# Tales from the Tower: Game Design Document

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## November 16, 2022

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#### 1 Introduction

This game design document is a continuously changing document created to follow and detail the development of the game "Tales from the Tower" being created as the final semester project for WSOA3004A.

This document should reflect the current stage of development of the game, as well as the projected final state of the development, and so will change with each iteration of the game.

The sections of this document include:

- The background of the project, what is expected for the final product and any specific project requirements.
- A description of the game being developed.
- The key features of the game being developed, the core mechanics.
- The referential games from which inspiration or direction is being taken for this project.
- The genre of the game being developed.
- Concept art showing current design concept for the game.
- Descriptions, visual and textual, of the core game-play loops and expected user experience.
- The characters within the game and their purposes.
- The enemies within the game, their functions, requirements and statistics.
- Specific descriptions of game play elements.
- The statistics, systems, and physics equations and algorithms required for the various programmed systems within the game.
- The current control mapping for the game, including for keyboard and PS4 controller.
- Flowcharts and descriptions detailing the user journey in terms of the basic user interfaces within the game.
- Functionality requirements for the user interface.
- The aims and requirements for the user experience
- Mock-ups and a style guide for the user interface.
- Descriptions of the goals and requirements for the visual requirements of the game.
- A discussion around the chosen art style for the game.
- A discussion around the inspirations and references for the art within the game.
- The goals and requirements for the audio development, as well as the references for the sound design within the game.
- An overview of the narrative story within the game.
- An overview of the various levels that will be required for the game's development.

## 2 Game Concept

#### 2.1 Background

The game discussed in this document is being developed for Game Design IIIB (WSOA3004A) as the final semester project.

The game should be developed and submitted in its various stages of development:

- 1. Prototype
- 2. Pre-Alpha
- 3. Alpha
- 4. Beta

Appropriate play-testing should be conducted throughout development.

The game is required to be uploaded onto itch.io.

GitHub should be used for version control and collaborative development.

Please refer to the Project Plan document for this game for further details on the project planning process.

#### 2.2 Description

The game being developed is a two dimensional, top-down, stealth, and item collection game. The player within the game will be required to use stealth techniques to avoid enemies, there will be no combat mechanics for the player. The game contains a narrative in which the player has been accused of stealing a Tower's magic emerald and must collect evidence to prove their innocence.

#### 2.3 Key Features

The key features of the game are as follows:

- Avoidance of enemies by the player using various mechanics (these mechanics will be detailed later)
- Patrolling enemies with the ability to spot the player
- Level restarting whenever the player is spotted
- Progressing through levels to ascend the "tower" within the game
- Collection of a set amount of items to prove the player's innocence in order to finish the game
- Interaction with objects within the game environment to progress through the level.

#### 2.4 References

A number of games were discussed for their mechanics and genre, and these games are being used as references for the creation of the game in this document. The games are as follows:

- Outlast
  - Stealth, no combat, hiding mechanics
- Metal Gear Solid 2
  - Stealth, hiding under objects to avoid detection
- Cult of the Lamb
  - The rolling/dashing mechanic used by the player
- Stardew Valley

- Character interactions and user interfaces
- Assassins Creed Games
  - Stealth, methods of distracting enemies by whistling or throwing projectiles
- Pokemon White
  - 2D top-down view
- Turnip Boy Commits Tax Evasion
  - 2D top-down view, pixel art

#### 2.5 Genre

Genre	Description	Examples
Stealth	Stealth is defined as: avoidance of defined enemies or objects. Contact(physical, sight, sound etc) with defined enemies and objects will lead to negative consequences for the player, such as death, level failure, loss of items etc.  Stealth in the context of this game will be as follows:  The player must navigate the area without being detected by enemies. Detection is based on the enemy' field of view/sight. This can be done by moving away from enemies, hiding behind/in objects or using items to distract enemies to make them navigate to a new position.	Outlast, Assassins Creed, Metal Gear Solid 2, The Elder Scrolls V: Skyrim
Mystery	The concept of a mystery game is defined as: a total defined set of information is given in the game, however the player does not have immediate access to all of this information. The player must collect and analyse pieces of information until all pieces of information have been collected and a conclusion can be made from the information.	The Wolf Among Us, Cluedo, L.A. Noire, Among Us
Narrative	A narrative game is defined as: A story is conveyed through the game and is used to progress the game-play. The narrative can be communicated visually, throug dialogue and text, or environmentally.	The Wolf Among Us, Firewatch, The Last of Us

## 2.6 Concept Art



Figure 1: The concept title art for the game.



