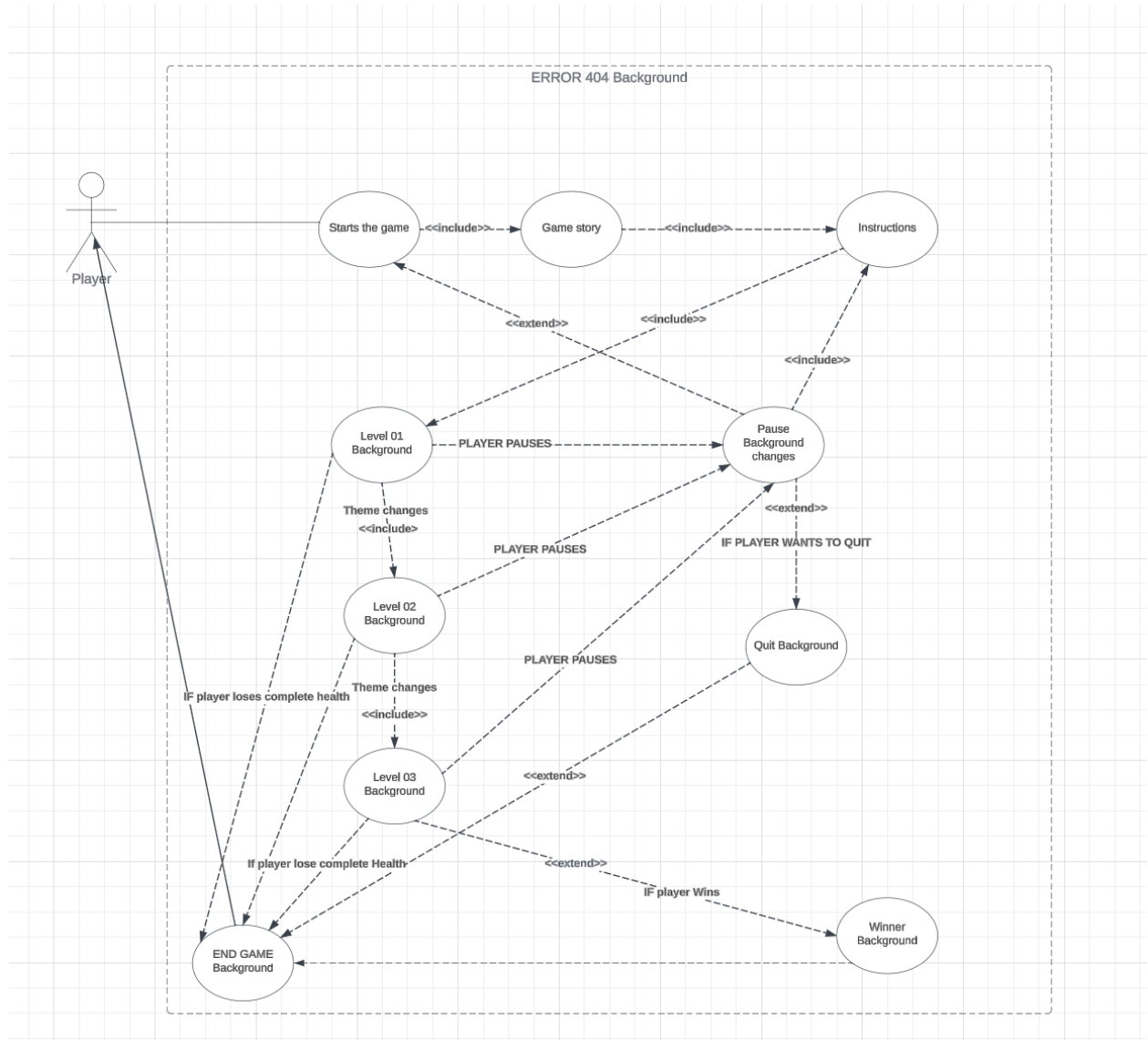


## 1. Brief introduction \_\_/3

As a member of the development team for the Unity game titled "Error 404," my primary responsibility revolves around creating captivating and immersive backgrounds for various elements of the game. With a focus on enhancing the player's experience, my role extends to designing backgrounds for pivotal moments such as game start, pause, and gameplay progression. Leveraging Unity's versatile tools and creative techniques, I strive to craft visually compelling environments that seamlessly integrate with the game's narrative and mechanics. From setting the tone at the game's inception to providing moments of respite during pauses and elevating the excitement during gameplay, my backgrounds aim to immerse players deeper into the world of "Error 404" and contribute to an unforgettable gaming experience.

