



## Game Design Document

# LYCAN

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*Walk the path of both man and beast.*



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Version 3.1

## Index

1	Changelist .....	4
1.1	VERSION 2.0.....	4
1.2	VERSION 2.1.....	4
2	Game Overview .....	5
2.1	General Information.....	5
2.2	Game Summary .....	5
2.3	Story/Premise and Aesthetics .....	5
2.4	Game Objective .....	5
2.5	Win/Lose Conditions .....	5
3	Mechanics.....	6
3.1	Player.....	6
3.1.1	Human Form.....	6
3.1.2	Werewolf Form.....	6
3.1.3	Health .....	7
3.1.1	Camera Control .....	7
3.1.2	Control Scheme .....	8
3.2	Non-Player Characters.....	8
3.2.1	Villagers .....	8
3.2.2	Guards .....	9
3.2.3	Targets.....	10
3.3	Interactive Objects .....	11
3.3.1	Locked Door.....	11
3.3.2	Moving Cart .....	11
3.3.3	Ladder.....	11
3.3.4	Crate .....	11
3.3.5	Drawbridge.....	11
3.3.6	Water.....	12
3.3.7	Barrel .....	12
3.3.8	Waving banner .....	12
3.3.9	Bell Tower.....	12
3.3.10	Paper Scrap.....	12
3.4	Levels.....	13
3.4.1	Gallows Level .....	13

3.4.2	Market Level .....	13
3.4.3	Festival Level .....	13
3.4.4	Fortress Level.....	13
4	User Interface .....	15
4.1	Heads-Up Display .....	15
4.1.1	Health Bar and Detection Status .....	15
4.1.2	Transform Bar.....	15
4.1.3	Guard Status .....	15
4.1.4	Interaction Indicator.....	15
4.1.5	Key Icon .....	15
4.2	Map.....	15
4.3	Main Menu .....	16
4.4	Pause Menu.....	16
4.5	Level Start Screen .....	16
4.6	Level Complete Screen .....	16
4.7	Level Failed Screen .....	17
4.8	Game Complete Screen.....	17

# 1 Changelist

## 1.1 VERSION 2.0

- Initial version of the revised document
- Added Title Page
- Added [1] Changelist
- Added [2] Game Overview, including subsections [2.1] through [2.5]
- Added [3] Mechanics, including subsections [3.1] through [3.4] and their subsections
- Added [4] User Interface, including subsections [4.1] through [4.7]
  - [4.3] Main Menu and subsequent sections are still empty

## 1.2 VERSION 2.1

- Added [4.8] Game Complete Screen, including basic work in progress content
- Added work in progress content to sections [4.3] through [4.7]

## 1.3 VERSION 3.0

- Design has been updated to focus on one main mechanic per form.
- Changed human and werewolf form text.
- Removed mechanics that were no longer used.
- Highlighted parts that are optional and not high priority with red

## 1.4 Version 3.1

- Changed the name
- Added collapsible roof section
- Revised crate section

## 2 Game Overview

### 2.1 General Information

**Product Title:** Lycan

**Genre:** Puzzle

**Platform:** PC

**Target Audience:** Ages 12+

**Localisation:** English

### 2.2 Game Summary

In Lycan, players play as a mercenary 'suffering' from lycanthropy. When the player steps into the moonlight, and remains there for long enough, he or she will transform into a werewolf. Returning to the shadows will turn the player back to human, after some time. In each level, the player must use a combination of human and werewolf powers to solve puzzles **and eventually find and kill a designated target.**

### 2.3 Story/Premise and Aesthetics

The player character suffers from lycanthropy, and will turn into a werewolf when entering the moonlight. The player has been hired as a mercenary, and sets out to complete a number of contracts at nighttime. The game is set during medieval time.

### 2.4 Game Objective

The objective in Lycan is to complete all contracts (i.e. kill all targets). Every level has a single target to find and kill.

