

CHOMPER STUDIOS



# Grim Reaper

## Loss of Memories

All work Copyright © 2024 by Chomper Studios.

Written by

Christopher Rojas 301189137

Denisjann Reyes 301249768

Yiu Yiu Yoyo Ho 301256477

Version #03

Dec 01, 2024

# Table of Contents

Revision History.....	4
Game Goals.....	5
Who, What, How?.....	5
Technical Specifications.....	5
Gameplay Types.....	5
Technological Requirements.....	6
Tools Used:.....	6
Implementation:.....	6
Design Tools:.....	6
Proposed Cheats:.....	6
Target Specs for Mobile Devices:.....	6
Story Overview.....	8
Game World.....	8
Levels.....	8
Game Progression.....	8
Game Play.....	9
Controls.....	9
Game Play Mechanics.....	9
Camera.....	9
Saving and Loading (will be available in the next stage). ....	10
User Interface.....	11
Main Menu.....	11
Game Level UI.....	12
Game Win Menu.....	13
Game Over Menu.....	13
The World Layout.....	14
Level 0: Tutorial (will be available in the next stage). ....	14
Level 1 - Adventure Starts.....	15
Level 2 - Final Chapter (will be available in the next stage). ....	15
Player Characters.....	16
Main Character.....	16
Assistance Character.....	16
Weapons.....	16
Abilities.....	16
Player inventory tools.....	17

Power-ups.....	17
HUD System.....	17
Health Bar.....	17
Lives (will be available in the next stage).....	17
Death (will be available in the next stage).....	17
Map (will be available in the next stage).....	17
Inventory.....	17
Checkpoints System (will be available in the next stage).....	18
Achievement System (will be available in the next stage).....	18
Bosses.....	18
Enemies.....	18
Non-player Characters.....	18
Design Notes.....	19
Reaper Design.....	19
Crow Design.....	19
Enemy Design.....	19
Music and Sound Effects.....	20
Background Music (will be available in the next stage).....	20
Sound Effects (will be available in the next stage).....	20

# Revision History

- Version 01 - Oct 01, 2024
- Version 02 - Nov 08, 2024
- Version 03 - Dec 01, 2024

# Game Goals

**Grim Reaper: Loss of Memories** is a single-player 3D action-adventure mobile game that immerses players in the captivating journey of a young boy on a quest to recover his lost memories and ultimately ascend to the role of the Grim Reaper, all with the help of his newfound friend, Crow.

## Who, What, How?

**Who:** This game is aimed at players aged 10 and up, rated E for Everyone by ESRB. It caters to both casual and dedicated gamers who enjoy engaging stories and platforming challenges.

**What:** Players will navigate a surreal world filled with diverse platforms and formidable enemies while collecting memory fragments. Gameplay blends platforming and combat, requiring quick reflexes and strategic use of Crow's abilities to progress through the game.

**How:** The game offers:

- 3D Action-Adventure Gameplay: Unique blend of platforming and combat.
- Dynamic Levels: Varied platform types and escalating challenges.
- Savepoint System: Careful placement allows for seamless gameplay without losing progress.
- Engaging UI: Intuitive interface with inventory and health indicators.
- Achievement System: Encourages exploration and skill mastery for greater replayability.

## Technical Specifications

**Platform:** Mobile Devices (Android)

**Multiplayer Capability:** The game focuses solely on a single-player experience.

**Technical Requirements:** Compatible with most modern Android devices with sufficient storage for download and gameplay.

## Gameplay Types

- Platforming: Navigate through moving, bouncing, and still platforms while solving puzzles to progress.
- Combat: Engage in fast-paced battles against a variety of enemies, utilizing both physical attacks and Crow's abilities.
- Exploration: Discover hidden areas and memory fragments while interacting with NPCs for clues and guidance.
- Quest Completion: Undertake quests that encourage deeper engagement with the story and world.

**Grim Reaper: Loss of Memories** invites players on a captivating journey filled with challenges, emotional storytelling, and the thrill of discovery!

