***Shaders***

*Toon & Water*

Date: 13.09.2021

Name: Luca Ruiters

Student nr: 500796991

GitHub: [ru1t3rl/GPE](https://github.com/ru1t3rl/GPE)

Table of Contents

[Intro 3](#_Toc82198213)

[Cylinder 3](#_Toc82198214)

[Vertices 3](#_Toc82198215)

[Triangles - Top and Bottom 3](#_Toc82198216)

[Triangles – Side 4](#_Toc82198217)

[Terrain Generator 5](#_Toc82198218)

[Grid 5](#_Toc82198219)

[Vertices 5](#_Toc82198220)

[Triangles 5](#_Toc82198221)

[Result 6](#_Toc82198222)

[Heightmaps 7](#_Toc82198223)

[Chunks 9](#_Toc82198224)

[Conclusion 10](#_Toc82198225)

[References 10](#_Toc82198226)

[Files 11](#_Toc82198227)

Notes and sketches can be found in the *Files* chapter

# Intro

Before I started with this semester. I had no experience at all with generating a mesh or even a face/triangle in Unity. So to make an easy start I decided to start with a cylinder that you modify in real-time (when in play mode). But before I can get started with this, I need some basic knowledge for generating meshes. I followed [this tutorial](https://catlikecoding.com/unity/tutorials/procedural-grid/) about a procedural, which also helped with the start of my terrain generator.

# Files