### 2.5 Win/Lose Conditions

The game is won when the player has completed all contracts/levels. The game is lost when the player gets killed, in which case the player has to restart the current level.

## 3 Mechanics

### 3.1 Player

The player will have access to a variety of actions, with several unique actions for human and werewolf modes.

#### 3.1.1 Human Form

In human form, the player can walk or run. The human is very vulnerable compared to the werewolf form, and is mostly unable to engage in combat. However, the human is small and this allows it to move through small alleyways and doors. The human form is generally used for stealth gameplay, but most importantly is capable of pushing and pulling certain objects around the level, shifting the shadows. The player can walk over collapsing roofs -

While walking, the human character moves at the same speed as any other NPC, and alerts the guards at a normal pace. By holding down the R2 button, the player can run at a high speed, but this also speeds up detection by guards.

By pressing the X button, the player can climb up objects. The player can climb on small crates and ladders. The player can also climb onto bigger crates, but only if he does this from the height of a small crate.

Using the Circle button, the player can hold and move certain objects (REF).

Pressing Triangle will make the throw a rock which draws guard attention to the location it was thrown. Rocks are thrown a set distance and are thrown in the direction the player is facing at the time.

Using Square, the player can push certain objects and NPCs in the world (see object description for details).

#### 3.1.2 Werewolf Form

The werewolf mode is strong, being capable of taking out guards. The werewolf is also faster and more agile as the human, being capable of jumping from roof to roof. Fleeing from an overpowering force of guards is also easier as a werewolf. However, the wolf is incapable of moving through certain tight doors and alleyways, and doesn't have enough control over itself to grab and move objects. The wolf will also cause the collapsible roofs to collapse, unless there is a crate under them.

Player movement is above average: walking as a werewolf is slightly faster than walking as a human. By holding down R2, the player can run, increasing speed even further – this is the fastest way to move in the game.

By pressing Square, the player can attack NPCs and certain objects. The player will dash towards the nearest NPC or destructible object, killing the NPC or breaking the object on contact.

By pressing X, the player can jump. If the player jumps while walking or running, the jump distance increases accordingly – the jump height is not variable.

Using the Square button, the player can perform a dash attack, in which the player quickly dashes toward the closest NPC or the closest destructible object and hits it with their claws. By holding down

the Square button, this attack can be chained, killing multiple NPCs or breaking multiple objects in a row. This attack can only be used if there are one or more NPCs or destructible objects within the player's attack range.

### **3.1.3 Health**

The player has multiple health points, represented by a health bar (REF). When the player is hit by a Guard's attack, one or more health points are deducted. When all points are lost, the player dies, and the level must be restarted.

### **3.1.1 Camera Control**

The camera can be controlled in two ways: it can be rotated, and it can be moved around within a set radius from the player.

Using the R1 and L1 buttons, the camera can be rotated clockwise and anti-clockwise respectively. The camera will smoothly start rotating when either of the buttons is being held, and will also smoothly, but quickly, stop rotating when the buttons are released. The last button pressed will dictate in which direction the camera will rotate.

Using the right analog stick, the camera can be moved. The centre of the camera's view must always stay within a set range from the player: the camera movement can be used to see slightly further ahead in one direction while sacrificing sight in another.

### 3.1.2 Control Scheme

An overview of all of the game's controls during gameplay (not including menu interaction):

	Human	Werewolf
	Normal Mode	Normal Mode
Cross	Jump	Jump
Square	Push	Dash Attack (HOLD to chain)
Circle	Interact	Interact (Limited)
Triangle	Throw rock	Roar
Left Stick	Move (Walk)	Move (Walk)
Right Stick	Move Camera	Move Camera
L1	Rotate Camera anti-clockwise	Rotate Camera anti-clockwise
R1	Rotate Camera clockwise	Rotate Camera clockwise
L2	Activate Sneak Mode (HOLD)	
R2	Run	Run
D-Pad Down	Open Map / Close Map	Open Map / Close Map
Options	Pause Menu	Pause Menu

## 3.2 Non-Player Characters

NPCs come in two types, Villager and Guard. A third type, Target, is a special variation on one of the two other types. If an NPC is killed, its body will remain where it was killed.

