

Untitled: A DirectX Game

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1 Summary

2 User Controls

3 Features

3.1 Procedural Terrain Generation

[Starting point: the problem of concavity!]

Introduce marching cubes as the central tenet of the modelling process...

Definitive... Paul Bourke's *Polygonising a scalar field* (1994)...

3.1.1 Initialisation

Introduce Perlin, Simplex noise as addendum...

3.1.2 Iteration

First introduce thorns, orbs, etc...

...Then explain that tiles are bounded by the exact same process (std::min adds, std::max subtracts...)

3.1.3 Texturing

3.2 Procedural Narrative Generation

[Overview of research in the field...]

3.2.1 Text Generation

3.2.2 Picking

3.3 Psychoacoustics

[Relevance to themes... geiger counter, *10,000-Year Earworm*, etc...]

3.4 Post-Processing

4 Code Organisation

4.1 HexBoard.cpp

5 Evaluation

5.1 Features

5.2 Code Organisation

6 Conclusions

References

Bourke, P. (1994), 'Polygonising a Scalar Field', Available at:
<http://paulbourke.net/geometry/polygonise/>. (Accessed: 9 February 2023).