# Technological Requirements

## Tools Used:

- **Game Engine:** Unity for 3D graphics and physics.
- **Art Tools:** Blender for 3D modeling and animations.

## Implementation:

- **Camera:** Controlled through Unity's Cinemachine, designed by programmers to ensure smooth transitions and perspective adjustments.
- **Physics:** Utilizes Unity's built-in physics engine, primarily implemented by programmers with some designer input for fine-tuning interactions.
- **Boss Mechanics:** Scripted events for boss encounters, including AI behavior, implemented by designers using Unity's visual scripting or C#.
- **Level Design:** Designers will create levels using Unity's scene editor, incorporating gameplay elements and testing for balance.

## Design Tools:

- **Level Creation:** Unity Editor for creating and testing game environments.
- **Scripting Tools:** Visual Studio for coding in C# and Unity visual scripting for non-programmers.
- **Asset Management:** Unity Asset Store for sourcing additional assets and tools.

## Proposed Cheats:

- **Level Skip:** Shortcut to advance to the next level (e.g., button combination).
- **Invulnerability:** Toggle invincibility for the player character (e.g., double-tap a specific button).
- **Camera Control:** Free-camera mode activated by a cheat code to explore levels without restrictions.
- **Gameplay Modifiers:** Speed adjustments, infinite health, and other gameplay-related tweaks accessed via a console or specific button combinations.

## Target Specs for Mobile Devices:

- **OS:** Android 7.0 (Nougat) or higher.

- **RAM:** Minimum 3 GB.
- **CPU:** Quad-core 1.5 GHz or equivalent.
- **Graphics:** Adreno 506 or equivalent (supports OpenGL ES 3.0).
- **Storage:** At least 1 GB of free space for installation.
- **Required Peripherals:** Touchscreen support for control, no additional peripherals required.

These technological foundations will ensure a smooth and engaging experience for players in **Grim Reaper: Loss of Memories**.

# Story Overview

In our game, players will step into a surreal and haunting realm known as 'Limbo.' This ethereal world is a labyrinthine landscape, where reality bends and twists, giving birth to a series of mind-bending and captivating stages. This dimension-shifting world challenges players with its otherworldly beauty and treacherous terrain. As players traverse these twisted stages, they'll unravel the mysteries of Limbo and confront the surreal forces that dwell within, creating an immersive and unforgettable experience.

# Game World

## Levels

The game consists of two levels in this stage, including tutorial level and game level, each featuring various types of platforms such as static, moving, ramps, elastic, spinning, and swinging elements. Additionally, different enemies and obstacles will be introduced in each level, with the difficulty increasing as players progress to higher stages. Enemies become stronger based on the current stage, providing a greater challenge, but players can discover more powerful weapons to aid in their journey.

