**Projet Pratique**

INF443

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This project stimulates a scene simplified in the game Hollow Knight. We used several tools learnt from the class to present a late-night scene of the village.

1. Geometric Models
   1. Surface

The surface is made by a 20 \* 20 mesh. We add additionally a slightly rough texture for stimulating the ground.

* 1. Roads

The roads are created by fixing several points on the Surface mesh. We utilized the “Spline” technic to create smooth paths.

* 1. Road lamps

Road lamps situate next to the fixed points of the roads. For every road lamp, we attached a light source at the top of it. This scene is mostly lighted up by the road lamps.

* 1. Bench

Benches situate next to the road and also next to the road lamps.

* 1. Houses

Two types of houses are created to stimulate the scene of the village. They are mostly made by a re-shaped sphere adding up some details such as windows and doors. They are also situating next to the roads and also facing to it.

Additionally, we created a source of light in the transparent windows, in order to simulate the case that there are habitants in the house so the light is on.

* 1. Fireflies

Fireflies are one of the most important elements who gives the village a tranquil and mysterious vibe during the night in the game. We created the bug’s model based on a model given for the TP. For each flying firefly in the sky, there’s a source of light attached to its bottom. These lights are the second source of light in the scene.

1. Animations

The main part of the animation in this scene is the flying fireflies. Locally, there is a natural movement for the flying bugs. We then set a fixed path for every single bug by the “spline” technic. The bugs move slowly along this path and light up the whole scene with their glowing light.