Every NPC, including villagers, guards and targets, can hold a key (REF), which can be stolen by pushing the NPC, or by killing it.

### 3.2.1 Villagers

Villagers can be found roaming the streets in most levels. They can have one of three behaviour types: wandering, idle or pulling a cart. Wandering villagers will wander about within a set area, stopping every now and then to look around or talk to other NPCs. Idle villagers will stand still in a specified location.

The third behaviour type, pulling a cart, will make the villager pull a cart while patrolling between set waypoints. Per waypoint, a timer can be set which determines how long the villager will remain at that waypoint before continuing. When set to zero, the villager will immediately continue to the next waypoint.

#### 3.2.1.1 Interaction

When a villager spots a dead body, they will walk up to it, and after a few seconds, call the guards. This will attract and alert guards within a set range. If a villager sees the player kill another NPC, they will immediately call the guards. Villagers pulling carts will leave their cart to examine the dead body, after which they return to their cart and continue patrolling.



If a villager spots the player in werewolf form, they will start to panic and run away from the player in fear. When the villager loses line of sight with the player, they will start to calm down. After a few seconds, the villager will return to its original behaviour and location. If the villager spots the player again during this calm down period, the calm down timer is reset, and the villager runs away again. While panicking, **the villager will not react to dead bodies**, but they will call the guards when they see the player kill an NPC. While calling the guards, the villager will temporarily stop running.

**If the player uses the Square button to push a villager, the villager will turn to face the player, after which it falls to the ground and is stunned for a few seconds. After a few seconds, the villager stands up and continues its original behaviour.**

### 3.2.1.2 Death

Villagers can be killed in multiple ways. As a werewolf, the player can perform a dash attack to kill a villager. If the villager is killed by a werewolf's dash attack, 1 health point is recovered. **As a human, the player can interact with certain objects that might kill a villager (environmental kills)**. Villagers have only a single health point – any attack kills them instantly. **If a villager is pushed into the water, the villager drowns – this is the only instance in which the body will disappear.**

## 3.2.2 Guards

Guards are found in all levels, and can have one of three behaviour types: wandering, patrolling and idle. **Wandering guards will wander about within a set area, stopping every now and then to look around or talk to other NPCs.** Patrolling guards will patrol between set waypoints. Per waypoint, a timer can be set which determines how long the guard will remain at that waypoint before continuing. When set to zero, the guard will immediately continue to the next waypoint.

### 3.2.2.1 Interaction

Guards have a 'player detection state', which can be one of three states: not alerted, alerted and detected.

When not alerted, the guard will perform their default behaviour. If the guard sees the player, a detection bar (REF) will slowly rise. When it is full, the guard changes its state to detected. The speed at which this bar rises is determined by the player's actions:

- When walking as a human, the guard will only see the player when within line of sight and within a set range: sneaking behind a guard is possible. The bar will rise at a slow pace.
- When running as a human, the guard will spot the player when within a set, large range: the player makes a lot of noise. The bar will rise at a fast pace.
- As a werewolf, the guard immediately detects the player if within a set range. This range increases if the player is also running.

**If a not alerted guard spots a dead body, they will walk up to it and immediately become alerted when they get close. They will also become alerted when they see a crate fall, are called by a villager or are lured by the player.**

When alerted, the guard will wander about within a set range from where they last spotted the player, **dead body, falling crate or the villager that called them – i.e. they will wander the area around**

**whatever alerted them.** An alerted guard will always remain alerted: they will never return to their original behaviour, allowing the player to lure guards away from their post.

An alerted guard uses the same detection patterns as a not alerted guard.

