

Game Design Document (GDD) – Arcane Quest

1. Overview

Title: Arcane Quest

Genre: Fantasy Adventure / VR Spellcasting

Platform: VR (PCVR, Quest)

Target Audience: Players who enjoy immersive fantasy worlds, spellcasting, and exploration in VR.

2. Narrative

Magic is the source of life in Eldoria, a land that is slowly dying because the evil sorcerer Malakar is draining all its magic. The player is the last apprentice of the Order of Arcanists, a group of legendary wizards. The goal is to bring magic back to the world, stop Malakar, and restore balance. Players will learn powerful spells, explore hidden ancient ruins, and fight creatures that have been corrupted by dark magic.

3. Core Gameplay Mechanics

3.1 Project Requirements & Feature Implementation

The game includes essential VR movement and interaction features while adding unique mechanics to make the world feel alive. The sections below explain how each required feature is used in Arcane Quest.

3.2 XRIT Built-in Features (mandatory) + How They Work in Arcane Quest

Continuous Move

- Players can move freely by tilting the joystick on their controller.
- Used for exploring forests, dungeons, and magical castles.
- Can be combined with a sprinting ability for faster movement.

Teleportation

- An alternative way to move by pointing and instantly jumping to a new location.
- Helps players who feel motion sickness when moving normally.
- Used for dodging attacks and solving platforming puzzles.

Continuous Rotation & Snap Rotation

- Players can rotate smoothly or in quick turns depending on their comfort level.
- Used to adjust direction while exploring or in combat.

Climb

- Players can grab ledges, vines, and magical walls to climb up surfaces.
- Required to reach high places, escape danger, and solve vertical puzzles.
- Some walls require enchanted gloves to climb.

Grab Move

- Players reach out and "grab" a point in space using their VR controllers.
- While holding the grab, they can move their hand to pull themselves forward or push themselves away. Can be enabled in a magical storm or gravity-defying zone.
- Reference: <https://www.youtube.com/watch?v=dF9iNtkAt2s>

Near Interaction

- Players can touch objects directly with their hands.
- Used for opening doors, turning pages in books, or mixing ingredients in a potion.
- Small details like flipping switches or adjusting puzzle pieces require this interaction.

Far Interaction

- Players use telekinesis (a magic power to move objects from a distance).
- Used to lift heavy objects, pull levers that are out of reach, or grab weapons from afar.
- Can be upgraded to push enemies back during combat.

Poke Interaction

- Players poke buttons, symbols, or enchanted items to activate them.
- Used for unlocking doors, triggering magic effects, or interacting with floating runes.
- Some puzzles require pressing symbols in a specific order.

Socket Interaction

- Players insert objects, such as magic stones or keys, into special slots to activate devices.
- Used for opening gates, powering ancient machines, and crafting new spells.
- Some sockets require combining multiple items before they activate.

3.3 Advanced Movement Mechanics

Swimming (Hand Movement-Based Control)

- **Players move their hands and tilt their palms to swim up, down, or forward.**
- **Used in the Sunken Ruins area, where structures are deep underwater.**

- **Swimming consumes stamina, which runs out over time and must be refilled by surfacing or finding air pockets.**
 - **Players can use underwater currents to move faster and reach distant areas.**
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3.4 Non-Movement Interaction Mechanics

Spellcasting (Performing Magic with Hand Gestures)

- Players cast spells by making specific hand gestures.
- Example spells:
 - **Fireball:** Flicking motion forward.
 - **Ice Spear:** Clasp hands, then pushing outward.
 - **Lightning Strike:** Raising one hand and snapping downward.
- More complex spells require combining multiple gestures.
- Players must time spells correctly to avoid enemy counterattacks.

Potion Brewing (Mixing Ingredients to Create Effects)

- Players collect plants, crystals, and liquids to brew potions.
- Brewing involves:
 - Grinding herbs using a mortar and pestle.
 - Pouring liquid ingredients into a cauldron.
 - Stirring to the correct consistency using a magic spoon.
- The correct recipe creates powerful effects, but mistakes can lead to explosions or unexpected potions.

Summoning Creatures (Calling Magical Allies to Assist in Combat and Puzzles)

- Players can bring magical creatures to life by drawing a rune in the air.
 - Examples of summoned creatures:
 - **Phoenix:** Revives the player when defeated and provides light in dark areas.
 - **Stone Golem:** Fights enemies and blocks incoming attacks.
 - **Shadow Wraith:** Can phase through barriers and retrieve objects from locked rooms.
 - Summoned creatures have a limited time before they disappear.
 - Players can unlock stronger versions of summons by finding rare magical scrolls.
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4. World Exploration and Gameplay

- **The Enchanted Forest:** A training area where players learn basic spells and movement.
- **The Arcane Ruins:** An ancient temple full of puzzles and hidden knowledge.
- **The Floating Isles:** Requires flying to navigate through sky-based challenges.
- **Malakar's Fortress:** The final stage, where all skills are needed to defeat the villain.

5. Player Experience & Feedback

- **Visual Effects:** Spells have glowing trails, objects show magical highlights when interactable.
 - **Sound Design:** Each spell has a unique sound, providing instant feedback.
 - **Haptic Feedback:** Players feel vibrations when casting spells, taking damage, or picking up objects.
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6. Cybersickness Considerations

- **Comfortable Movement Options:** Players can switch between teleportation and free movement.
 - **Smooth Flight Controls:** Gradual acceleration reduces discomfort when flying.
 - **Snap Rotation Settings:** Prevents dizziness by allowing players to rotate in steps.
 - **Visual Stabilizers:** The game world remains steady to prevent disorientation.
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7. Final Refinements for Clarity and Engagement

- **More Tutorial Guidance:** The spirit guide teaches players every mechanic with step-by-step instructions.
 - **Better UI for Magic Selection:** A floating menu lets players quickly switch spells without disrupting immersion.
 - **Dynamic Enemy Reactions:** Enemies react to the player's attack patterns and adapt their defense strategies.
 - **Hidden Lore Books:** Players can find books that provide more story details and hidden spell recipes.
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Arcane Quest provides a deeply immersive spellcasting experience, with clear and engaging mechanics that make the magical world come to life. Every feature is designed to be intuitive, allowing players to explore, fight, and solve puzzles naturally in VR. With a combination of movement-based gameplay, crafting, and interactive magic, the game ensures an exciting and accessible adventure for all players.