Procedurally Generated Navigable Mountain terrain

High Concept and title

My component for this demo is Procedurally Generated mountain terrain.

The component generates a random mountain terrain with pathfinding to show users can navigate the terrain in a realistic way. It will generate a terrain which lets users realistically get to different areas within the terrain. These areas can be the peak of the mountain or chosen locations.

Target audience and market

For this product I looked at speedTrees business model because they sell tree models for set prices. Mountain terrains will vary in size and factors like gradients and height of peaks.

Small terrains which are relatively smooth will be sold for £40 ranging from complex large terrains which will be sold for £120.

These prices are using the pricing model of SpeedTree model and they will be sold as individual terrains and each purchase will be for one user.

Potentially there is a case to produce specific terrains for companies for a higher prices like SpeedTree.

USP and how it differs from competitors

This products unique selling point is that it provides complete terrains which are proven to be navigable using pathfinding. Games in recent years like Skyrim with their mountain terrain shows that terrains are needed and having them be realistically navigable would make them better to use within games.

The design and technical and production feasibility

This component will use Perlin noise combined with A* pathfinding to produce the terrains.

It will look at gradients to see if something is navigable and complexity of a terrain can be defined by length of the path and turnings.

It is a feasible project but requires different aspects like pcg and pathfinding to work together.

Commercial viability

Companies have previously proved that it is commercially viable for companies.

Paying for the terrain is a good alternative instead of having to develop a terrain yourself.

Doing this will allow quicker development and means other areas of a project can be focused on.

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