EECS 481 Software Engineering Project 2 Description

Problem

Detroit Metro Airport and Northwest Airlines are developing a new 74-gate terminal to match the increased needs for flights into and out of Detroit. The objective of the group is to track, inform, and control traffic in the vicinity of the new terminal.

The TRAFFIC group has no control, but adequate information regarding traffic in the 15-30 mile radius from the airline terminal. The group has moderate information about traffic, and some method of informing drivers about traffic in the 2-14 mile radius. The group has copious information and lane control in the <2 mile radius from the airline terminal. That is, lanes can be changed to entrance/exit lanes based upon need.

Traffic congestion typically occurs on a given schedule each day. However, unusual circumstances, such as an accident, may cause congestion at unexpected times. The system must inform drivers of alternative routes with more explicit information as drivers/passengers travel closer to the airport.

The system is integrated with the PARKING group. Traffic is routed based upon congestion and availability of parking.

Constraints

Issues to be considered:

- 3 ranges of distance (<2, 2-14, 15-30) with different levels of I/O and control at each distance.
- system must recommend alternative routes in case of traffic congestion.
- system should recommend most likely parking lot.
- integration with PARKING group.