Collaboration is crucial in my role, as I work closely with artists, designers, and developers to ensure that the visual elements align with the game's aesthetic direction and narrative. Through iterative design processes and feedback sessions, we continuously refine and enhance the background visuals to achieve the desired impact on the player experience. Together, we strive to create captivating and immersive backgrounds that enrich the gameplay and contribute to the overall success of the game.

## 2. Use case diagram with scenario \_14



## Scenarios:

**Name:** Starts the Game

**Summary:** The game initialization process is initiated by the player.

**Actors:** Player

**Preconditions:** The game has been installed and loaded successfully.

**Basic Sequence:**

- The player launches the game application in unity.
- The game's title screen is displayed.
- The game loads the initial level or game environment.
- The game presents any introductory cutscenes.

**Exceptions:** No exceptions.

**Postconditions:** ready to begin gameplay again.

**Priority:** 1

**ID:** La01.

**Name:** Game Story

**Summary:** The game initialization process is initiated by the player.

**Actors:** Player

**Preconditions:** The player is at the beginning of the story mode.

**Basic Sequence:**

- The player is introduced to the protagonist, their character traits, and their initial goals or desires.
- The protagonist receives their first objective or quest, which serves as the initial driving force for the player's actions.

**Exceptions:**

- **Skip Option:** Some players may prefer to skip the story introduction. In this case, they can choose to skip the cinematic or fast-forward through dialogue.

**Postconditions:** The player is immersed in the game world, with a clear understanding of the story's premise and their role as the protagonist.

**Priority:** 1

**ID:** La02

**Name:** Instructions

**Summary:** The player receives instructions on how to play the game.

**Actors:** Player

**Preconditions:** The game has been started, and the player has selected the option to view instructions.

**Basic Sequence:**

- The player accesses the instruction menu from the Game Story.
- The tutorial guide explains the basic controls necessary to navigate the game world. This includes movement controls, interacting with objects, and accessing menus.
- This may include combo attacks, stealth tactics, or puzzle-solving tips.
- The tutorial guide confirms that the player understands the instructions and is ready to proceed with the game.

**Exceptions:**

- In this case, they can select an option to skip directly to gameplay.

**Postconditions:** The player is equipped with the knowledge necessary to navigate and succeed in the game.

**Priority:** 1

**ID:** La03

**Name:** Level Backgrounds

**Summary:** Each level in the game provides a unique and immersive background environment that enhances the player's experience.

**Actors:** Player

**Preconditions:** The player has progressed to a new level within the game.

**Basic Sequence:**

- **Level 01: The Forest of Beginnings**  
The player enters a lush, vibrant forest filled with towering trees, sparkling streams, and chirping wildlife.
- **Level 02: The Ancient Ruins**  
The player delves into a mysterious set of ancient ruins, adorned with crumbling stone structures, intricate carvings, and hidden passageways. Eerie torchlight flickers against the cold stone walls.
- **Level 03: The Fiery Volcano**  
The player finds themselves in the heart of a roaring volcano, surrounded by rivers of molten lava, billowing smoke, and trembling earth. The air is thick with heat, and the ground quakes with each eruption

**Exceptions:** If the player fails to complete a level, they may need to retry.

**Postconditions:** The player gains a deeper understanding of the game world's diversity and complexity, setting the stage for further exploration and adventure.

**Priority:** 1

**ID:** La04

**NAME:** Pause Background Changes

**Summary:** When the player pauses the game, the background dynamically changes to enhance the pause menu experience.

**Actors:** Player.

**Preconditions:** The game is in progress, and the player activates the pause menu.

**Basic Sequence:**

- The player presses the pause button or key to activate the pause menu.
- As the pause menu opens, the background of the game scene smoothly transitions to a new environment.
- The background may reflect the overall theme of the game.

