# Sprint 6 – Implement Hydraulic Erosion 22/03/2019 – 31/03/2019

# Abstract

# Research

After researching for a few hours, I came across an application named Instant Terra, this is a 3D application made in C++ for Procedural Terrain Generation. I used this application and got an idea in what I should expect from the hydraulic erosion in my terrain (Figure 1, Figure 2 and Figure 3).

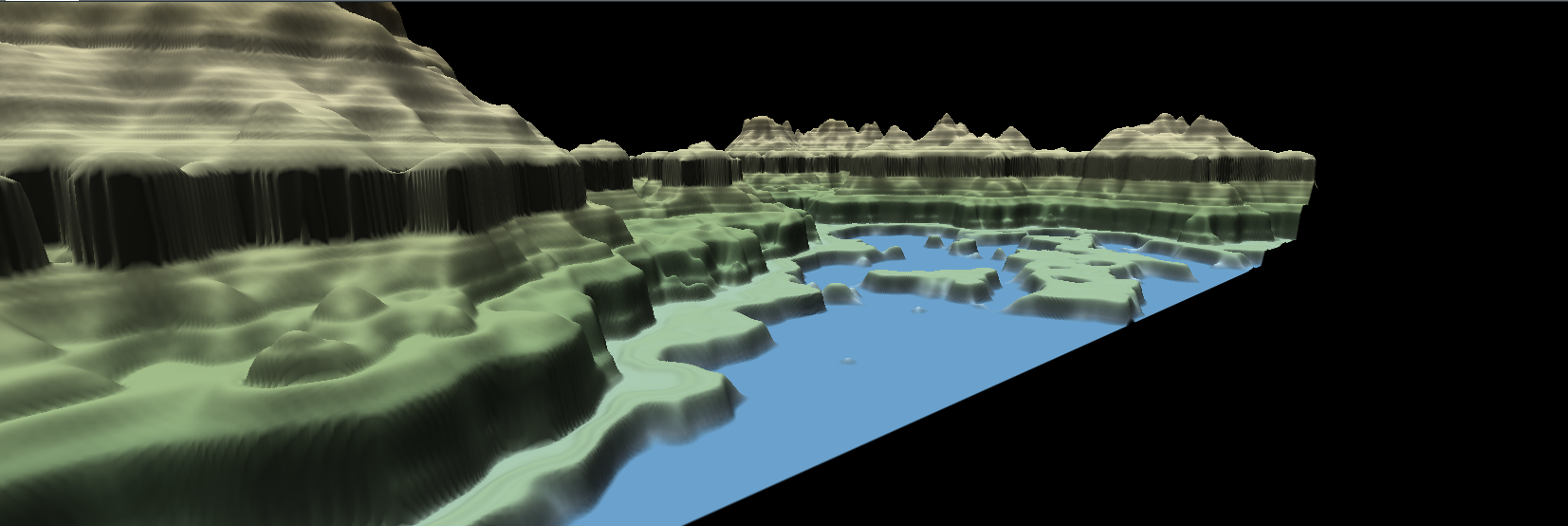


Figure - Instant Terra, terrain without hydraulic erosion

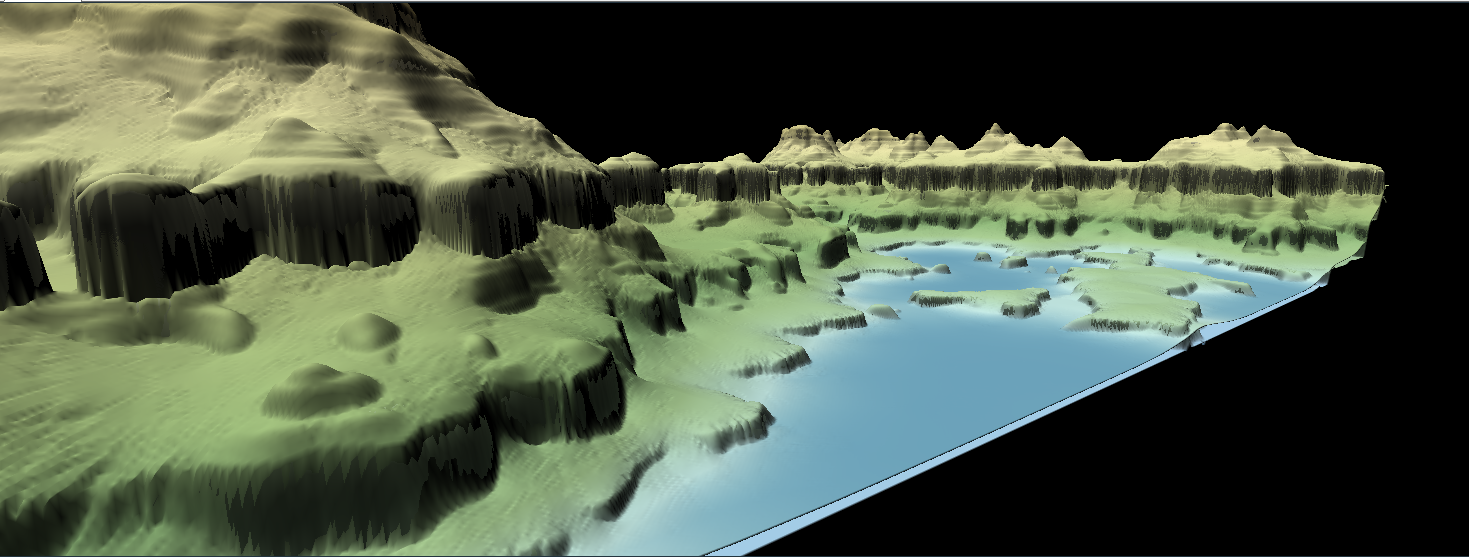


Figure - Instant Terra, terrain with hydraulic erosion

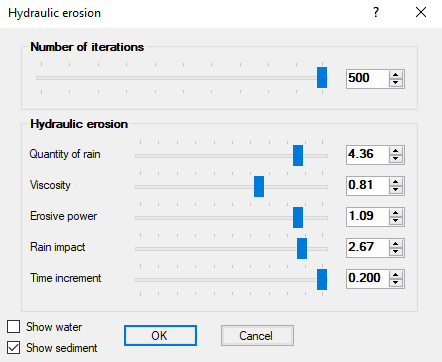


Figure - Instant Terra, hydraulic erosion settings

# Sprint Review

# WBS

1. Research (40%) (22 hours)
2. Implement graphical user interface (10%) (5 hours)
3. Implement the level of detail functionality (50%) (27 hours)

# Reading List

Bottom of Form

