System. From the actions stated above, it will shows our courtesy to other road user. Besides that, eventually it will give a pleasant emotion to the other driver while on road. This model can be one of attractive model to anyone that loves to make up or upgrade their car with car's accessories. Last but not leas, it such a reminder to other road user to always drive safe and remember their loves one while driving.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

The project is given name Car Greeting System. This project is the combination of several component included ArduinoUNO as our microcontroller, Dot matrix LED and other electronic devices. The main function of this project is to give awareness about manners in road. Basically, this project consist of three input and three output based on the action. As the example, while driving and you want to change the line, we need to give signal .Once you entered the line, push the first button placed next to the steering and the display board will appear “THANK YOU” at the back of car. This shows a good manner and appreciations to driver who give way to us.

Nowadays, car is one of the most important transports for us to arrive at any destination timely. Even though government have taken initiative to provide an efficient public transport such as LRT , MRT and Rapid KL , people nowadays prefer to use own car instead of public transport due to conveniences. Based on the statistic, Malaysia is one of the highest numbers of accidents in the world.

There are some causes that may lead to this situation such as weather, car's condition and driver itself. It is not because the driver doesn't know how to drive, but it's about the behaviour of the driver that sometimes can lead to accident. As we can see, some of the driver like to change their line without give a signal, this can cause the other driver didn't realize and will hit the car.