Kronos

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Terms

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

Motivation

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

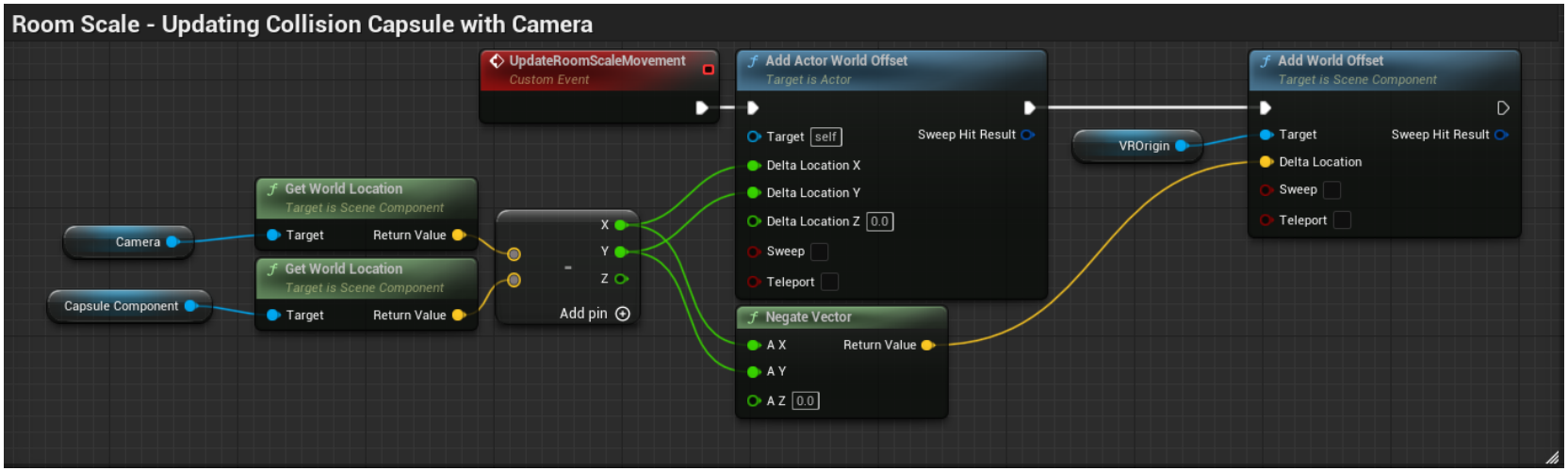
- Experimentation with VR technologies
- Learning game design elements with Unreal Engine

Story

- Someone has broken the rules of time
- Timeline is scrambled, up to Kronos to repair it
- Kronos manipulates time to assist in restoring time
- 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 levels
- Plugin uses a depth first search algorithm
- Plugin connects levels to each other dynamically
- The levels are procedurally connected to provide a fluid start to finish dungeon

