

# Game Design Document

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**Tutorial:** 3

**Link to the game repository:** <https://github.com/ivzemberi/Moon-Hollow>

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## 1 Overview

Moon Hollow is a 2D Android game set in a cursed town. The *unlikely* hero is a black cat (reason for that is the wide belief/superstition that black cats bring bad luck) and that together with the story of how the town got cursed is what makes it unique.

The targeted audience is anyone interested in puzzle exploration games who likes mystic themes and cats. The game does not contain any violent scenes or dark topics other than town being haunted so considering similar games on Play Store it should be from ages 6 and up, but solving the puzzles would probably be too difficult for 6 year olds. So I think my targeted audience would be age 12 and above.

### 1.1 Game abstract

The player assumes the role of a black cat caught in a haunted town called *Moon Hollow* and his mission is to lift the curse. While walking and collecting clues (keys, letters, signs, etc.), the player also picks up different resources, or power-ups: milk (food), gold, medicine, etc. The hero has nine lives (like a cat) and he loses them by making wrong decisions e.g. by giving a wrong answer to a riddle or running into ghosts. The hero can move around the town freely and jump to collect resources or to avoid ghosts, but he cannot hurt the ghosts.

There are two outcomes for game ending:

**win:** the puzzle is completed and the curse is lifted, the cat can finally reunite with its family

**lose:** the player lost all his lives, the town stays haunted and he can try again.

### 1.2 Objectives to be achieved by the game

By exploring the town, the player collects clues that will help him solve riddles and complete the game. The main objective is to lift the curse and save the town. He also collects power-ups (food, medicine) that gives him further advantage and some that positively affect his end score (gold). By running into ghosts, the player loses a life (he cannot fight ghosts, only avoid them). But if he collects a magic potion, it makes him immune to ghosts for a short time. That brings us to the secondary objective of achieving a high score, the more power-ups the player collects and lives he has remaining after finishing the game the score will be higher.

### 1.3 Core gameplay

The player will:

- **explore the town:** This includes looking for clues, and enjoying the visuals of the haunted town. ← aesthetically pleasing aspect
- **collect power-ups:** Occasionally the player will have an opportunity to collect food, medicine or gold which will help him get a higher score and a better chance to solve the puzzle. ← engaging aspect of the game
- **gather clues:** Different types of clues will be hidden all over the town. For example, keys that open special doors, letters that reveal part of the story, objects needed to lift the curse and finish the game, etc.

- **piece together the story:** With gathering the clues, the player will also have the opportunity to talk to NPCs which will also reveal parts of the story.
- **avoid the ghosts:** ghosts are making the game more challenging and have the goal of keeping the player in the state of “flow”

## 1.4 Game features

### 1.4.1 Genre

Moon Hollow is an exploration puzzle game. [1] It has elements from adventure games where the main character assumes the role of a protagonist in an interactive story driven by exploration and puzzle-solving [2]. Unlike logical puzzle games, it requires inductive reasoning to solve the puzzle. Player is immersed into a story where he is a black cat in a haunted town and he has to solve riddles and connect the clues together in order to lift the curse and win the game.

### 1.4.2 Number of players

It is a single-player game.

### 1.4.3 Game theme

Game theme is a haunted town set during the night in the 2000s.

### 1.4.4 Story summary

At the beginning the player is welcomed into the Moon Hollow world with a story that explains the game context:

It is the year 2000. The evil witch that lives on top of a mountain has cursed the whole town. Moon Hollow is filled with ghosts, bats and all kinds of unworldly beings. It is up to the player to find all the things needed for lifting the curse. To do that he has to go through the town and collect all kinds of clues, talk to the remaining towners, avoid ghosts and solve riddles.

## 2 Mechanics

### 2.1 Game elements categories

- Ghosts are the player's enemies.
- Clues in the form of
  - letters
  - keys
  - chest
- Power-ups in the form of:
  - milk (food)
  - medicine (health)
  - gold bars
  - magic potions (grants the player immunity and ghosts cannot harm him)
- Sounds
  - eerie background music

- creaking for opening chests/doors
- slurping for collecting milk
- clinking sound when collecting gold

## 2.2 Rules

### 2.2.1 Interaction rules

The player can:

- freely walk through the town by tapping in the direction he wants to move
- jump to avoid ghosts or to reach clues or power-ups by sliding his finger up
- collect gold, food, medicine by walking up to them or jumping to reach them
- collect clues by tapping on them
- solve riddles by typing the answer
- solve puzzles by putting an object in the correct place (e.g. key into a lock that opens up a chest)

### 2.2.2 Artificial Intelligence

The player will interact with the NPC towners and depending on what the player decides to ask them he will get different responses from them. Some may be friendly and some may be hostile NPCs.

