Life of Blob

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1. Project Status

Currently we are still into layer 3 as we had to rethink certain mechanics and had to make corresponding additions to get these changes to work. First of all, enemies are now dropping “loot”, when they are hit. When acquiring this loot, the player either grows by some amount , gains a new ability or improves an already existing ability. The way the level is generated has also changed but parts are still under construction. Enemies are still getting their abilities at random but due to some AI improvements the game feels more fair than before. Balancing the distribution of abilities will be part of the playtesting. Most improvements have been made in the visual part of the game. On the other hand, music and sound effects are still absent and the UI is only a mockup version that is barely functional.

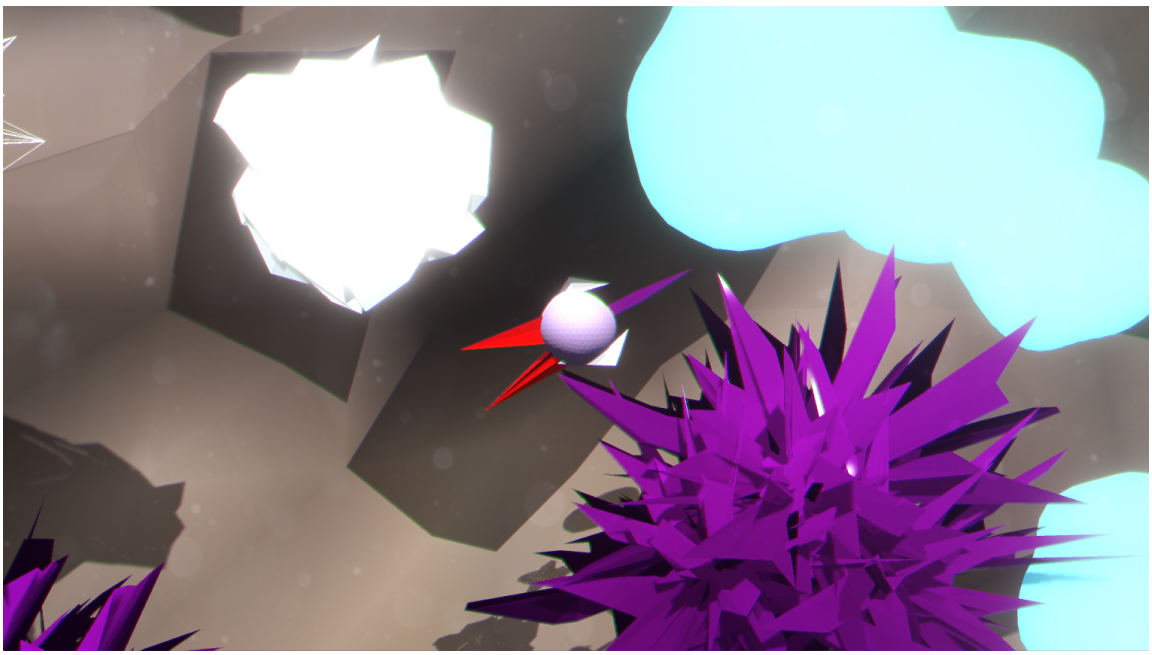
2. Implementation Details

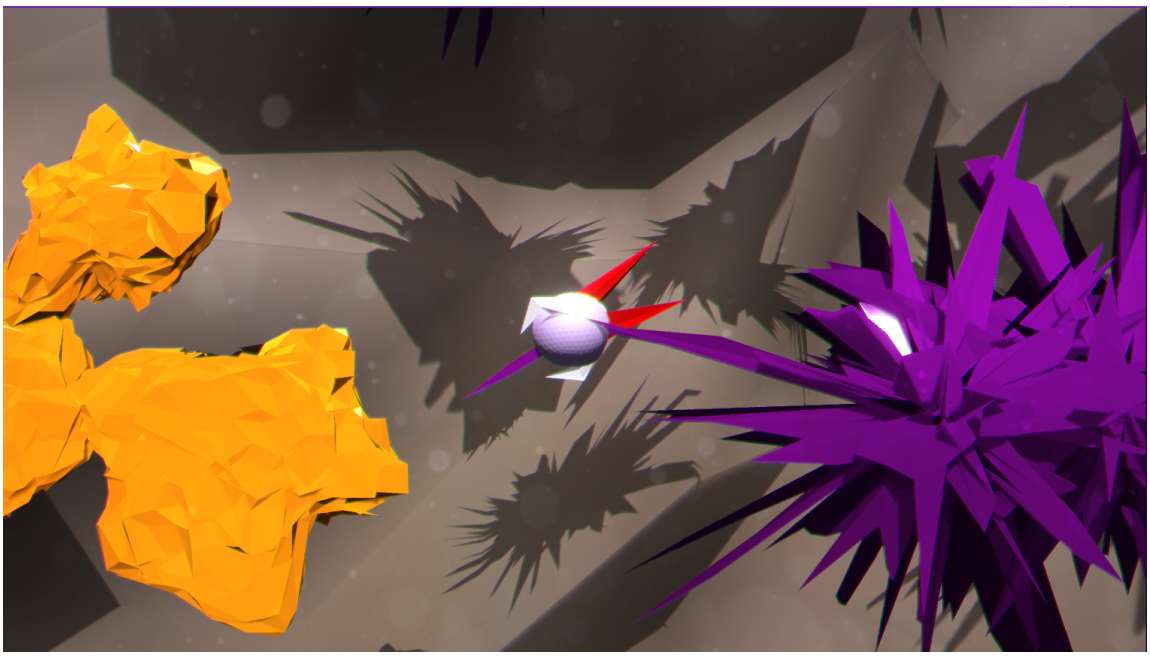
In the previous version, the background was a mesh, that was dragged constantly along with the player. The resulting contiuous change of vertex positions lead to artifacts when using perlin noise. Therefore the first change we did, was to make the background plane much bigger, such that its position does not need to be changed constantly. Only when the player reaches the end of a plane, another one will be set to active and smoothly continue the level. Problem is, that the boundaries are still visible, which is a bit confusing since the perlin noise for the corresponding vertices should return an equal value. Maybe is is due to the interpolation of the normals at the edge of the map, that makes the edge so easily visible.
Another unresolved issue, is that there is basically a limit of how big the player can get, before the edge of the map would get visible. Though none of us has ever played the game for that long, it is basically possible to grow that big. An easy fix for this would be to make the game exponentially more difficult, the bigger the player gets, such that this case will never occure.
The procedural placing of environmental obstacles is currently under construction and will be the next task to finish.