**Exceptions:** No exceptions.

**Priority:**1

**ID:** La05

**Name:** Quit Background.

**Summary:** When the player chooses to quit the game, the background dynamically changes.

**Actors:** Players.

**Preconditions:** The player is currently playing the game and decides to quit.

**Basic Sequence:**

- Upon selecting the quit option, a confirmation prompt appears on the screen asking the player to confirm their decision to quit the game.
- After a moment, the game gracefully transitions out, returning to the main menu screen.

**Exceptions:** No exceptions.

**Postconditions:** The player leaves the game with a memorable farewell experience, potentially encouraging them to return in the future.

**Priority:**1

**ID:** La06

**Name:** Winner Background.

**Summary:** When the player achieves victory, the background dynamically changes to celebrate their success.

**Actors:** Player.

**Preconditions:** The player completes a major objective within the game.

**Basic Sequence:**

- The player achieves victory by completing a challenging level.

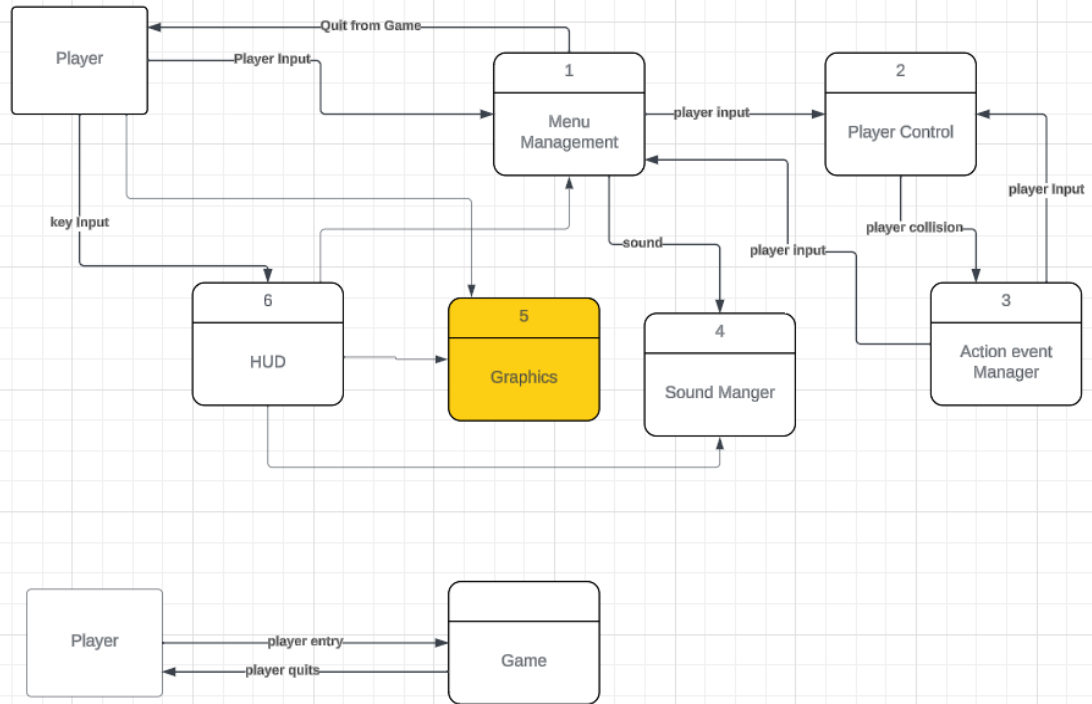
**Exception:** No exception.

