HIGHER TECHNICAL INSTITUTE

COMPUTER STUDIES

DIPLOMA PROJECT

Intelligent Traffic Lights Management

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A few words about the system and the development

This project was proposed by Dr. Andreas Hadjiprokopis, lecturer of General Studies at the Higher Technical Institute, to be developed by the third year students as one of the final year diploma projects.

A Traffic Simulator System will be designed to provide monitoring for traffic on a daily basis. Traffic conditions of individual vehicles can become unstable, especially in towns. Is there anyone who has not yet been amazed by traffic jams or stop-and-go waves, seemingly appearing "out of nowhere", without any obvious cause? Traffic Simulator can describe the attitude of drivers and therefore the average speeds of cars on different roads, the density of traffic in avenues and at traffic light junctions. The results should help prevent at least some of the traffic jams by providing effective algorithms i.e., traffic-dependent control of speed limits, traffic lights timings in cities, road modifications- change of speed limit, bidirectional or one way.

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