

Problems within Yandere Simulator



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Instancing OFF

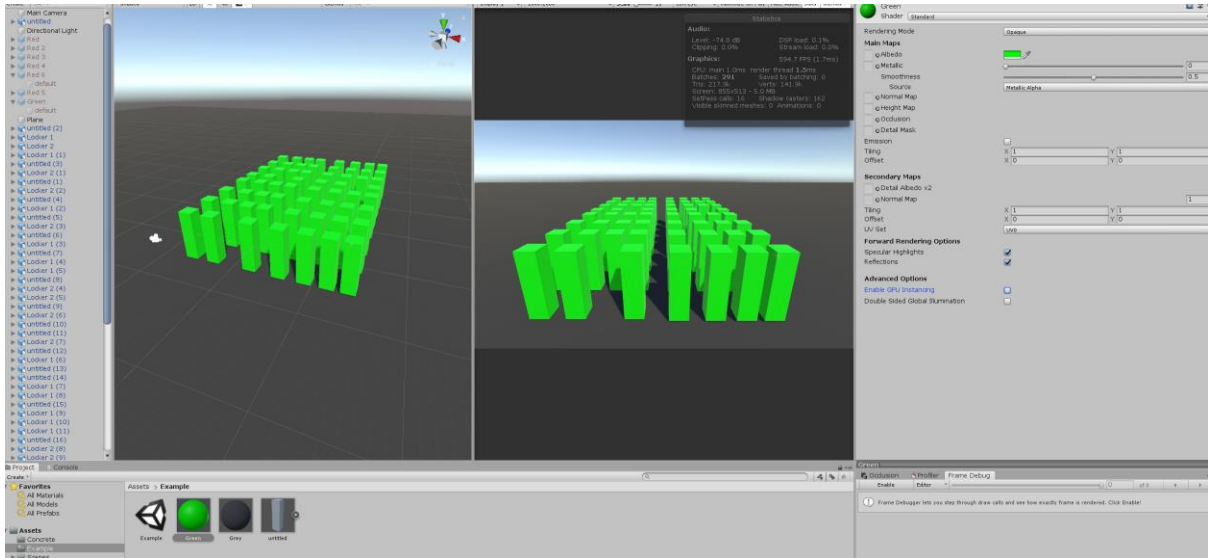


Illustration 1

Instancing ON

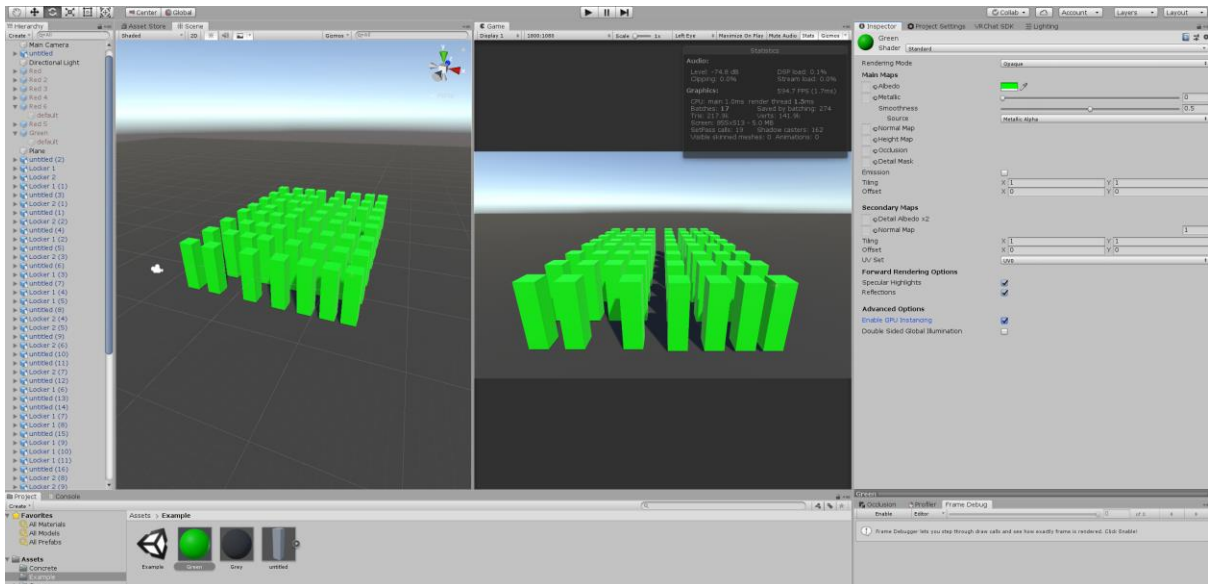


Illustration 2

The batch count lowered by instancing all objects. This is done at the shared material (standard shader). The instanced object only fills what the original object file does. Contra making these static into roots (combined) where it will fill 50x as much.

These represent Lockers

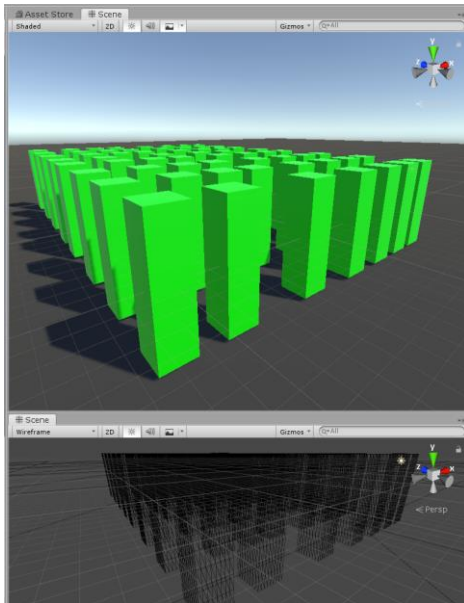


Illustration 3

In illustration 2 all object (despite instanced) they all have separate names. In the code to associate each locker with each student the names of the lockers will be changed. Using an INT valuable to represent the students locker a cached `GetComponent` of the locker is issued to locate it.

Likewise to any other instanced chair, classroom or anything else each instanced game object have their own name, which is easily found with a `GetComponent` command.

In the case of hedges there are roughly 200.000 polygons loaded into VRAM at once. These are all in the same object. Instancing them would not only LOWER the batch count but only use the memory of one hedge.

All repeating objects in the game shall be instanced to improve the framerate, prevent frequent crashes because of missing space for VRAM and greatly improve loading times.

For this to work the instanced object must only use 1 material which has GPU INSTANDING enabled. Use an atlas map if necessary. Despite deleting lockers the batch count is not changed because they are instanced.