When a guard has detected the player, they will chase the player. When the guard is close to the player, the guard will stop, pull back their spear, then attack. While preparing their attack, guards will not move or rotate, allowing the player to move out of the attack range, evading the attack. When the guard loses line of sight with the player, they will become alerted, and wander around the spot where they last saw the player.

**When the player uses Square to push a guard, the guard turns to face the player. The guard then falls down to the ground, where they are stunned for a few seconds. This can also be used to interrupt an attack. When the guard gets up, and the player is still within line of sight, they change their state to detected. If the player is out of sight, their state changes to alerted, and they wander around the area where they were pushed.**

### **3.2.2.2 Death**

Guards can be killed in multiple ways. As a werewolf, the player can perform a dash attack to kill a guard. **As a human, the player can interact with certain objects that might kill a guard (environmental kills).** Guards can have multiple health points, potentially requiring multiple attacks to be killed. If a guard is pushed into the water, the guard drowns – this is the only instance in which the body will disappear.

## **3.2.3 Targets**

**Targets are special NPCs, which are variations on one of the two types of NPCs (villager or guard). The goal of each level is to find and kill the target.**

**Targets can have one of three behaviour types: wandering, patrolling or idle, which are detailed in (REF).**

### **3.2.3.1 Villager Type**

**A villager type target functions largely like a normal villager. They will become panicked when they spot the player as a werewolf, call the guards when they see a dead body etc. The only differences in behaviour are the additional behaviour type they can have (patrolling), and targets cannot be interacted with using the Circle button.**

### **3.2.3.2 Guard Type**

**A guard type target will function largely like a normal guard. They have the same detection states and patterns, with one vital difference: a target will change its state back to not alerted after losing line of sight with the player for a set amount of time. After they do this, they will return to their original behaviour. Guard type targets can also have increased health, faster attacks, and stronger attacks.**

### 3.3 Interactive Objects

Interactive or dynamic objects are objects and other elements with which the player can interact in one or more ways.

#### 3.3.1 Locked Door

Locked Doors can be opened using a key (REF), which must be stolen off of an NPC. If the player has one or more keys in their possession, and stands next to a Locked Door, pressing the Circle button will consume one key, and open the door. An interaction icon (REF) will be shown floating above the door when it can be unlocked.

#### 3.3.2 Moving Cart

Moving carts are pulled by villagers, and cast a moving shadow which the player can use to move across large lit areas stealthily. When the villager pulling the cart is scared or attracted by a dead body, they will leave the cart, creating a static shadow until the villager calms down and returns to the cart. If the villager is killed, the cart will remain static for the duration of the level.

#### 3.3.3 Ladder

Ladders provide a way for the player to access the rooftops. When the player is standing next to one, pressing the X button will make the player climb up or down the ladder, depending on whether they were on the ground, or on the rooftops. An interaction icon is shown floating above the ladder when the player gets within a set range. Ladders are always placed inside the shadow to prevent the player from turning into a werewolf while climbing. The ladder can also be grabbed and moved with the Circle button.

The player can be hit by a guard's attack while climbing, but no unique animation is played.

#### 3.3.4 Crate

Crates are placed in set locations throughout the level, and can be pushed around by the player by pressing either the Circle button while standing next to it. When it can be interacted with, an interaction icon is shown floating above it. Crates are used as a movable shadow. For this reason, all crates will be two crates stacked on top of each other in order to create a large enough shadow. A crate can also be placed under a collapsing roof.

#### 3.3.5 Collapsing Roof

Collapsing roofs are used as an area the werewolf can't cross without specific actions being done as a human. If the player walks onto a collapsible roof while he is a werewolf, the roof will collapse and then slowly return to normal afterwards. This will also happen if the player drags a crate onto the roof. Both will fall. If the player walks onto a collapsible roof while he is a human, the roof will remain normal and the player can cross. If a crate is placed under the roof, the roof will no longer collapse when the player crosses as a werewolf.

