

## Problem → Solution Table

Identified Problem	Evidence (Observation / Feedback / Metrics)	Proposed Solution
Difficulty spike at Spike Pit #2	Highest death count (8 total deaths), "Spike jump felt unfair"	Increase jump landing platform size and reduce spike width
Unclear objective (5 keys required)	Players hesitated at locked door, confusion reported in feedback	Add UI counter: "Keys: 0/5" + message when reaching locked door
Frustration due to restarting far away	High death count, feedback asking for checkpoints	Add checkpoint before Spike Pit #2

## Description of Implemented Changes

### Change 1 : Adjusted Spike Pit #2

- Increased platform width by 20%
- Reduced spike collision hitbox slightly
- Added visual warning (different colored spikes)

**Goal:** Make challenges fair but still engaging

### Change 2 : Added Key Counter UI

- Displayed top-left text: "Keys Collected: X/5"
- When player reaches locked door without keys → message appears: "You need 5 keys to unlock this door"

**Goal:** Improve clarity and reduce confusion

### Change 3 : Added Checkpoint System

- Checkpoint placed before Spike Pit #2
- Player respawns at checkpoint instead of level start

**Goal:** Reduce frustration and repetition

## Before / After Comparison

Aspect	Before Iteration	After Iteration
Spike Pit Difficulty	High failure rate	More balanced, fair challenge
Objective Clarity	Players confused	Clear UI indicator
Death Frustration	Restart from beginning	Respawn near challenge
Player Flow	Interrupted by backtracking	Smoothen progression

## Plan for Next Iteration Cycle

To validate improvements:

1. Conduct a second playtest with 2to3 new players.
2. Measure :
  - Death rate at Spike Pit #2 (should decrease)
  - Completion time (should be slightly lower)
  - Hesitation at door (should disappear)
3. Ask updated questions:
  - Does the difficulty feel fair ?
  - Is the objective clear from the start ?
  - Did checkpoints improve your experience ?

If death rate is still high → further adjust platform spacing

If difficulty becomes too easy → slightly reintroduce challenge through timing variation