Remember that the quality of the defenses, hence the quality of the of the school on the labor market depends on you. The remote defences during the Covid crisis allows more flexibility so you can progress into your curriculum, but also brings more risks of cheat, injustice, laziness, that will harm everyone's skills development. We do count on your maturity and wisdom during these remote defenses for the benefits of the entire community.

SCALE FOR PROJECT PARTICLE-SYSTEM (/PROJECTS /42CURSUS-PARTICLE-SYSTEM)

You should evaluate 1 student in this team

★

Git repository

`git@vogsphere.msk.21-school.ru:vogsphere/intra-uuid-65755f84-e86a-49`

Introduction

To ensure this evaluation goes smoothly, please respect the following set of rules :

- Please remain courteous, polite, respectful and constructive at all times during this exchange. The trust bond between the school's communauty and yourself depends on it.

- Should you notice any malfunctions within the submitted project, make sure you take the time to discuss those with the student (or group of students) being graded.

- Keep in mind that some subjects can be interpreted differently. If you come accross a situation where the student you're grading has interpreted the subject differently than you, try and judge fairly whether their interpretation is acceptable or not, and grade them accordingly. Our peer-evaluation system can only work if you both take it seriously.

Guidelines

- You may only evaluate whatever is in the GiT submission directory of the student you are grading.

- Make sure to check wether the GiT submission directory belongs to the student (or group) you're grading, and that it's the right project.

- Make sure no mischievous aliases have been used to trick you into correcting something that is not actually in the official submitted directory.

- Any script created to make this evaluation session easier - whether it was produced by you or the student being graded - must be checked rigorously in order to avoid bad surprises.

- If the student who is grading this project hasn't done the project him/herself yet, he/she must read the whole topic before starting the evaluation session.

- Use the flags available to you on this scale in order to report a submission directory that is empty, non-functional, that contains

a norm errors or a case of cheating, etc... In this case, the evaluation session ends and the final grade is 0 (or -42, in case of cheating). However, unless the student has cheated, we advise you to go through the project together in order for the two (or more) of you to identify the problems that may have led for this project to fail, and avoid repeating those mistakes for future projects.

Attachments

subject.pdf (https://cdn.intra.42.fr/pdf/pdf/19214/en.subject.pdf)

Preliminaries and constraints

If one of the constraints asked for isn't met, do not grade further.

Render

Launch the program. Is there particles rendered in the window ? Is it possible to initialize the particles in the shape of a sphere and a cube ?

Yes No

Libraries check

Check the use of OpenCL 1.2 and OpenGL 4.0 (minimum) and the interoperability between them. While you're doing this, look for the following memory synchronization functions: clEnqueueAcquireGLObjects and clEnqueueReleaseGLObjects.

Yes No

Performances 1

Launch the program with at least one million particles and check that it runs smoothly at 60 fps.

Yes No

Performances 2

Launch the program with at least three million particles and check that it runs at 20 fps.

Yes No

Memory allocation

All the particles must be allocated on the VRAM (video memory). Launch the program with a million particles and check the memory usage in the activity monitor (by searching for the name of the executable), then repeat with three million particles, the memory must not triple.

Yes No

Let's have some fun

Stationary gravity center

Is it possible to place a gravity center that attracts the particles?

☑ Yes ☒ No

Moving gravity center

Can the cursor act as a moving gravity center?

☑ Yes ☒ No

Colors

Are there colors? Are they depending on the distance between the cursor and the particles?

☑ Yes ☒ No

Bonuses

Camera

Is there a camera? It should be able to move with WASD or the mouse.

☑ Yes ☒ No

Emitters

Is it possible to put emitters? They have to generate particles with life span.

☑ Yes ☒ No

Other bonuses

Give some points for every other cool bonuses.

Rate it from 0 (failed) through 5 (excellent)

Ratings

Don't forget to check the flag corresponding to the defense

✔ Ok ★ Outstanding project

Empty work Incomplete work No author file Invalid compilation Norme Cheat

Crash Incomplete group Forbidden function

Conclusion

Leave a comment on this evaluation

Finish evaluation

Conclusion