Physics 11

CITM

Project: Racecar

Overview

- To test our knowledge with Bullet Physics library, we will create a simple racing game.

- The project will be done in groups of 2/3 people.

Submission rules

- The delivery must be a **zip** containing:
  - The executable compiled in *Release* with all DLL and data needed to run the game.
  - There must be a text file called "README" containing the list on controls, the goal of the game and the guide to finish it. Add name of the students involved and a link to the source in GitHub.
  - In the GitHub page there must be the zip also published in the release section.
- The file must be named **Lastname1Name1_Lastname2Name2_etc** after each student's names and last names. It should be located in the folder "**RacingGame**".
- The file must be submitted before **15 Jan 2021**. No delivery will be accepted that does not follow those guidelines. You can deliver many times, only the last entry will be evaluated.

Grading Criteria

To accept a submission for grading, it must comply with:

- It follows the submission rules stated above.
- The game did not crash while testing.
- The game has to have a clear WIN and LOSE condition.
  - Ex: *"Do three laps in less than 4 minutes"*.
- There is at least one gameplay use for a constraint of any type.

Grading Criteria

Once accepted the criteria is as follows:

- Code quality 50%
  - Code is clear and well structured.
  - No memory leaks.
  - The focus will be on physics code.
- Game polish 50%
  - The game has a clear win/lose condition.
  - The game is fun and easy to play with well defined rules.
  - Creativity will be rewarded.

Experimental Gameplay

- The game can feature special elements not included in the original idea like hovercrafts, tanks, boats, etc. as long this has been **previously approved by the teacher**.
- In this case, special grading criteria may be used to reward experimentation.