

Abstract

Traffic accidents are unexpected and accidental incidents on roads involving vehicles with or without other road users resulting in human casualties and / or property losses. Many factors can cause accidents such as human factors, vehicle conditions, road conditions and surroundings, and weather factors. The government has established regulations on the investigation of accidents and the first handling of an accident. The prototype in this final project is a system that can record and classify in case of accident. Vehicle recording utilizes On board Diagnostic-II (OBD-II) feature with parameters: vehicle speed and engine temperature. Accident classification utilizes vehicle's speed, airbag condition, and Gs value from accelerometer. OBD-II features can be utilized prototype in testing data recording on Toyota Yaris. Accelerometer ADXL345 and DTC can be used to classify accidents, SIM900 can be used to send data on the server and send notification in the form of SMS in case of accident to the authorities.

Keywords: Accident, Classification, OBD-II, DTC.