Programming with the Intel Galileo

LCD Racer

Description
Create a racing game on the LCD screen. The car will be racing through a set of randomly generated obstacles that go across the screen towards the car. These obstacles will need to be avoided by moving the car either up or down before it gets hit. As you pass more and more obstacles, they will start to come at you faster. If you “crash” into an obstacle then you lose, and your distance (score) will be displayed.

Required Components

LCD Screen, Buttons or Keypad

Basic requirements

Begin by displaying a small splash screen with the game title. The racing game will use the LCD to display the race, and either a set of buttons or the keypad to move the car. The obstacles will need to speed up as the time goes on. When you crash into an obstacle it should show a quick crash animation, then display your distance (score) on the LCD. You will be able to restart the game from this screen. You must have a soft reset button that will return you to the intro screen when pressed.

Advanced requirements

After the splash screen, implement three different difficulty levels. Adding obstacles and/or the default speed of the obstacles is one solution to vary difficulty.

Video Demonstration: [https://youtu.be/x-P-b1LJoww](https://youtu.be/x-P-b1LJoww)