Mini Game Design Document

Ellen: Shadows of the Ruins

(Developed by Daniyal Dianati)

1. Game Concept & Inspiration

Ellen: Shadows of the Ruins is a **2D action-platformer** built in Unity using the **2D Game Kit** framework

Players take control of **Ellen**, an agile explorer navigating the remnants of an ancient ruin filled with traps, enemies, and environmental hazards.

The game draws inspiration from classic platformers such as *Metroid* and *Celeste*, combining responsive movement, timing-based combat, and level design that rewards observation and skill. The focus is on delivering a **medium-core difficulty** experience — accessible for beginners but challenging enough for experienced players seeking precision gameplay.

2. Core Mechanics

• Movement & Exploration:

Ellen can run, jump, and climb across 2D environments filled with vertical challenges and hidden areas.

Players must use precise timing and quick reflexes to survive environmental hazards.

• Combat System:

Simple melee-based attacks allow Ellen to defeat enemies in close range, requiring timing and positioning.

• Hazards & Obstacles:

Spikes, bottomless and acid pits, and moving traps encourage careful movement and awareness of surroundings.

• UI & Gameplay Systems:

Custom menus, pause screens, and a restart system give players control over their progress at any point.

3. Win / Lose Conditions

• Win Condition:

Reach the end of the level or the goal flag successfully without dying.

• Lose Conditions:

- Ellen's **health reaches zero** after taking damage from enemies or traps.
- Ellen falls into a pit (instant death).
 Losing triggers a Game Over screen, followed by the in-game menu screen, where the player can restart or quit.

4. Creative Additions

• Custom GameManager:

Handles Win/Lose transitions, pause control, and restart logic for smoother gameplay.

• Improved UI & Menu Flow:

Integrated Game Over → Main Menu → Restart functionality with clean UI transitions.

• Fall-Death Detection:

A new system automatically detects when Ellen falls out of bounds and triggers the Game Over state.

• Pause and Options Menu:

Fully functional in-game menu allowing players to **resume**, **restart**, or **quit** during gameplay.

• Medium-Core Difficulty Balance:

Adjusted level pacing and hazard placement for a rewarding but fair difficulty curve.

5. Technical Details

Category Description

Engine Unity 2022+ (2D Game Kit)

Language C#

Platform Windows & WebGL

Version Control Git + Git LFS (GitHub)

Tools Used Visual Studio Code, GitHub Desktop, Unity Hub

6. Playable Build

• Windows Build:

Assignment 2 2d.zip (included in GitHub repo under /Builds folder via Git LFS)

- **Github Repo:** https://github.com/devvolve/2dGame
- How to start the game: Choose the 2DGamekit as the scene under assets.

7. Repository & Submission Links

• GitHub Repository:

https://github.com/devvolve/2dGame.git

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Prepared by:

Daniyal Dianati **Date:** October 2025

Project: Assignment 1 – 2D Unity Game Development