Abstract

Rapidly increasing population growth, increased traffic density also occurs. Especially in Bandung City many drivers who want to travel to each destination with is hoping to arrive on time, but always hampered by the density of traffic.Moreover, as the driver who wants to visit a first place before proceeding to the final destination in a timely manner.Many drivers often have problems with selecting the optimal route to reach the destination by the time it takes to not face the traffic density or minimize the route which included traffic density so that drivers arrive on time.

In this final project, the authors apply *A *(Star)* Algorithm to determine the optimal route for drivers.In this method is also used to determine the prediction of traffic density that is passed by the driver in the form of data, and after that the process will be conducted using data mining with *Decision Tree* method.Drivers who will go to the starting point to the next point until arrive to endpoint will be searched the prediction of traffic density based on day and hour required by the driver.

With the final project to be made, is expected to help the driver to find optimal route and get to their destination in a timely manner.

Keyword : Optimal, *A *(star) Algorithm*, *Decision Tree*