All environmental obstacles (like water, lava fields, thorn bushes, etc) are now generated with an (optional) initial distortion of the base mesh (which is always a sphere) and calculation of perlin noise for a structural change along the shared vertex normals during

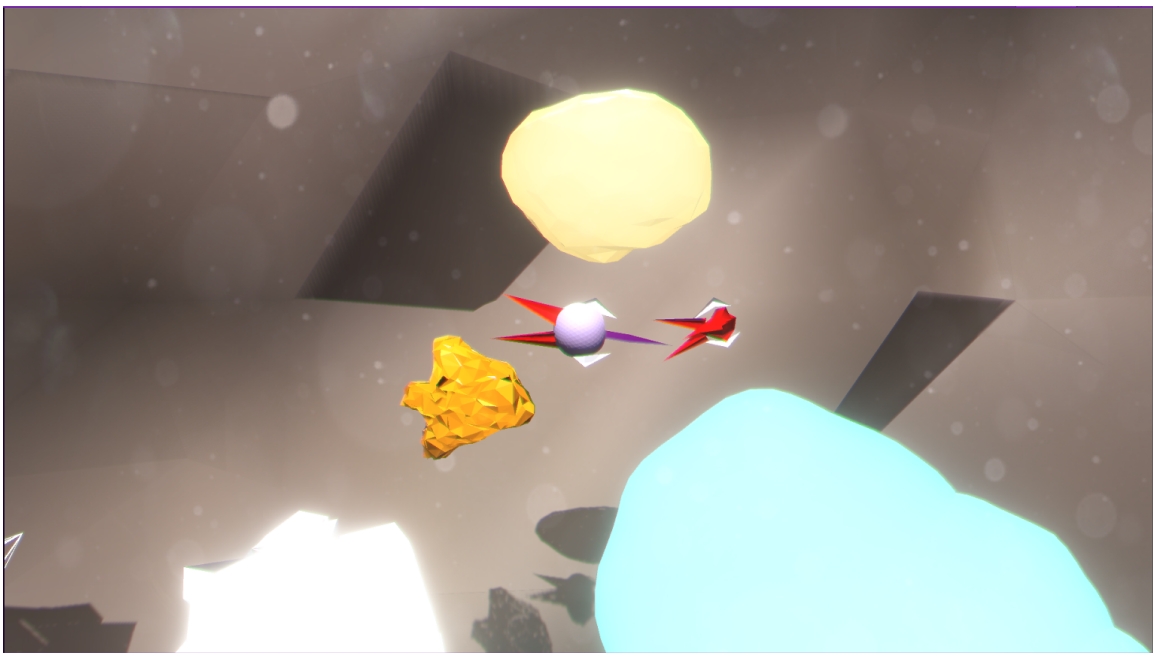
each frame. Performance wise it works fine, but we will see what happens when there are a lot of these objects on screen. Maybe we'll have to export this deformation function into a coroutine only executing a few times per second instead of every frame The pictures don't quite do the game justice. It looks slightly better when in motion and somehow reminds of an underwater scene.

Most abilities are now visible as meshes attached to the blobs. Only thing missing here is some visual change depending on how far developed this ability is. We will probably go with a color change or simply let it glow. Eversince we have these mehses, it is also easier as a player to understand how dangerous a certain enemy ir, or what easy prey it is - i.e. we have died much less frequently.





We also attached a new shader to the camera, which introduces bloom and chromatic aberation to the game.



3. Next steps

The next steps are certainly to bring in some sounds, in order to give the player audio cues of what is happening. First off will be some simple sounds that indicate a close by environmental hazard and attack/hit/eat sounds. The different materials/shaders will also get a facelift very soon.
On the coding side, we will implement a few more attack abilities in order to have at least four, that we can map to the buttons of the Xbox360 controller. This will also birng some more variety to the game. Of course, each ability will be visible as a new mesh being attached to the blob. Additionally we will also be looking into improving the AI.
Major issue is still that the game kind of lacks a goal. We are thinking into implementing a highscore as a “simple” fix to give the player some more motivation.