Figure 2: Concept art for the main character of the game.



Figure 3: A basic level concept for the game prototype.



Figure 4: Concept art for the enemies within the game. Inspiration was taken from Amnesia: A Machine for Pigs

## 3 Game Mechanics

## 3.1 Core Game Play Loop

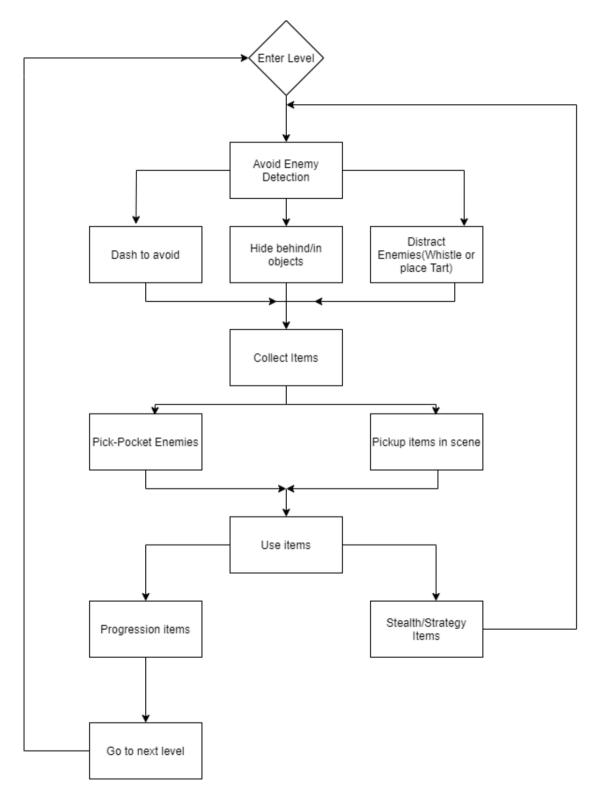


Figure 5: Flowchart showing the core game play loop within the game

#### 3.2 Characters

- The Main Character
  - The main character is small boy with black hair, he is a stranger in the tower. The player controls this character as they move through the tower and evade the guards.

#### 3.3 Enemies

- Pig Samurai Guards
  - The pig samurai guards are NPC enemies within the game, they have field of view sites with the ability to detect the player. The guards patrol in preset loops around the game level.

#### 3.4 Statistics, Systems, and Physics

- 1. Character Controller
  - The character has 360 movement within the x-y plane.
- 2. Character Dash and Cooldown
  - The character can dash in their current movement direction to quickly evade enemies. The dash has a cool down time that is implemented after the player uses the dash, this prevents spamming.
- 3. Enemy Patrolling and FOV movement
  - The enemies patrol over defined paths. Each enemy has a field of view that spans 45 degrees in an arc. If the player enters this field of view they will be "seen" by the enemy. The enemy FOV also rotates to face towards the enemy's current movement direction.
  - The enemies have individually defined paths. The enemy paths intersect however the enemies will not collide with one another (their paths are setup to prevent this from occurring).
- 4. Re-spawning player
  - If the player is "seen" by the enemy, they will get setback to the starting point of the level and any items that they have collected will also be reset.
- 5. Item Collection
  - The player can collect defined items within the level. The player must be within a specific radius to be able to collect an item. The player collects the items by pressing the square button, not simply touching it. This ensures the player must strategically time their collections presses so that they do not get caught and have enough time to move out the space. Dynamic inventory system will be developed and used.
- 6. Environment Interaction
  - Various environmental interactions were added allowing the player to interact with the scenes within the game in order to progress.