**Priority:** 1

**ID:** La07

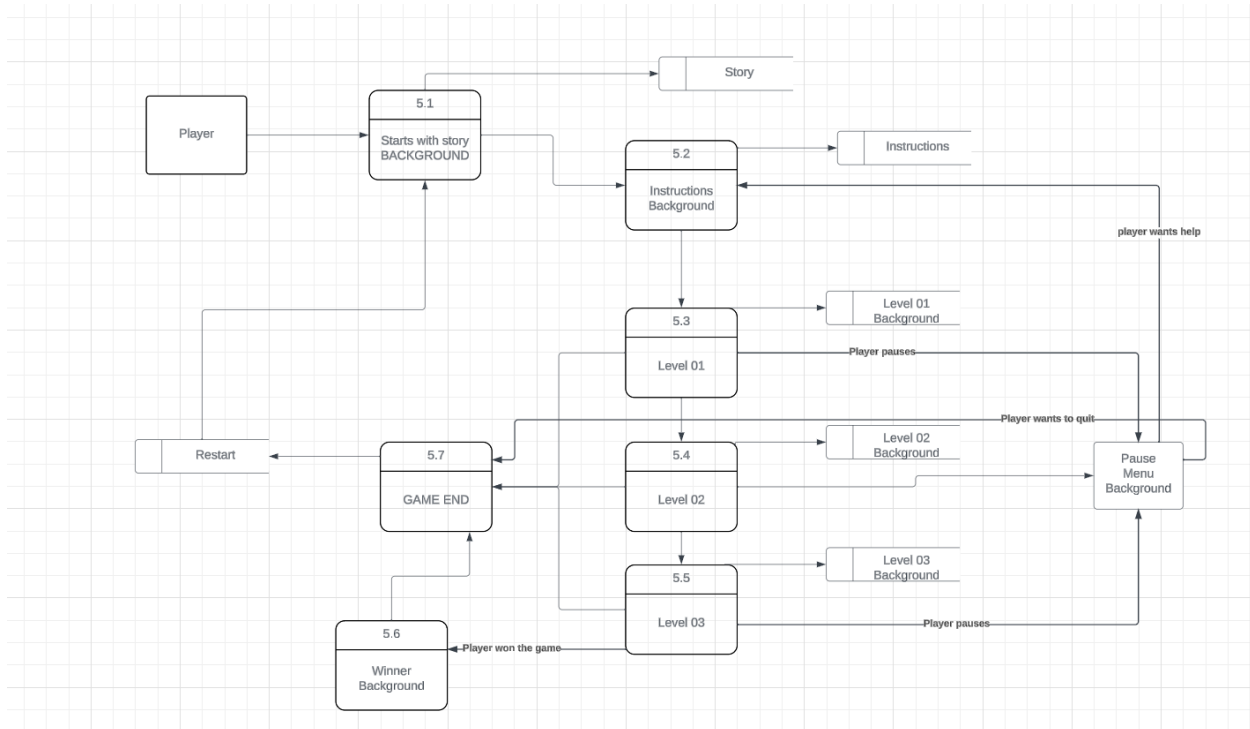
### 3. Data Flow diagram(s) from Level 0 to process description for your feature

14





## LEVEL 01



### Process Descriptions:

**Starts with Background (5.1):**When the player launches the game, the background is set to the starting background, which typically introduces the game's theme. This background remains until the player progresses to the next stage.

**Instructions Background (5.2):** After the player selects the option to Start, the background transitions to the instructions background. The instructions background provides a visually appealing environment where the player can learn about the game controls, mechanics, and objectives.

**Level Backgrounds (5.3):** As the player progresses through the game levels, the background dynamically changes to reflect the environment and theme of each level.

Level 01: The background shifts to depict the setting of the first level, such as a forest, cave, or town square.

Level 02: The background transforms to match the atmosphere of the second level, such as ancient ruins, underwater caverns, or a snowy mountain peak.

Level 03: The background adapts to the environment of the third level, such as a fiery volcano, haunted mansion, or futuristic cityscape.

**Winner Background (5.4):** When the player achieves victory, by completing a major milestone, the background transitions to the winner background.

**Game End Background (5.5):** This background provides a fitting conclusion to the player's experience and special messages from the developers.

