Crater Racer

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Website: http://www.googlecode.com/p/cpsc585
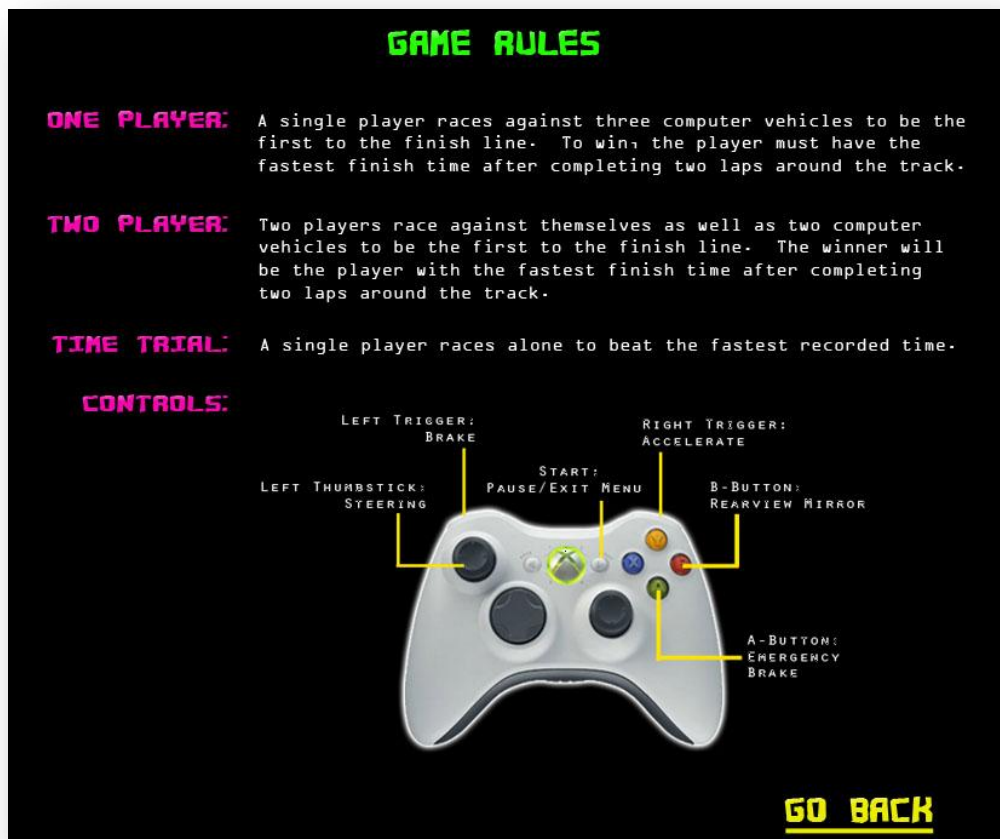
Readme

<u>Requirements:</u>

- DirectX 9.0c (Aug 2008) (works best with this version)
- XBox Controller(s)

<u>To run:</u>

- Just run CraterRacer.exe

<u>How to play:</u>

We left the "back" button as the respawn button, in case the player gets stuck.

Game features:

The final milestone features all three gameplay modes: One Player, Two Player, and Time Trial. We have fixed most of the things noted in the readme in our last milestone. In this iteration, the game is now a full screen game for nicer effects.

Above: Yellow boost ramp

We added boost ramps to the track, which accelerates vehicles that drive over it in the direction the vehicle is heading.

Meteors now have a random chance to spawn and there are now meteors that spawn only during the second lap of the race. A player lagging behind has a higher chance to see some meteors fall.

If a vehicle is off the track for more than five seconds, then it will get respawned at its last waypoint. This is done in hopes that vehicles cannot skip parts of the track, and prevent them from getting stuck off the track for too long.

We added ebrakes to our driving model (button A to use). Though it is not necessary for finishing the course, players may find it useful in some situations.

Vehicles' maximum velocity is dependent on their current rank. Vehicles in the lead will have a lower maximum velocity, and vehicles lagging behind will have a higher one, making the race more competitive.

Above: a shot of the skybox and start/finish line

A skybox is present, and there are also props (rocks) in the scene. Since they are props and not of major importance, we have a simple bounding sphere for each. There is shading on the objects in the game, however, shadows did not work as planned. Our scene now has a start/finish line as well, so players can tell when they are close to the finish.

Vehicle collision and boost ramp sound effects have been added. We have menu music as well as in-game pause menu music. There is sound for the race count down as well. There are seven different soundtracks for the race.

Time trial has been fixed, and the user races against the fastest time recorded, or two minutes if a record has not yet been set. If your finish time is in the top five records, then you may enter your initials on the results screen shown after you finish the race. Move the left thumbstick up and down to find the desired letter, then press A to select. The scores are kept in a file (times.txt) so they can be used again later.

The results screen in all modes have been fixed, and the menu options work properly in this milestone. If the player did not come in the top four, then his/her stats are displayed at the bottom of the screen.

Above: Best race times screen

Below: Results screen

The waypoints system in Crater Racer supports multiple paths, however our current track does not have any.

Known bugs:

- Shadows not working
- Vehicles can flip and sink under the ground
- Wheels may penetrate side walls
- AI occasionally gets stuck by meteors
- Vehicles can skip parts of the track by going over a particular section of the outer track, however they will need to return to where they left the track if they want to win