#### 3.5 Controls

The game will support both keyboard and GamePad/controller support, but the controller will be used as the preferred input device for the game. The reasoning for this, is that the range of input distances that can be taken from a controller joystick allow for multiple movement distances to be achieved by the player, whereas the keyboard input only offers a set distance to be travelled based on the player speed. This offers the player more leniency in navigating the area and avoiding enemies.

A ps4 controller will be used to develop the controller input as this is the available development hardware.

Action	Keyboard	PS4 Controller
Basic Movement	WASD	Left Joystick
Dash	Spacebar	X Button
Item Collection	Е	Square Button
Whistle	K	Triangle
Drop Tarts	Q	Circle

#### 4 User Interface

#### 4.1 User Journey Flowcharts

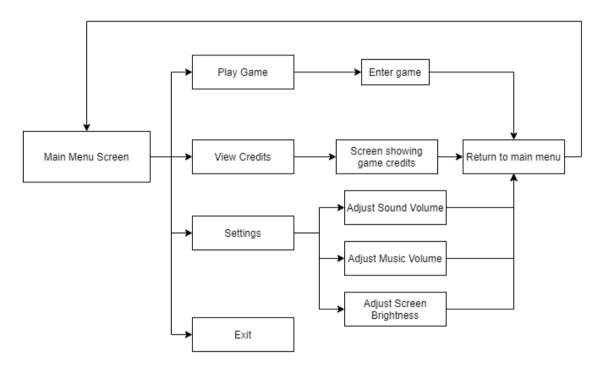


Figure 6: Main Menu Flowchart

#### 4.2 Functionality and Requirements

The following systems in the game will require a user interface:

- 1. The Main Menu
  - Should allow the player to change settings, view the game credits, exit the application, and also play the game.
- 2. Stealth Detection Interface
  - There should be indications on the screen during game-play letting the player know when they are in danger of being detected and when they have been detected and are being reset.
- 3. Player Objective Interface
  - A small on-screen interface showing the player what there current goals or objectives are should be present on the player's screen.
- 4. Item Collection interface
  - A panel that can be brought up by the player should exist within the game to show the player which items they have collected, as well as information about the items, along with how many items have not been collected yet (portrayed as empty slots).

#### 4.3 User Experience

The controls and user interface should be intuitive and feel natural and easy for the player to use. The user should view the user interface as clear and thoughtfully laid out.

The user experience aims should be confirmed through play-testing sessions.

#### 4.4 UI Style Guide

The font Mangabey by Niskala Huruf was chosen as it was a playful, easy to read font that would communicate the intentions of the game to be enjoyable and accessible.

UI elements were created in a hand-drawn style to further represent a fun and inviting atmosphere.

#### 5 Art

#### 5.1 Visual Development Goals

The visual goals of the game should be to:

- 1. Communicate the environmental settings to the player through appropriate room and outside area designs
- 2. Communicate actions from the player character standing, walking, rolling/dashing and any other actions. These should be communicated through clear character animations.
- 3. Appropriate use of color and composition to communicate the tones of various levels to the player.

#### 5.2 Art References

Several sources have been investigated as inspirations for the art style and visual designs within the game.

#### 5.2.1 Howl's Moving Castle



Figure 7: Screenshot from Howl's Moving Castle (Owned By Studio Ghibli)

## 5.2.2 Spirited Away



Figure 8: Screenshot from Spirited Away (Owned By Studio Ghibli)

## 5.2.3 Turnip Boy Commits Tax Evasion



Figure 9: Screenshot from Turnip Boy Commits Tax Evasion (By Snoozy Kazoo, Yukon Wainczak

#### 6 Sound and Music

#### 6.1 Audio Development Goals

Music should be created for the game and used to enhance the experience of the game for the player, music should match the various environments and tones and be used to bring out desired emotional reactions from the player.

To communicate movement and actions within the game, sound effects such as footsteps and action sounds should be added to make the game feel more alive and polished.

#### 6.2 Proximity System

A sound proximity system was added in order to elevate the stealth mechanics of the game. This system allows the player to hear where enemies are when they are off screen, with sounds becoming louder as they are nearer and softer as they move away. This allows the player to anticipate where enemies are coming from and plan their moves.