Procedural Generation Continued

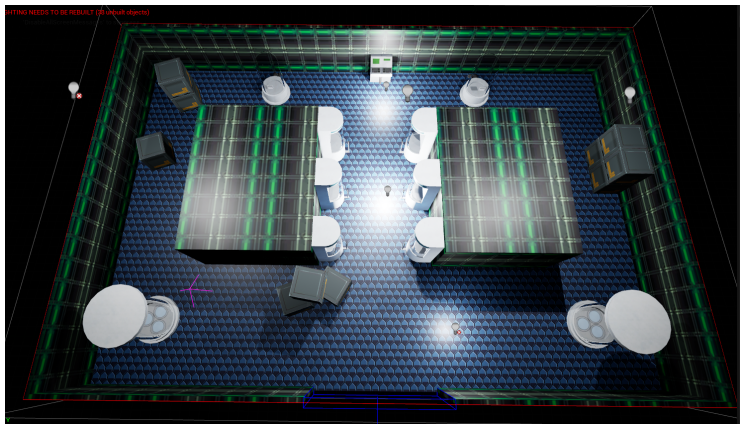


Figure: Top-down view of a single level

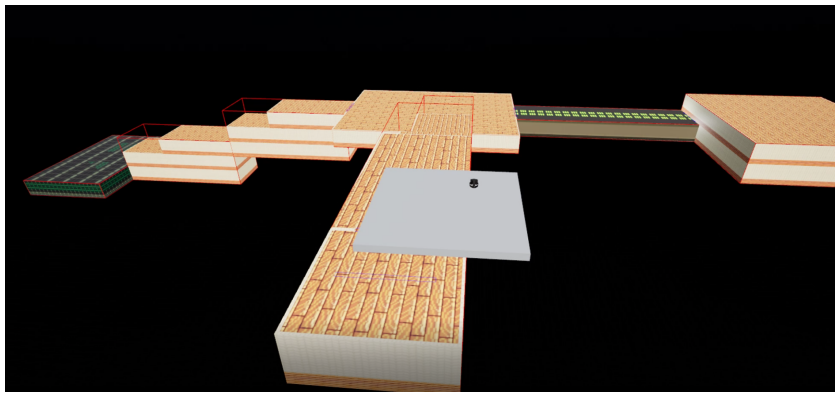


Figure: A dungeon created by the plugin

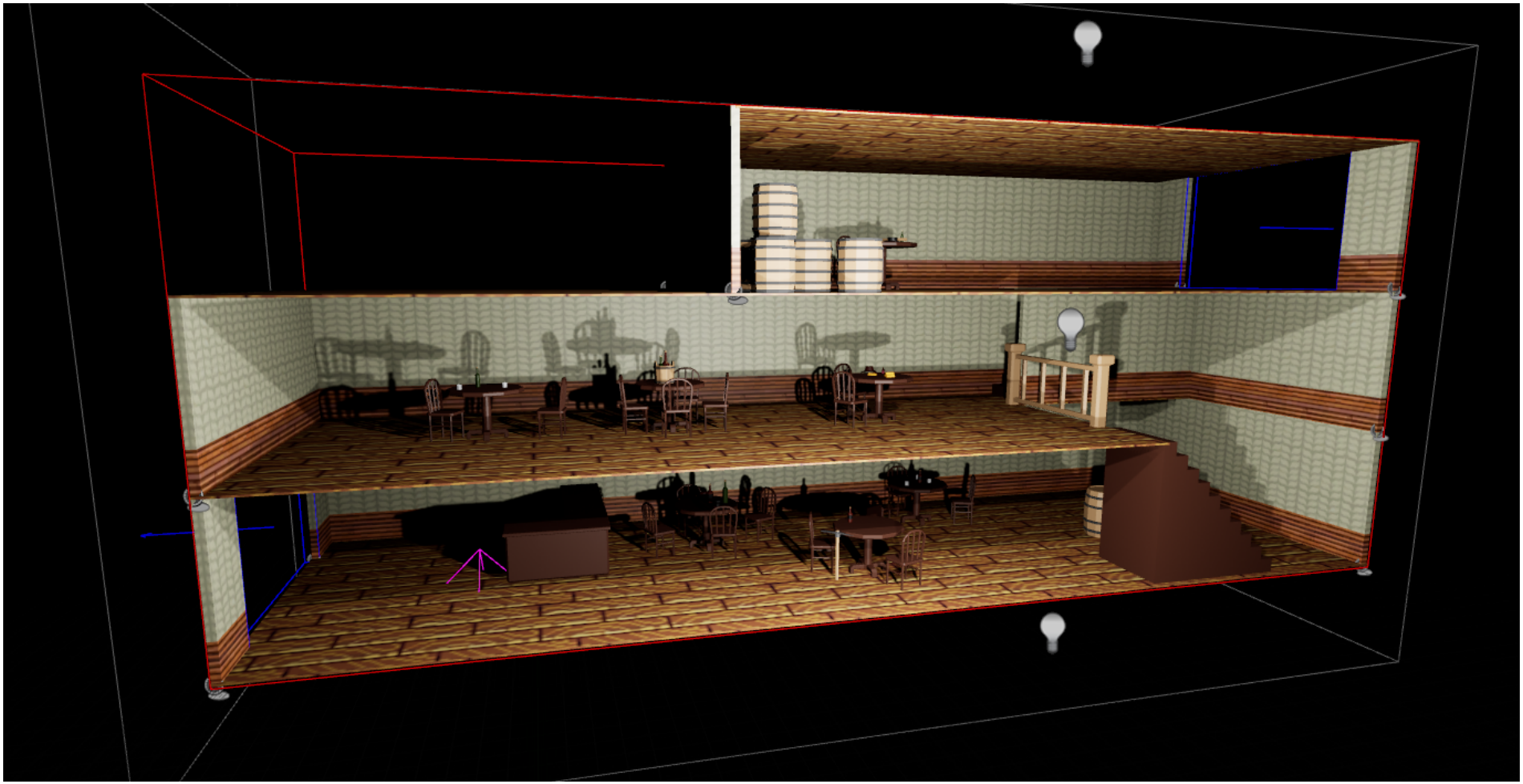
2D/3D Mashup

- 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)

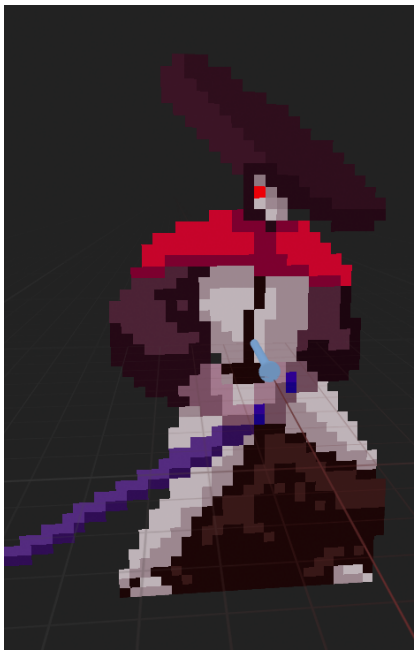
Gameplay

- Each level is a different time period
- Kronos is sent to different eras to eradicate his flagged enemies
- Enemies and bosses will reflect the era of the level
- Kronos is able to bring weapons across levels

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)
- AI creation and management using Behavior Trees
- More enemies, bosses, and weapons

Feedback

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

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