#### 4. Acceptance Tests \_\_\_\_\_9

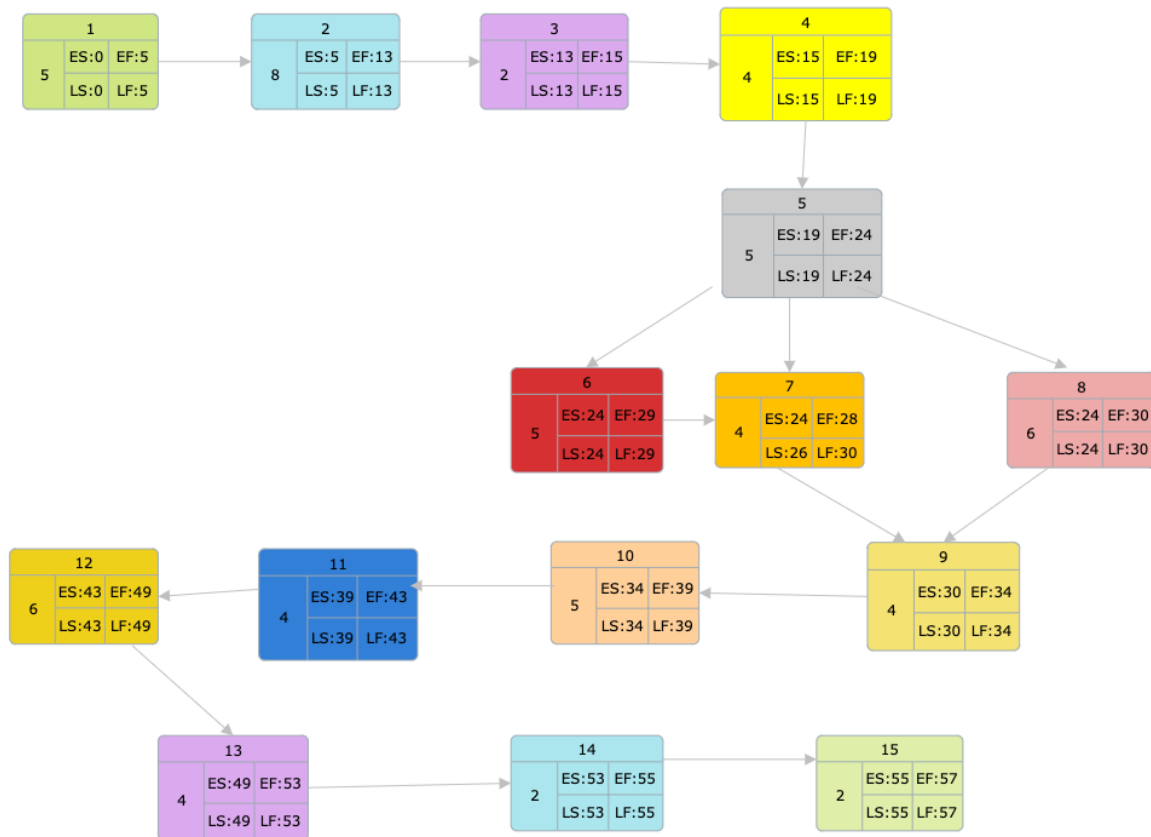
In testing the game's background transitions, a comprehensive approach is vital, encompassing various scenarios and boundary cases to ensure robust functionality. Starting with the game launch, we verify that the designated starting background is displayed. Upon selecting instructions, a transition to the instructions background is expected, facilitating an immersive learning experience for players. As players progress through levels, each transition to level-specific backgrounds (Level 01, Level 02, Level 03) must occur seamlessly, enhancing immersion and reflecting the game's evolving environments. Achieving victory triggers a transition to the winner background, where celebratory visuals and rewards are displayed, rewarding players for their accomplishments. Finally, reaching the game's conclusion results in a transition to the game end background, signaling the end of the player's journey with potentially credits, acknowledgments, or special messages. Boundary cases, such as testing extreme system resource conditions and varied completion percentages, are also crucial to ensure consistent performance and accuracy across all scenarios. Through thorough testing of these inputs and outputs, the game's background transitions can enhance player engagement and satisfaction throughout their gameplay experience.

## 5. Timeline \_\_\_\_/10

### Work items:

Task	Duration	Predecessor Task
1.Conceptualization and Planning	5	N/A
2.Asset Gathering or Creation	8	1
3.Unity Project Setup	2	2
4.Scene Setup	4	3
5.Background Implementation	5	4
6. Lighting Setup	5	5
7.Particle Effects Integration	4	5,6
8.Animation Setup	6	5
9.Audio Integration	4	7,8
10.Camera Effects Setup	5	9
11.Optimization	4	10
12.Testing and Debugging	6	11
13.User Interface Integration	4	12
14.Documentation	2	13
15.Version Control and Backup	2	14

## Pert diagram:



### Gantt timeline:

[illegible]