#### 6.3 Sound References

There will be talking NPCs within the game, and therefore sound effects should be used to communicate speech. The following games are being investigated as references for characters speaking:

- Animal Crossing: New Horizons
  - The animal characters within the game speak in high or low pitched tones, the language is fast paced gibberish it fits the very cute and childlike tone of the game.
- Pokemon Legends: Arceus
  - Characters make a single sound to indicate that they are speaking, this is followed by dialogue boxes - no other actual sounds besides this are used within the game. This is appropriate for the large amount of dialogue in the game - only a few sounds need to be used.
  - The sound made by the characters are usually just to indicate the tone in which they are speaking: happy, annoyed, angry, scared etc.
- Hollow Knight
  - The characters in Hollow Knight make small sounds in a made-up language to indicate speech. While the speech used is imaginary - the tone and style is more mature than that of Animal Crossing: New Horizons

## 7 Story Overview

Floating high above in the sky is the great Tower City: a tall and fantastical building teeming with magical secrets. But wait! Panic strikes! The Precious Jewel of the Tower Emperor has gone missing, and you, an unknown stranger, are suspect number one!

The Samurai Pig Guards are looking for you, and you must use stealth and your wits to travel up the tower and prove your innocence! Collect evidence from residents of the tower, in hidden places, and from the pig guards, keep a look out for anything suspicious, and don't get caught!

#### 8 Level Overview

Level	Level Description
Tutorial Level	Basic stealth concepts are taught to the player. The player is taught to dash and hide. Patrolling enemies with field of view sites are introduced to the player. Item collection is introduced to the player.
Level 1	Player is expected to make it through a level with a series of patrolling enemies with field of views sites.  The player is informed of their pick-pocket ability. The player must pick-pocket a guard to progress through the level.  The player is taught to interact with the game environment in order to progress through the level.  The player enters a boiler room and must collect a schematic as evidence. The player must turn off a steam valve in order to exit the level.
Level 2	Player should be expected to make it through a level with a series of patrolling enemies with field of views sites.  Player must use the skills acquired in the previous levels to complete this level.  The player enters a library and must help the librarian restore the lighting as well as collect a chewed book as evidence.
Level 3	The Player enters a market area. The player is taught by NPCs to whistle and place tarts to distract enemies. The player must complete a task for the ShopKeeper NPC to unlock their tart placement ability.  The player must use these new skills to progress to the next level.
Level 4	The Player enters the Palace. The player must use all of their skills obtained throughout the game to complete this level. The player must collect the Glass Case Holder as evidence.  This level will be the most difficult to complete out of all the levels.
End Level	The final level is an explanation of the ending - showing the player who was responsible all along.  The Emperor clears the player of their charges and the game ends.

#### 9 Reflections

#### 9.1 Initial Reflections)

This version of the prototype is the Alpha version of the game, however it is also only the second iteration of our prototype, since we are a newly formed group and development began 2 weeks ago.

The current state of the build does not represent the original project goal plans set for this development point.

Initially the development plan was to implement the player's abilities to throw objects, distract enemies and hide in/under objects. These development goals have been delayed to a future point in the project plan. The current prototype required balancing of the player's dash and move speed, the movement speed of the enemies and the placement positions of the collection items. These mechanics form the core gameplay and it was necessary to focus development on testing and balancing the game feel of these mechanics.

The current prototype requires the player to evade enemies and collect 3 emeralds. The design goal for this iteration was to create a level of difficulty that forced the player to think about their

movements as well as prompt the player to try and predict the enemies movement pattern through observation, in order to effectively collect the items.

Through play-testing this version of the prototype, it was found that play-testers enjoyed evading the enemies while collecting the items. There were some notes on the collisions within the level - the player could not move flush with bottom wall to the right, this posed an issue for the player as they could not effectively evade an enemy because of it.

With the enemy speed at a low value (8), a play-tester could easily evade the enemies without much of a learning curve, and collect the items multiple times.

With the enemy speed at a higher level (15), a play-tester tried several times to evade the enemies and failed - but gave feedback that it was enjoyable to sit and attempt to complete the level, meaning that the enemy evasion mechanic was successful in creating a fun level of game-play.