Puzzle elements should react dynamically to player interactions and inputs, giving feedback to guide the player.

## 2.3 Game world elements

There's a backpack icon that leads the player to an **inventory** screen where all of his resources are stored and he can use it to track progress and use the items to overcome challenges.

## 2.4 Game log elements

The score is being tracked and the player can save his progress.

## 2.5 Other elements

There are no other elements so far.

## 2.6 Assets list

Visual assets:

- Characters (including NPCs): the black cat, ghosts, towners, bats, the witch
- Power-ups: keys, magic potion, gold bars, bowl of milk
- Environment Art: backgrounds, props depicting the town, library, coffee shop
- UI Elements: buttons, health bars, settings screen, scoreboard
- Animation: Animated models for character movements (cat walking, jumping, bats flying, ghosts floating)
- Logo for the game

Audio assets:

- Eerie background music
- Sound Effects: player actions - picking power-ups, entering places, solving riddles

Design assets:

- Puzzle Design: mechanics, rules and solutions for all of the game's puzzles and riddles

### 3 Dynamics

#### 3.1 Game World

A town named Moon Hollow in the year 2000 that is currently haunted.

##### 3.1.1 Game theme details

The game is set in a haunted town in the 2000s, the main character is a black cat and everything feels spooky, similar to halloween movies. There are bats flying, ghosts are around, and it is set in the night. It contains houses, stores, a library, a coffee shop, a road, ghosts, bats and a main character which is a black cat. There will also be some NPCs which are the towners and the player will be able to interact with them briefly before the curse takes effect on them too.

In the background there is eerie music, opening doors has a creaking sound, picking up clues and power-ups also give unique sounds, for example when the cat collects milk there's a slurping sound which tones down the eeriness a little.

##### 3.1.2 Missions/levels/chapters Flow

The player navigates through the world in the game by walking - so it's linear. If he misses a clue he can go back to get it (he is not restricted in strictly forward moving). However, he cannot enter areas that are locked if he hasn't found a key beforehand.

#### 3.2 Missions/levels/chapters elements

The game is imagined as an interactive story - the player slowly pieces the clues together in order to lift the curse and win the game. It is organized in chapters, like stories usually are. So to move through the chapters the player needs to answer riddles (by typing) which help him get to the next clue. He also needs to interact with objects and NPCs.

##### 3.2.1 Objectives

The player **investigates the curse** by exploring the town and picking up clues. He then uses those clues and his problem-solving skills and logic to **solve puzzles and riddles**. Some of the clues he **collects** are **items** necessary for breaking the spell. He also **interacts with NPCs** to uncover additional clues. While doing all that he also **avoids ghosts**. At the end he's **lifting the curse** by performing necessary actions which is done by solving a final puzzle that all the previous puzzles led him to.

### 3.2.2 Rewards

By collecting power-ups the player is rewarded with increasing his score. By collecting a magic potion the player is rewarded with being immortal for a short period of time. Solving puzzles also positively affects the score along the way, and there are also feedback messages “Well done” or similar.

### 3.2.3 Challenges

Player will have different challenges throughout the game:

- riddles where he will have to type the answer to
- putting things together like a puzzle
- piecing together the story
- avoiding ghosts

### 3.3 Special areas

Special areas in the game are:

- a coffee shop or “cat cafe” where the player can interact with NPCs
- a library where the player can find scrolls and hints that help him solve the puzzle

### 3.4 Game interface

The player will first be welcomed to the game world with the **game title**, **the story** and his mission will be explained which he can choose to skip and after that he can start the game by tapping on the “**Play Game**” button. While playing the game the player will see the haunted town and his character (the black cat). In the left upper corner there will be **the score** and **the number of lives** displayed. In the upper right corner there will be a **backpack icon representing the resources** collected separated into power-ups and clues and next to it a **save button** and next to it a **settings icon** which enables the user to adjust sounds, music, the difficulty level, and remind himself how to play the game.