Erosion Water Simulation-https://www.youtube.com/watch?v=xzVBFkpD94E

Instant Terra APP - <https://www.youtube.com/watch?v=jW3RpEHRyJs>

L-Systems <https://en.wikipedia.org/wiki/L-system>

<http://www.kevs3d.co.uk/dev/lsystems/>

https://www.youtube.com/watch?v=f6ra024-ASY

**Fractals** {

<https://www.youtube.com/watch?v=-wiverLQl1Q&list=PLRqwX-V7Uu6bXUJvjnMWGU5SmjhI-OXef>

<https://www.youtube.com/watch?v=s3Facu6ZVeA&list=PLRqwX-V7Uu6bXUJvjnMWGU5SmjhI-OXef&index=2>

<https://www.youtube.com/watch?v=_BOtJncHCVA&list=PLRqwX-V7Uu6bXUJvjnMWGU5SmjhI-OXef&index=3>

<https://www.youtube.com/watch?v=RWAcbV4X7C8&index=4&list=PLRqwX-V7Uu6bXUJvjnMWGU5SmjhI-OXef>

<https://www.youtube.com/watch?v=f6ra024-ASY&list=PLRqwX-V7Uu6bXUJvjnMWGU5SmjhI-OXef&index=5>

<https://www.youtube.com/watch?v=0jjeOYMjmDU&index=6&list=PLRqwX-V7Uu6bXUJvjnMWGU5SmjhI-OXef>

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# References