

Introduction to Computer Graphics: Personal Project

Saturday 31st January, 2026

Contact: camille.schreck@inria.fr

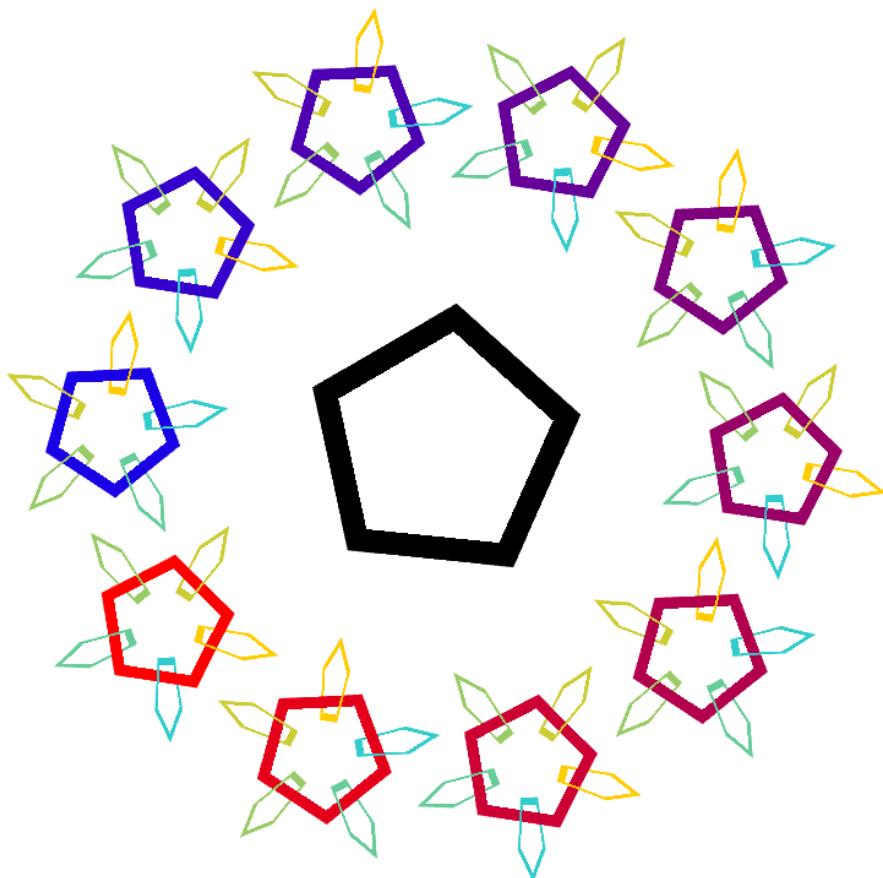


Figure 1:

Instructions: The project is to be sent by mail (camille.schreck@inria.fr). The title of the mail should start with [PROJET ENSG]. The project should be a file called *projet_name_surname.zip* with an archived repository containing your files, or a file *projet_name_surname.html* if you have only one.

The code should be commented

Pentagons

1. Create a pentagon centered on zero in the plane (xy) using 5 triangles (Figure 2 left).
2. Empty the inside of the pentagon using the `discard` command and the uv coordinates (Figure 2 right).
3. Make the pentagon rotate around itself on the z axis.

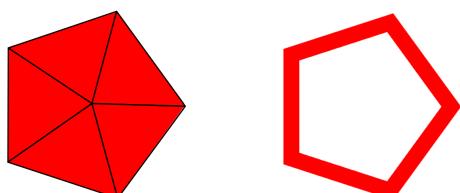


Figure 2:

Orbites

1. Create a circle of n pentagons rotating around the center of the scene in the plane (xy) (Figure 3).
2. Make the pentagons also rotate around themselves.
3. Around each of these pentagons, make a circle of new smaller pentagons such that they are interleaved with the bigger ones (see Figure 1) and make them rotate around them.

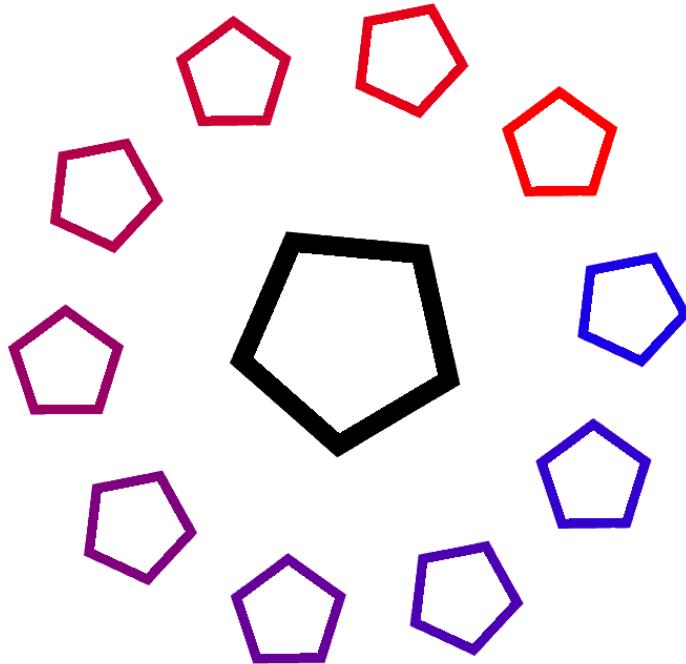


Figure 3:

Pentacman

1. In a new project, modify the uv coordinates and the fragment shader such that one of the triangles of the pentagon only keep its two inside borders (see Figure 4).

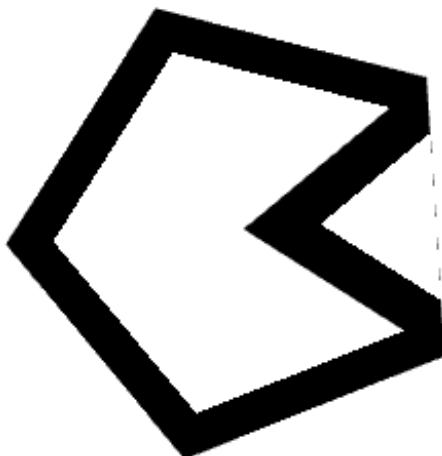


Figure 4: