**Project Description (Berend Baas 4723201, Jens Langerak**

Shadows are computed using shadow maps, using an infinitely far away light source, and reflect the distance to the generated infinite terrain. We create soft shadows by reflecting the distance of a small area of points. The light is placed in such position that the entities cast a clear shadow on the terrain.



Bullets shot by player are rendered as textured rectangles. When an enemy dies, a death animation triggers. This is done by increasing the rotation around the y axis every timestep. Likewise the height is decreased to simulate the enemy "crashing to the ground"



The boss consists of 2 circular heads orbiting a central point, each of which has two "moons". This is implemented using stacked transformation matrices, chaining global transformations, planetary transformations (rotation and translation) and moon transformations (again rotation and translation) when appropriate.



On hitting one of the boss' "moons" or "planets" results in an erosion effect achieved using voxel simplification

