final game.

Group 4:

Thomas de Boer Rense Wisse Jesper Spillenaar Boyd Verdoorn Luuk de Niet So far we have made five major prototypes. In this report they will be briefly discussed.

# Rigging

The rigging didn't work the way we anticipated. It therefore took more time to make it work. The rigging prototype is still not functional and has to be improved before we can use it. We are now in the process of remaking the characters mesh. We are currently experimenting with easy ways to do this.

### 3D models

Our group hadn't much experience with blender, so all the modelling took some time. But we now can create almost anything we want to. We are satisfied with the current 3D models. Every day we make some more to enhance the game. We will definitely use them in the final game. All models could be better, but it is a tradeoff between quality and quantity.

# Blender procedural house

The prototype does what it is expected to do. With a click on the button it randomly creates a building with a random size and all windows and doors on the right places. Because none of us knew how to work with blender it took a lot of time to create this model, however it was also a good training to now work faster with blender and know more of its options. Just this model took me more about 15 hours to make. We are satisfied with the result. It does exactly what it is supposed to do. This model was originally made to procedurally generate a city in unity. Because this was not what the assignment meant with procedurally generating a city, the model is now only used to create a hotel, police station and a hospital. These buildings will be the same in all generated cities, because they are important for the gameplay. To create the hotel, police station and hospital, the bear procedural house needs to be textured in different ways and it will have different signs.

# **Textures and bump mapping**

We now know how to add textures using UV maps. We also created normal maps with CrazyBump and added this extra layer to create a more realistic texture. It did take more time than expected, because it is hard to work with UV maps on objects with a complicated geometry. Most tutorials also work with a different version of Blender that has a different node system. Because of this it took a while to figure out how it worked. We also had problems with importing textured models into Unity. Now it is working I am satisfied with the results. The textures look realistic. We will definitely use the textures in our final game and might improve the secularity a bit if we have the time.

# Procedurally generated House/world

The prototype does what it needs to do. It took quite a long time to make this, because some typo's were hard to find. But finding out on the internet how to do it took the most time. We are not satisfied with the prototype yet because it takes a lot of time to process and create it procedurally. This means we are not sure yet if we will implement it in the final game because of the long processing time. That is why we will try to improve it to make it generate the city faster.