

Requirement Collection

In the present, there are several types of cars in the road. Monitoring become a lot harder than before. Today we are going to talk about the project that can help monitoring become easier.

This project is a web application based on Django framework that was designed for detect data from the video that recorded with drone camera at the top view. User can input the video received from the drone and let this project analyze it for them. The result from project includes type of vehicle, vehicle direction, and vehicle counting. In this version, application can detect 3 types of vehicles including Motorcycle, Car, and Trunk. This analysis can help police to predict and plan to manage those vehicles in the road via video that was take with drone at the intersection. For example, In New Year holidays, a lot of people go back home to visit their family. This web application can help police to detect and count number of cars to collect data, predict situation that may happen in a nearest future, and manage the situation to prevent unexpected circumstances.

Like other application, user must authorize to use this application. User with no account in this application can register and login too. The profile page is also editable. In this project, Developers of this project determine group of users in to 3 group of users including Department of highways, Local Police, and Traffic Police. Each group has difference data accessibility. When user login, this web will redirect to homepage. Homepage shows Task Table that contains date, name, location, status, owner, date, modify and date upload. Moreover, there is a search bar that can find a task that user is interested in. User can view result of each task by clicking at the name of the task and it will show result page that display the result of detection. The result not only show type of vehicle, vehicle direction, and vehicle counting but also allows user to export these data into JSON file. The task can be added by their own task or admin only. With video files, location, date collection, authority, and

description. Then they add loop name and loop location (x, y) in video files to detect cars.

In the future, this project has plans to develop for more functions such as notification to update process of work, develop engine and algorithm for more accuracy detection or function to show that who report the task.