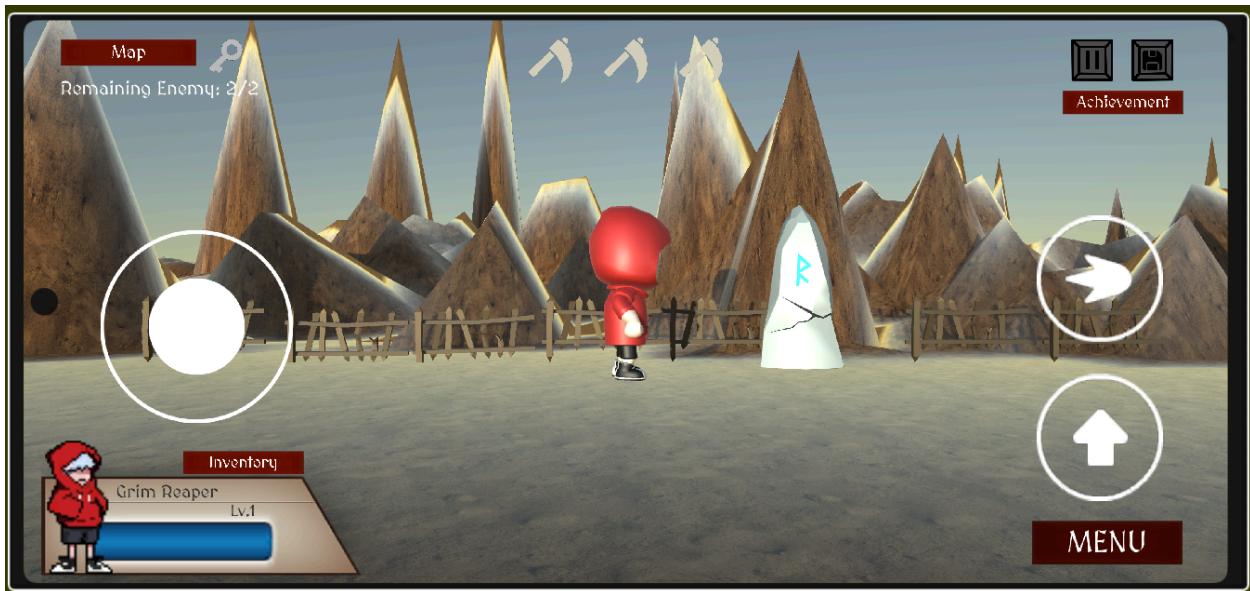
## Game Progression

When the player loads into the new game, a tutorial level hint will be shown. Meanwhile, there is an achievement scheme: when the player completes all the quests, including finishing the tutorial level, collecting at least 1 item, and killing at least 1 enemy, the player will be rewarded by being sent directly to the location of the key. It is because to advance to the game win scene, the player must first locate and retrieve the key from a designated location, then successfully navigate to the corresponding building or gate to unlock entry. However, the journey is fraught with challenges, as enemies and hazards stand in the way, hindering the player's progress. To overcome these obstacles, the player can employ various movements, including jumping and attacking, and utilize different weapons to either defeat enemies or navigate around hazards, ultimately allowing them to reach the gate and proceed to the next level.

# Game Play

## Controls

In "Grim Reaper", players will make use of on-screen control.



- Step 1: Use the joystick to move the character
- Step 2: Hit the jump button to jump and collide to collect items
- Step 3: Hit the attack button to shoot crow bullets and kill the enemies

## Game Play Mechanics

The game will feature a platformer format, offering players the ability to move the character using on-screen controls. In addition to movement and attacking, players will also have the option to jump to navigate the environment effectively. As players progress, they'll encounter both monsters that need to be defeated and challenging bosses to confront, designed to challenge their wits and platforming skills, creating a diverse and engaging gameplay experience.

## Camera

The camera in 'Grim Reaper' will provide a 3rd-person angle. This perspective ensures that players can fully immerse themselves in the side-scrolling platformer format, enabling easy navigation through the world and its intricacies while maintaining a consistent visual experience.