From this feedback, for the final version of the Alpha build, the enemy speed was set at a midpoint between the low value that was tested (8) and the high value that was tested (15) to (12.5).

Further improvements on the current state of the prototype include:

- Provide a use for the block obstacles within the game. At the moment, the block obstacles are colliders, and do provide shadows when the enemies cast light in their direction, however, the blocks are too small to be of any use to the player in terms of hiding from the enemies. In the future, these obstacles should be larger and laid out in such a way that they are useful to the player.
- The UI needs to be improved. At the moment, the user interface is extremely bare-bones, as this prototype is just testing basic mechanics. A UI needs to be designed with the aesthetics and theme of the game in mind, as well with a meaningful impact on the user experience.
- Levels with the narrative included within them need to be gradually added to the prototype.

#### 9.1.1 Final Reflections

From playtesting, it was found that the controller for gameplay is much more suited to the gameplay style of the stealth system, however, the controller does not work for all UI elements, so it must be used in conjunction with a keyboard and mouse.

The art style was changed from a Pixel style to a 2D top-down style, it was felt that this better communicated the themes and desired aesthetics for the game and overall gameplay.

Sound proximity detection was added to allow the player to detect how close or far away an enemy is. Playtester data in early stages indicated that players became frustrated and confused by not being able to see where or when an enemy was coming, and so sound proximity solved this issue by allowing the player to hear enemies who are just off the screen.

This allows for the player to predict when enemies are drawing near and allows them to strategize while playing.

The narrative was changed from a mystery to a "prove your innocence" story. The mystery narrative did not seem appropriate for the overall themes and goals of the game design. A much more light-hearted approach was taken allowing for humor and playfulness.

The clues collected by the player, from the start, did not require any guesswork or deduction from the player, and so in the end a mystery narrative did not make sense.

Environment interactions were added to alleviate the repetitiveness of the enemy avoidance gameplay. The added tasks of environment interactions forced the player to think about how they would tackle these interactions while being aware of the enemies.

The overall enemy speeds were reduced in most cases - this was done in order to allow the player to analyze enemy paths better.

The mechanic of throwing objects in order to distract enemies was replaced with a placement mechanic. Throwing items did not make sense in the context of the overall game and placing items gave players more agency in placing the object exactly where they wanted it to be - this was also done to add urgency and intensity to gameplay as in order to distract an enemy with an item the player must be in the path of an enemy.

The whistle mechanic was added in order to allow more agency in how the player chooses to distract and strategize their way around the enemies.

#### 9.1.2 Notes on Downscoping and Goal Reduction

We were unable to achieve adding all of the animations and art assets that were aimed for in the initial approach to the game design and development.

A holistic sound experience was intended, not only sound for player feedback but for aesthetic and enjoyment, however this was not achieved due to time constraints.

Full controller support was not adequately achieved also due to time constraints and programming methods.

#### 9.1.3 Overall Thoughts on Final Beta Product

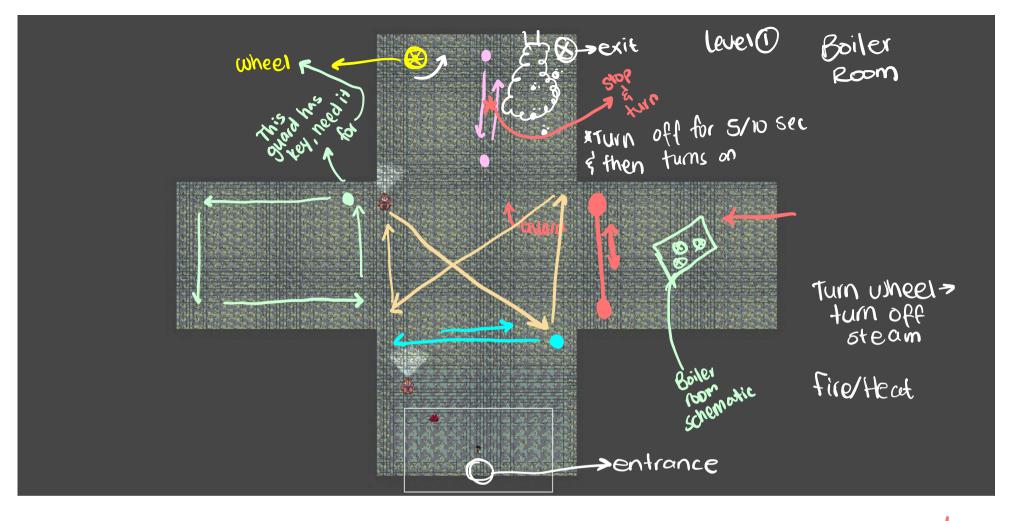
Overall as a beta prototype of the initial concept, it demonstrates a vertical slice of the goals that were set out to achieve, however, the depth at which all mechanics were explored was not to the level that was intended, as explained in the reasons in the above reflection.

