

Technical Report on VR Game *The Floor is Lava*

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1. Game Concept

The *Game* delivers an immersive experience using a first-person controller to place players directly in the action. Inspired by the popular concept of *The Floor is Lava*, the game challenges players to navigate through a procedurally generated environment filled with floating platforms, avoiding the ever-present threat of falling into lava. The final stage incorporates a selection-based mechanic to determine the correct outcome.

2. User Interface



- **Start Button:** Initializes the portal sequence and sets up the gameplay environment. The button triggers an event listener that resets game states and loads the game scene.
- **Exit Button:** Allows the player to terminate the game session. Linked to a quit function that clears memory allocations and exits the application.

3. Game Controls

- **Movement:** Use **WASD** or arrow keys to move the player. Hold **Shift** to sprint.
- **Jumping:** Press and hold **Space** to jump. Jumping while holding **Shift** maintains the player's momentum, providing a boost. Each jump updates a jump counter, tracking the player's performance.
- **Crouching:** Hold **Ctrl** to crouch.
- **Field of View:** Rotate the mouse to adjust the field of view. Use the scroll wheel to zoom in and out.

4. Game Objective

The player must successfully navigate through the challenge by avoiding "lava" and eventually making the right choice at the end to win.