**Saving and Loading** (*will be available in the next stage*)

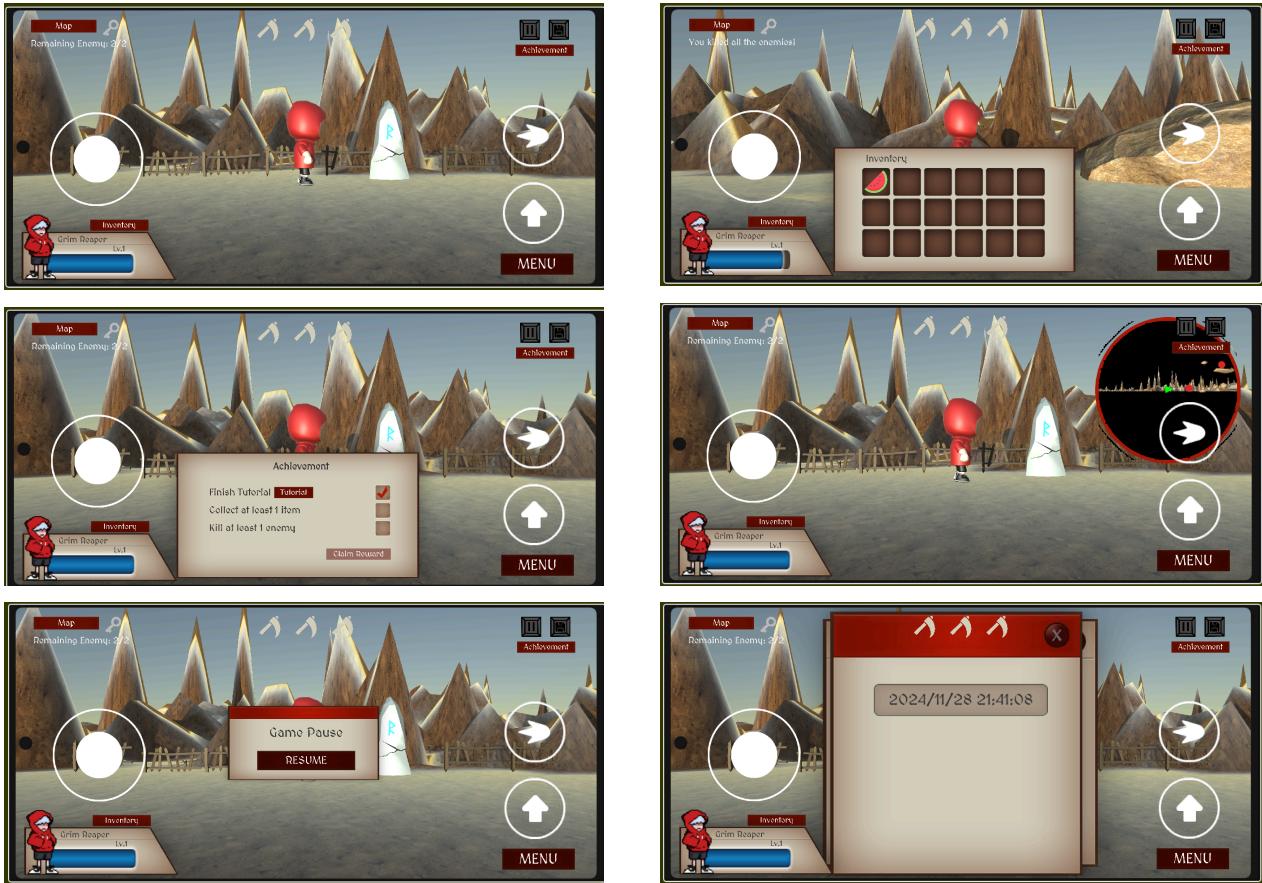
In "Grim Reaper", players can expect a thoughtful savepoint system strategically placed throughout the game. These savepoints are thoughtfully distributed between stages to provide players with a sense of security and progression. Whether you find yourself in the midst of a challenging stage or right before a formidable boss encounter, the save button will allow you to save your progress and continue your adventure with ease. This ensures that players can focus on mastering the platforming and combat aspects of the game, knowing that their progress is safely preserved at key junctures in the journey.

# User Interface



## Main Menu

- New Game: Embark on a new journey and discover the world
- Load Game: Access a specific saved progress and continue from that checkpoint (*will be available in the next stage*)
- Options: Customize audio options. (*will be available in the next stage*)
- Exit: Exit the game.