The beta product does supply a very thorough base for a more fleshed out and engaging game. There is a lot of potential in the mechanics that were explored and showcased throughout this project. Feedback from play testers indicated that many players were interested and excited with the overall concept of the game.

We are proud of the work that was done on this product in the time frame that was supplied.

# **Appendix**

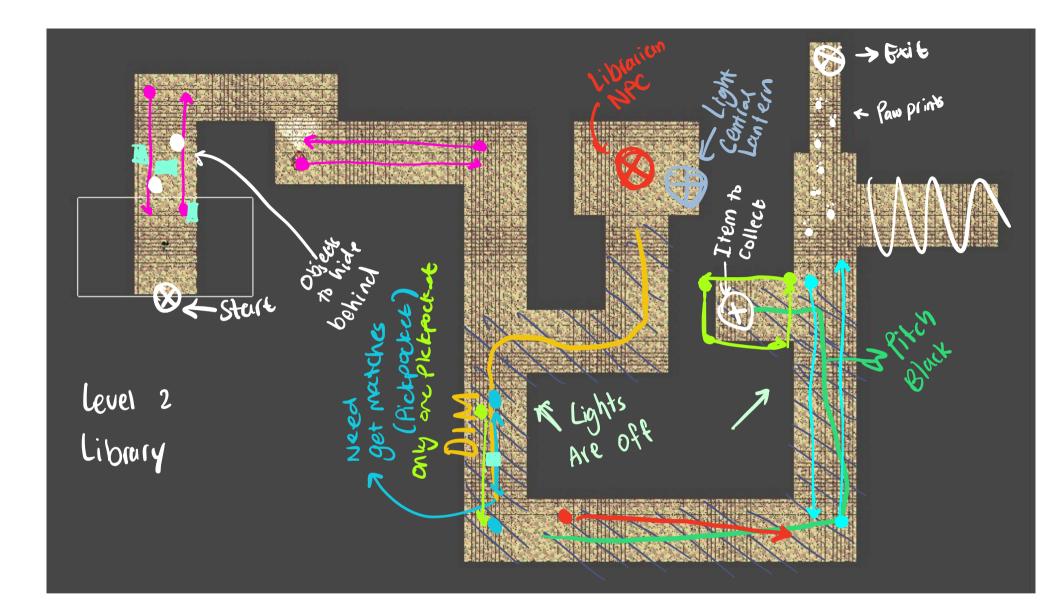
Level Design Plans

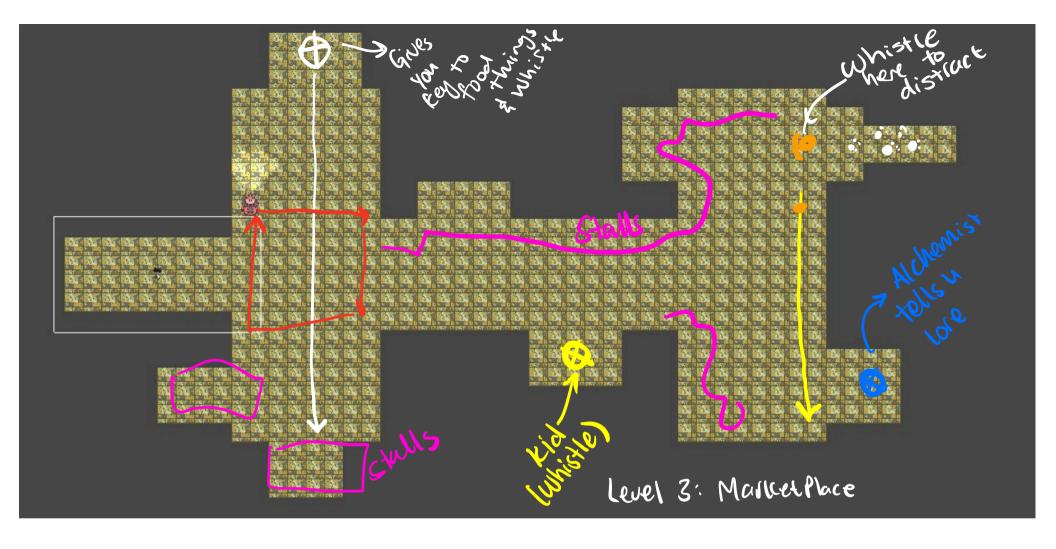


Jingle sound > can be pictpocketed

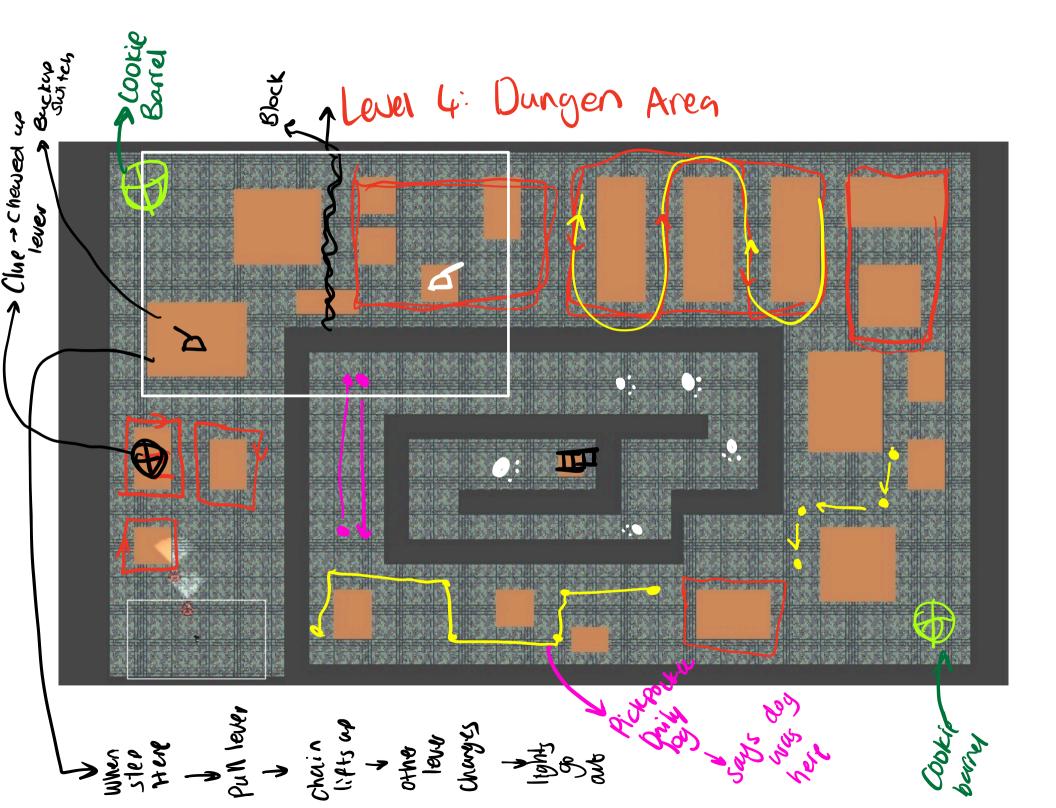
> Little spartle light

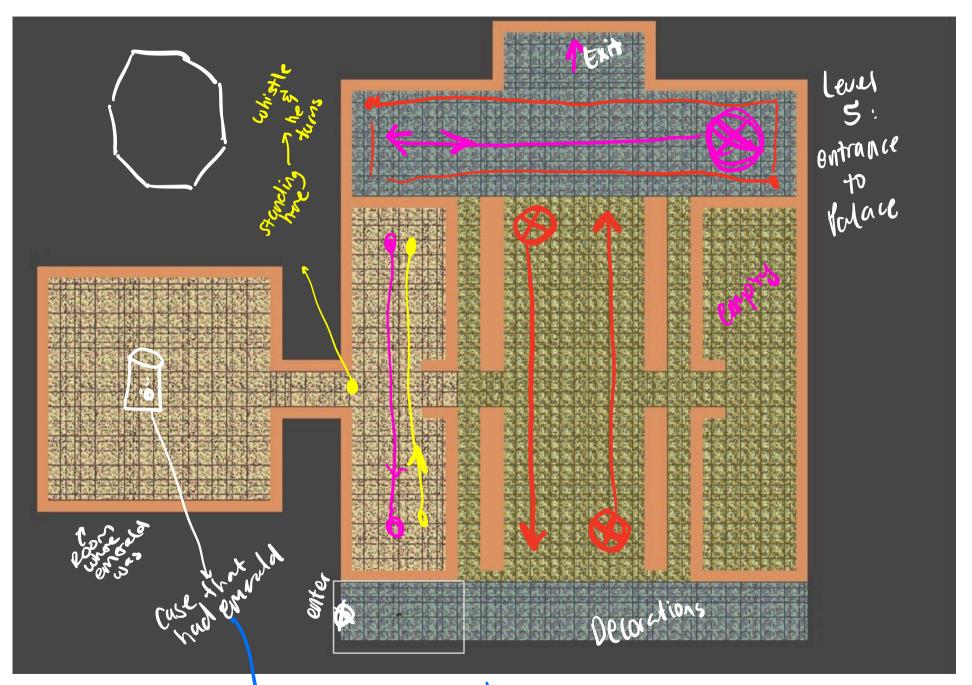






Won't see paw prints until person tells u about dog





covered in pan prints of slobber

# **Detailed Play instructions**

#### **Tutorial Level**

- Locate the dog tag item
- · Avoid being spotted by enemies
- Once the dog tag item has been collected, proceed to the top end of the level to proceed to next level.

