ABSTRACT

The increasing number of vehicles has also increased fuel consumption. Therefore, an environmentally friendly vehicle is needed, namely an electric car. Electric cars use an electric motor as a drive with a battery as an energy source. Batteries become one of the discussions on electric cars. The battery in the electric car used varies. Controls and monitors are needed to make the electric car an efficient vehicle with proper battery management.

In this Final Project, I will be designed a monitoring system and management of electric car batteries. The battery in the electric car will be taken data. The data to be monitored on the battery is current and voltage and added data from the speed sensor. Data from the sensor is then processed and sent to the microcontroller. Then the data is displayed on the LCD in real-time. That way, the condition of the battery of an electric car can be easily observed and controlled, and can predict the distance left on the electric car.

The result of this Final Project is that a mileage monitoring system has been made with an average error in the estimated mileage system that is equal to 0.034 km.

Keyword: Battery, Electric Car, Monitoring