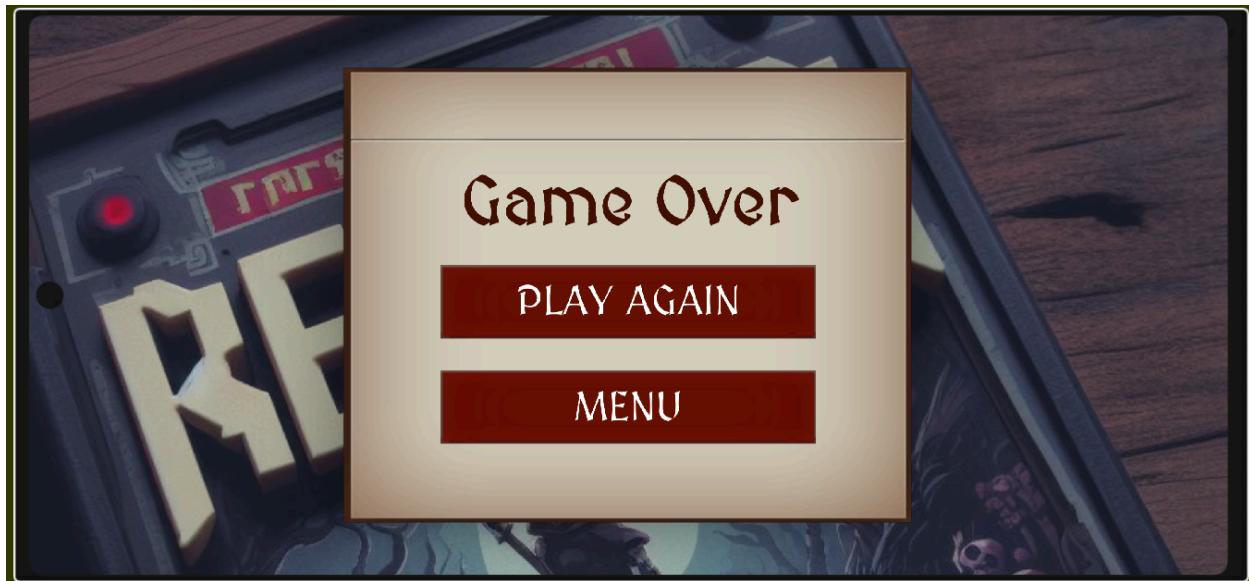
### Game Level UI

- **Inventory System:** Consumables the player picks up on the way to refill player's health, consumables types and location are randomly arranged every time.
- **Health System:** Player's life count and amount of hit points (HP), the HP can be refilled by consuming consumables, however, life count cannot be recovered.
- **Achievement System:** A list of quests assigned to the player. When the player completes quests, a reward will be granted. (*will be available in the next stage*)
- **Mini Map:** A map showing a radar-like view of the level, indicating the player's position, enemy positions, and level checkpoints. (*will be available in the next stage*)
- **Menu:** It contains main menu options.
- **Pause Button:** The player can pause the game and resume. (*will be available in the next stage*)
- **Save Button:** The player can save at any point of the game progress. (*will be available in the next stage*)