#### Level 1

- Locate the the schematic item for the boiler room(the right side of the level)
- Locate the guard to be pickpocketed(to the left of the level. The guard will make a jingle noise when near, and appropriate text prompts will appear).
- Pick pocket the guard
- Locate the wheel valve at the top of the level after collecting the key from pick pocketing the guard. Follow the prompt at the wheel.
- Exit the level once the steam cloud is gone. Note, the steam cloud reappears after 5 seconds from the wheel turning it off.

#### Level 2

- Follow the paw prints through the pathway until you reach a darkened area.
- The guard on the left hand side of the dimmed area can be pickpocketed for the matches item.
- After pickpocketing the guard, return up the path, on the right hand side is a bend that leads to a room.
- In the room is a red box, when interacted with when the matches are in your inventory, the lights will turn on.
- Follow the rest of the pathway,
- Before the exit is a room on the left hand side of the final pathway, this room contains a ruined book.

#### Level 3

- In this area, at the top of the map is a tart item that can be added to your inventory.
- If you continue to the right, there will be a basket, when interacted with, more tarts will be added to your inventory.
- When pressing Q on the keyboard and Circle on the controller, the tarts can be dropped in the paths
  of guards in order to distract them for a number of seconds.
- · Tarts can be picked up again after being dropped.
- Continue to the right of the map and head upwards, the exit will be there.
- From this level the whistling mechanic is also available to distract enemies. Press K on the keyboard to whistle and triangle on the controller.

#### Level 4

- In this level, the room on the right hand side contains a lever.
- The room on the left hand side contains the casing where the emerald was kept.
- The exit to the level is right at the top. Exiting this level will end the game.
- There are tart holders in this level where tarts can be collected and used to distract the guards.