### 3.5 Controls interface

[01 Welcome Screen]

The player can read the story, press a button to skip it, and press “Play Game” button

[02 Game Screen]

The player can

- tap in the direction which he wants to walk
- walk to the clues and power-ups to collect them
- tap on NPCs to talk to them
- tap on places to try to enter/explore them
- tap on objects that look like clues which leads to
- slide up to jump
- tap on settings icon to go to settings
- tap on backpack icon to go to the resources

[03 Settings]

The player can

- adjust music
- adjust sound
- adjust difficulty level
- remind himself how to play the game
- quit or restart the game

[04 Resources]

The player can

- tap on medicine to restore his life/lives
- tap on a clue to use it (e.g. a key to open a door)

### 3.6 Game Balance

To increase or decrease the challenges difficulty the following elements could be used:

- number of ghosts - the more ghosts there are it is more difficult to avoid them
- ghost speed
- highlighting the next clue - to make the game easier there could be hints about where the next clue is hiding - the player can choose to enable/disable this functionality

## 4 Visuals and Sounds

### 4.1 Game visuals

The game would have an eerie, haunted feel - dark colors, spooky (but cute) characters. I plan to design the characters and other elements myself. Below are some screenshots from the games that inspire me:

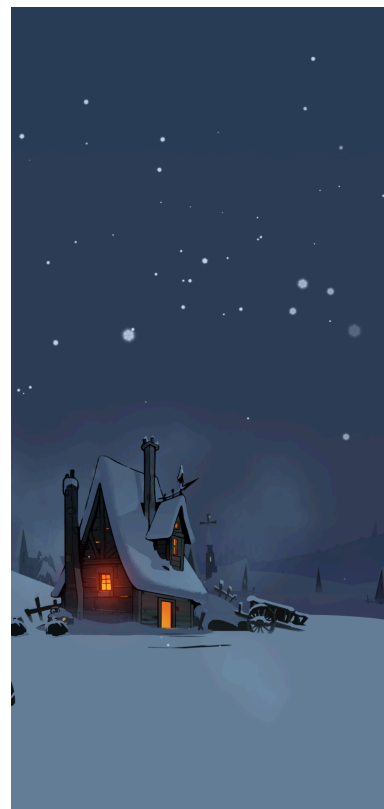
#### 01. Night in the woods (Finji)







## 02. Night of the Full Moon (Giant Games, Giant Network Group)



These screenshots capture the aesthetics I would like to follow in my game as well. The images below capture the direction I want to go with characters, simple vector illustrations of a black cat and ghosts.



Black cats Inspiration [5]



Ghost inspiration [6]

#### 4.2 Game sounds

Because the theme of the game is mystic and horror-like, the background music will be something eerie (maybe something like this: [link](#)). I would also include sound effects for: picking up physical objects for clues, unfolding a letter, sound of unlocking and door creaking ([link](#)), sound of drinking milk (the power-up, [link](#)) to immerse the player further into the game and enhance the overall experience.

#### 5 Document references

- [1] "Puzzle video game", Wikipedia. [https://en.wikipedia.org/wiki/Puzzle\\_video\\_game](https://en.wikipedia.org/wiki/Puzzle_video_game) (Accessed May 12th 2024)
- [2] "Adventure video game", Wikipedia. [https://en.wikipedia.org/wiki/Adventure\\_game](https://en.wikipedia.org/wiki/Adventure_game) (Accessed May 12th 2024)
- [3] Infinite Fall, Secret Lab. 2017. Night in the woods. Game [Windows]. (28 February 2017). Finji, Grand Rapids, Michigan. (Screenshots taken from Microsoft Store on May 12th 2024)
- [4] Giant Games, Giant Network Group. Night of the Full Moon. Game [Android]. (25 July 2019). Giant Network Group, Shanghai, China. Last played 13 May 2024.
- [5] "Halloween Cats", Dribbble. <https://dribbble.com/shots/23927670-Halloween-cats> (Accessed May 13th 2024)
- [6] "Illustration Of Cute Ghosts", Dribbble. <https://dribbble.com/shots/22462431-Illustration-Of-Cute-Ghosts> (Accessed May 13th 2024)