### Game Win Menu

- Button: Showing main menu



### Game Over Menu

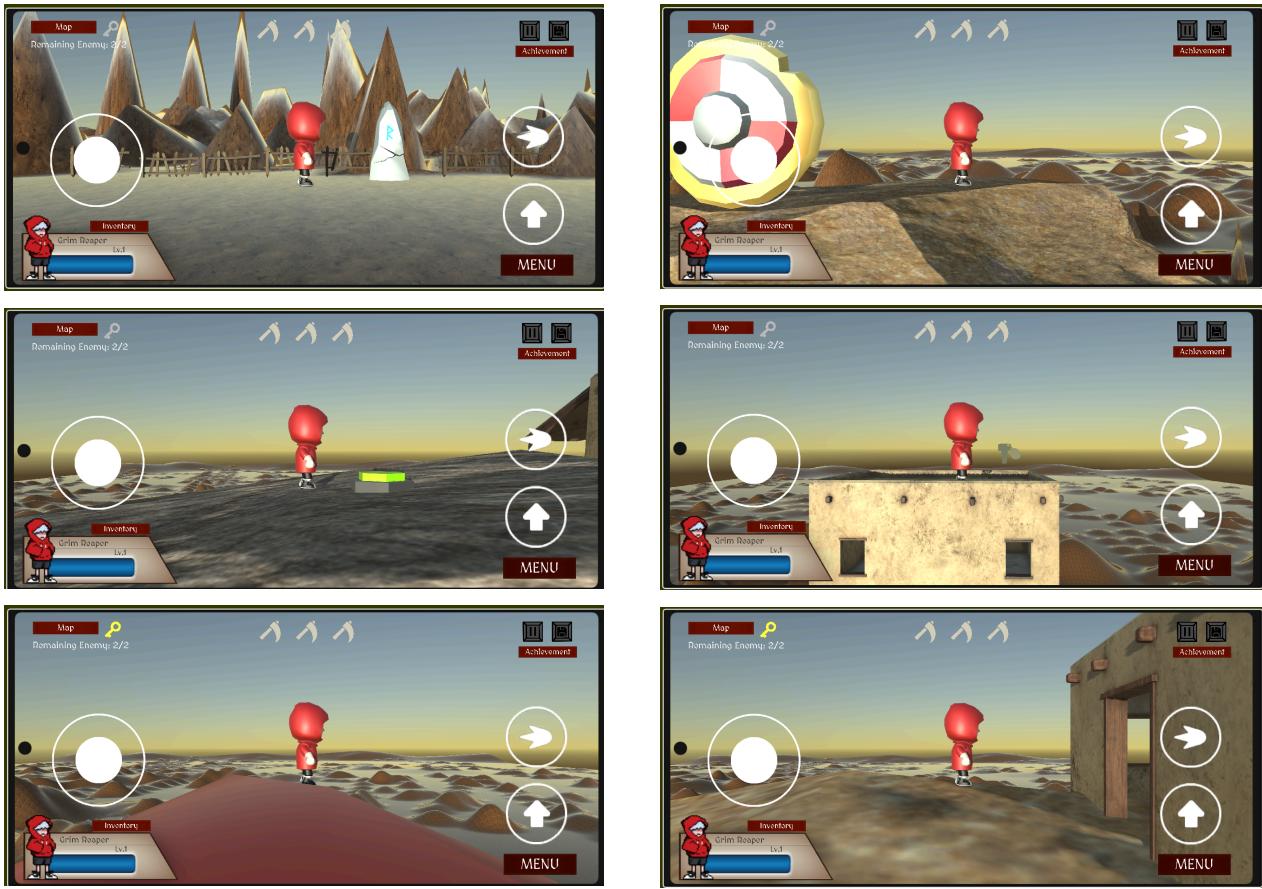
- Button: Showing main menu

# The World Layout

**Level 0: Tutorial** (*will be available in the next stage*)



## Level 1 - Adventure Starts



## Level 2 - Final Chapter (*will be available in the next stage*)

# Player Characters

“Grim Reaper: Loss of Memories” immerses players in the captivating journey of a young boy on a quest to recover his lost memories and ultimately ascend to the role of the Grim Reaper, all with the help of his newfound friend, Crow.

## Main Character

Reaper: The main character on an adventure to collect fragments of his memory and ascend as the Grim Reaper.

## Assistance Character

Crow: A companion who helps and protects Reaper during the adventure, providing unique abilities.

