Need For Speed: Hacker’s Trail

6.111 Final Project

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Abstract

The goal of the project is to implement a racing simulation system that allows users to create their own race tracks and subsequently compete on the created tracks.

For creating the desired race track, the user can trace out the map by using a mouse or by pointing a laser pointer onto a monitor. More specifically, the laser pointer method can be done by using a camera to locate the "cursor" by sensing points of high intensity on the screen and storing the pointer trail. The traced out tracks will then be saved in memory and be loaded as the track of the game. To make it more realistic, we will provide steering wheels to detect the actions by the users and move the cars accordingly. The game will contain the necessary logic to detect collisions and to keep track of the game related information, such as the lap number, the amount of time elapsed, and the scoring information. The game will also have multi-player capability, allowing people to compete with each other.