TJHSST Senior Research Project
Ideas for Project
2006-2007

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1 Purpose and Scope

This project would be a simulation of TJ. There would be two floor plans, and students and teachers would be represented by dots (maybe indentifiable by color). The goal is to accurately simulate a day of school. At certain times of the day, the dots would be in the classrooms, and at other times in the hallways or outside of school. At its highest level of sophistication, the program would allow the user to control variables of the school day such as class length.

2 Background

All I know about this topic so far is that it relies heavliy on probability. I recall the Marine Biology Simulation from APCS but I don't remember particularly enjoying that unit, so I'm hoping to make this project a bit more entertaining. Also, as I was looking through old projects, I saw a highway simulation that I thought was interesting and that prompted me to do something like this.

3 Procedure

I'm probably going to use Java because I'm most familiar with it, unless I find a language that is more suitable for simulation-writing. I'm not sure how to test my program for verification yet.

4 Expected Results

I expect to obtain an accurate simulation of a school day, with the students being where they are supposed to be at certain times of the day. The final results will be presented in a time-scaled demonstration.