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Abstract

The Eye is a traffic monitoring system using image processing for the city of Dasmariñas. This study aims to help modernize the way the traffic management of Dasmariñas city tracks the volume of vehicles passing through the intersection of Aguinaldo Highway and Congressional Road. The system requires video feeds from traffic cameras in order to count the number of passing vehicles. It is designed to lessen the burden of the traffic management personnel, automate the process of counting vehicles per hour, and classify each vehicle into three (3) categories namely Class 3 (Bus, Trucks), Class 2 (Sedan and Sports Utility Vehicle), and Class 1 (Motorcycles). The developers take into consideration that the design should be to avoid confusion and difficulty in using the system.

In order to determine what features are to be added, the proponents consulted the employee of the Local Government Unit who is familiar to the manual way of tracking the volume of the vehicles. Survey and interview were also made in order to determine if the proposed system is acceptable

The proponents decided to use C#. This software uses Microsoft .NET Framework 4.0 which provides the services that the proponents need in order to create the system. A Microsoft SQL Server 2008 database is used to store and fill the data that includes personal information, vehicle information, location details, and the video source.