Mystera

Wizardry & Alchemy

RST(Honors) Interactive Software Technology

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Abstract

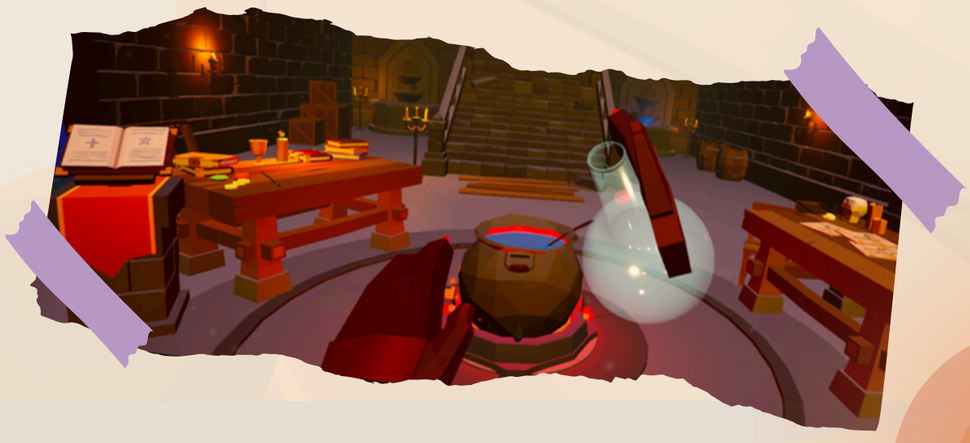
Mystera is a VR wizard simulator that explores how procedural content generation and great game design can enhance immersion and replayability in VR games.

The project combines spellcasting, potion brewing, and exploration within a fully VR-native design, avoiding traditional flat menus in favour of in-world systems such as gesture-based magic and a wearable magical hat used as an inventory.

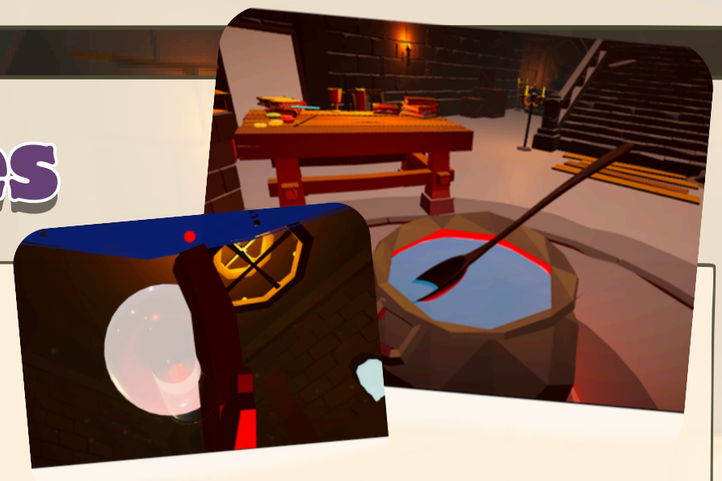
Problem Statement

Many VR games struggle with:

- **Shallow mechanics, uncomfortable controls and weak replay value - lack progression and meaning.**
- **Replayability - handcrafted levels become predictable after a few playthroughs.**



Objectives



- **Create intuitive and comfortable VR controls for immersive wizarding.**
- **Design a gameplay loop & mechanics to maintain long-term engagement and replay**
- **Explore how VR can enhance immersion through interactive systems.**
- **Develop a collision-based, connector-based dungeon generator from modular prefabs.**
- **Ensure variety and replayability while maintaining navigable, immersive spaces for VR.**
- **Integrate confirmed rooms for key gameplay spaces.**
- **Implement an exit room system with sealed unused connectors to preserve believability.**

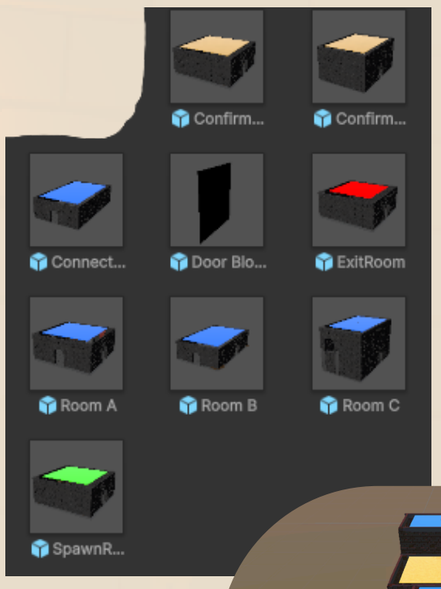
Game Design

Potions

Spells

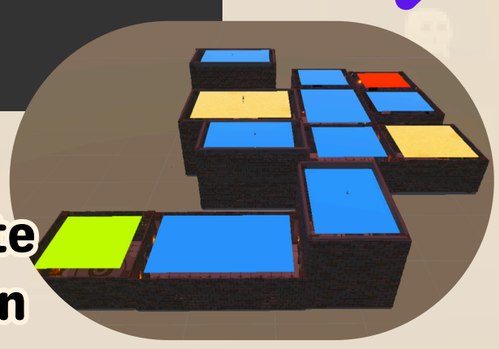
Dungeons

Dungeon Generator



Prefabs

Complete Dungeon



Testing Results

Player Experience (GEQ):

Survey showed high levels of enjoyment, concentration and immersion during gameplay. Most participants felt engaged and absorbed in the experience, describing it as rich and enjoyable.

Functionality & Procedural Systems:

Survey showed that the procedurally generated dungeon system worked reliably across different runs. Players were able to explore dynamically generated layouts without issue.

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