

# Kronos

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# Terms

- Roguelike - Procedurally generated gameplay
- FPS - First-person shooter
- Low-poly - Low number of polygons
- VR - Virtual Reality



# Motivation

- Paranaautical Activity - A roguelike FPS with a low-poly art style



- Experimentation with VR technologies
- Learning game design elements with Unreal Engine

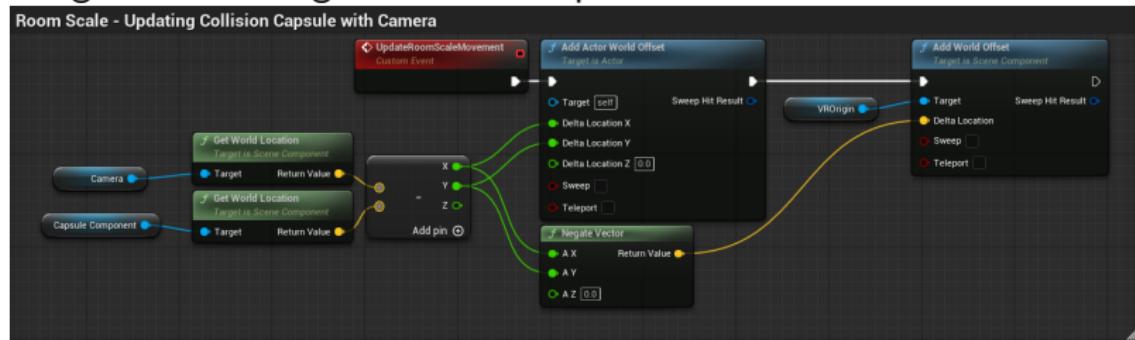
# Story

- Someone has broken the rules of time
- Timeline is scrambled, up to Kronos to repair it
- Apparent that time is off



# Technology

- Created using Unreal Engine 5
- Programmed using Unreal's Blueprints



- Procedural Dungeon Plugin by BenPyton

# Procedural Generation

- The dungeon itself is built using rooms
- Plugin uses a depth-first search algorithm
- Plugin connects rooms to each other dynamically
- Rooms are procedurally connected to provide a fluid start to finish dungeon

# Procedural Generation Continued

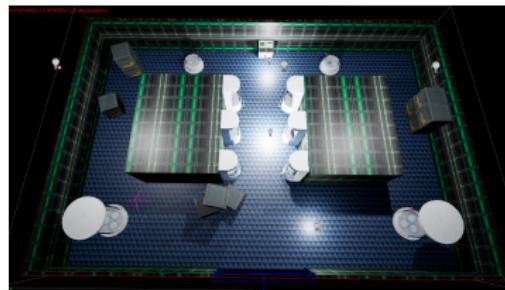


Figure: Top-down view of a single room

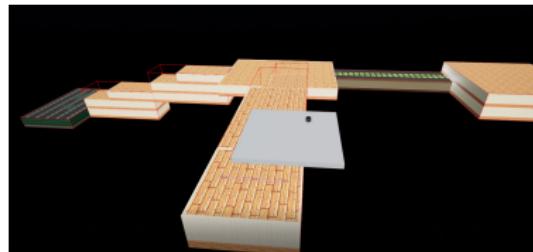


Figure: A dungeon created by the plugin

# 2D/3D Mashup



- The world is crafted using 3D elements
- The enemies and items are represented as 2D sprites to capture the feel of early game designs like Doom (1993)

# Gameplay

- Each level is a different time period
- Kronos is sent to different eras to eradicate his flagged enemies
- Environment and enemies will reflect the era of the level
- Consumable items that affect player stats

# Demonstration



# Trials and Tribulations



- Locomotion Movement Implementation
- Sprite Changing with the Different Actions
- Understanding the Dungeon Creation Plugin with the Documentation Provided

# Future Work

- Create a new floor (possibly a modern era)
- Further refinement of AI behavior
- More enemies and bosses
- Have a save system

# Feedback

- Any questions?
- Project repo: <https://github.com/enrgteje/Kronos>

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