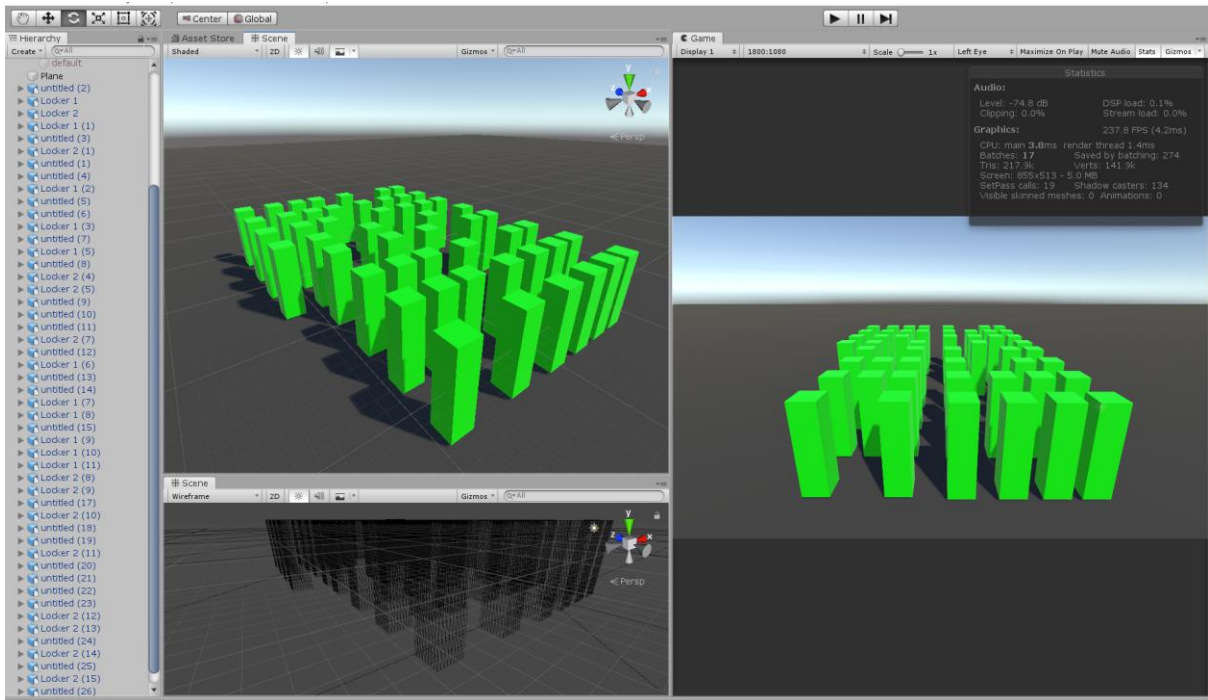


Illustration 4

Instanced objects have no impact on the batch count, and therefore no impact on the amount of draw calls.

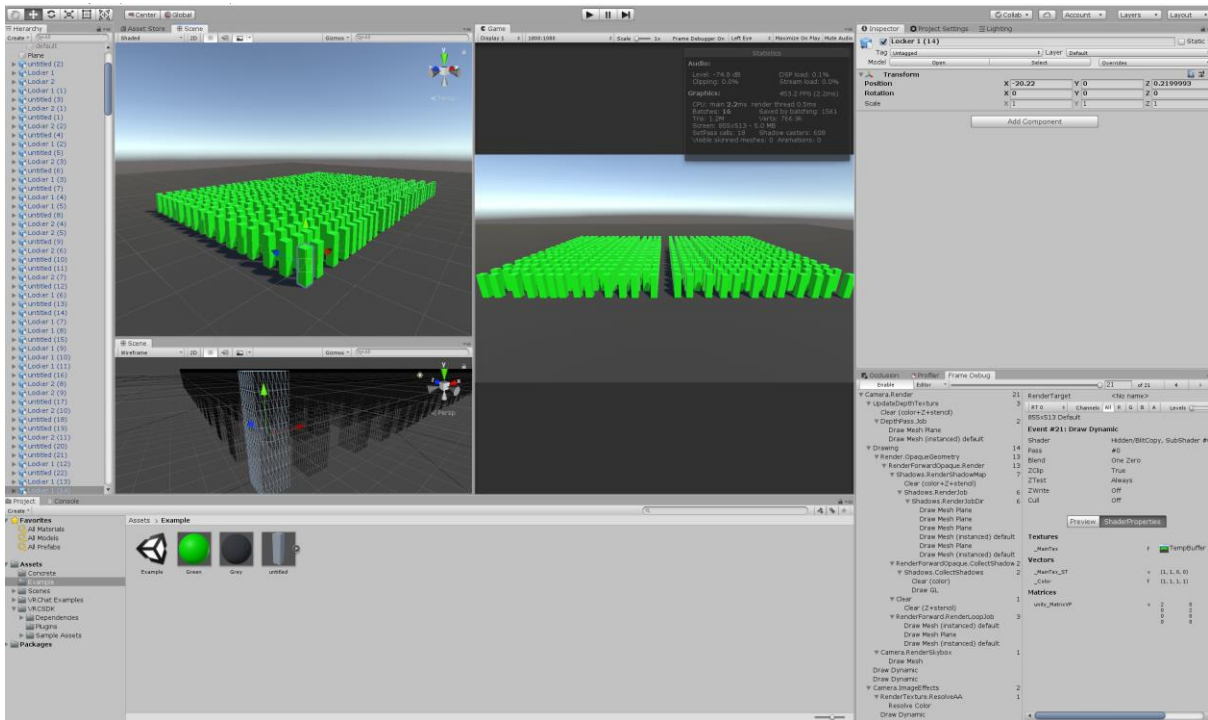


Illustration 5

Notice that the issued draw calls are the same. The allocated VRAM is also the same, as all drawn meshes are drawn from 1 instance. It has the same performance as 1 locker.

Conclusion:

Instance repeating objects. This is fencing, hedges, bushes, chairs, lockers, posters, tables, trees. ALL REPEATING OBJECTS.