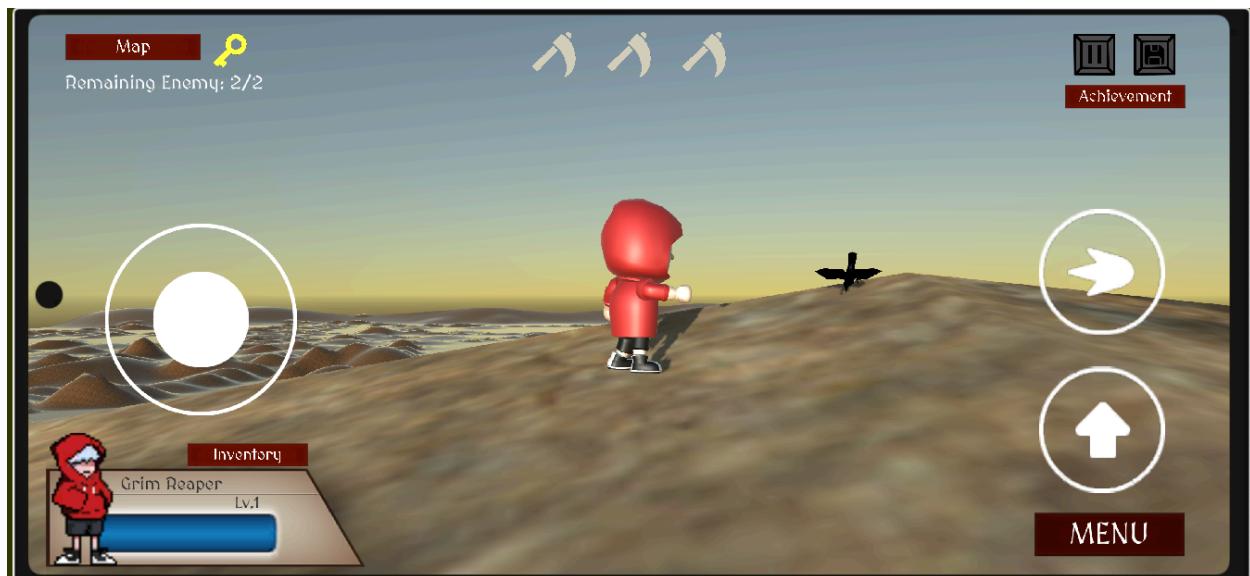
# Player skills

## Weapons

Crow

## Abilities

Crow Attack: Shoot crows to attack





## Player inventory tools

Players can store the HP consumables they collect on the way in the inventory box.

## Power-ups

banana, watermelon, cherry

## HUD System

### Health Bar

- Total health is 100%.
- Each time the player takes damage, health decreases by 10%.

### Lives (*will be available in the next stage*)

- The player starts with three lives.
- If health reaches 0%, the player loses one life.
- Losing all lives results in game over.

### Death (*will be available in the next stage*)

When the player dies, the game reloads and returns to the location where they died.

### Map (*will be available in the next stage*)

Players can use it to locate enemies, key and the door.

### Inventory

Players can open or close the inventory box.

### **Checkpoints System** (*will be available in the next stage*)

Players can find a key to unlock a door, which serves as a checkpoint for progress.

### **Achievement System** (*will be available in the next stage*)

- Quest 1: Finish the tutorial
- Quest 2: Collect at least 1 items
- Quest 3: Kill at least 1 enemy
- Reward: Being sent to the location of the key

## **Bosses**

Bad Boss Batty: The final boss who erased Reaper's memories to prevent him from ascending to the role of the Grim Reaper.

## **Enemies**

Flamey, Bunny, and Doggy: Batty's subordinates who try to stop Reaper from collecting his memory fragments during the adventure, each introducing different challenges as the game progresses.

### **General enemy rules**

Patroller: Enemies remain at their designated patrol station. When the player enters the area, they will initiate a chase.

Spawn Parameters: Enemies will attack when the player collides with them, causing a reduction in player health.

Defeat Parameters: There are no defeat parameters for patrollers; they continue to function regardless of player actions.

## **Non-player Characters**

Chickens: Non-player characters that provide guidance or assistance to Reaper. (*will be available in the next stage*)

# Design Notes

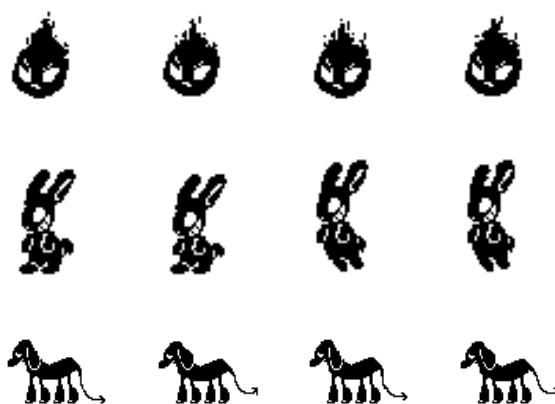
## Reaper Design



## Crow Design



## Enemy Design



# Music and Sound Effects

## **Background Music** (*will be available in the next stage*)

- Main Screen
- Game Win/ Game Over
- Level 0: Tutorial
- Level 1: Adventure
- Level 2: Final Chapter

## **Sound Effects** (*will be available in the next stage*)

- Walk/ Run
- Jump
- Crawl Attack
- Player Reborn
- Enemy Hit
- Button Click
- Achievement complete
- Game Win/ Game Over