#### 3.3.6 Drawbridge

Drawbridges create ways to cross the water quickly, and can be used to stop a guard's pursuit by raising the bridge. Drawbridges have a switch – a lever or similar – which can be interacted with by the player. An open bridge can be closed and vice-versa using this switch. The switch can only be activated when the bridge is fully opened or closed, not while it is still animating. An interaction icon will be shown floating above the switch when it can be interacted with.

Any NPCs that are on the bridge when the bridge is raised will slide off.

### **3.3.7 Water**

Water can slow and block the player's progress, but can also be used to their advantage. NPCs that are pushed into the water will drown, and are removed from the game. If the player falls in to the water, they will start swimming, regardless of what mode or form they were in. While swimming, only character and camera movement are possible: no other actions are available. To leave the water, the player must find a slope leading back to higher, dry ground.

Guards will not follow the player into the water. Instead, they will try to find the location on dry ground closest to the player. If the player is swimming along the coast, for example, the guards will follow along. If the player leaves the water, the guards will try to find their way to the player again.

This can be used to lose the guards: if the player, for example, crosses a river, the guards will try to find their way to the other side. They will likely lose the player out of sight, but continue moving to where they last saw the player. This allows the player time to escape the area. Once the guards arrive at the location where they last saw the player, they will start wandering around that location.

### **3.3.8 Barrel**

Barrels can be pushed over to spill a liquid on the ground, which will slow anything that moves through it. When the player is standing behind a barrel, pressing either the Circle or Square button will make the player push the barrel over in the direction the player is facing. A 'liquid' object will be placed in front of the fallen barrel, which slows any characters touching it. The barrel is a single-use item, and the liquid will remain for the duration of the level. When the player is close to the barrel, an interaction icon will be shown floating above it.

### **3.3.9 Waving banner/Flag**

The banner is a long piece of cloth attached to a pole. The banner will move in the wind – a looping animation – casting a dynamic shadow which the player can use.

The flag is similar to this, but the flag is deactivated when placed in the level. This means that it has to be activated by the player before it casts a shadow on a specific area in the map.

### **3.3.10 Bell Tower**

The bell tower is a high tower with a metal bell at the top. A rope at the bottom of the tower allows the player to ring the bell from below. When the player stands next to it, they can interact with it, ringing the bell. All guards within a large radius around the bell tower will be alerted, and will move toward the bell tower. The player can use this to lure guards away from their posts and into the area around the bell tower. An interaction icon will appear above the object when it can be interacted with.

The bell tower can only be used once every few second.

### **3.3.11 Paper Scrap**

Every level will have three Paper Scraps hidden throughout the level. Collecting these scraps will give the player more information on their target. Additional information is drawn onto the map (REF).

The first scrap collected will always reveal the target's name, occupation and portrait. This gives the player some background information, as well as making it easier to identify the target.

The second scrap reveals the exact path the target follows. In case the target is always idle, a single dot will be used to show its location. A wandering target will reveal the exact area in which it wanders.

The third scrap reveals one or several escape routes on the map. These escape routes are relatively easy ways to escape the area after killing the target.

## 3.4 Levels

The game will feature a total of four levels, each with a unique theme and layout.

### 3.4.1 Gallows Level

The first level, which also acts as a tutorial, is built around a central square where the gallows are located. The target, Brom Kebrun, as an executioner, and uses the Guard type. He will patrol the area around the gallows.

The level features a combination of small alleyways and large open spaces. The area is highly populated by villagers who have come to watch the executions, and there is a fair number of guards spread around the level.

### 3.4.2 Market Level

The second level features two main elements: a marketplace, and the docks. The target, Donald Kelvin, is a merchant, and uses the Villager type.

The level features a lot of water and drawbridges, allowing plenty of opportunities to drown guards or cut off their pursuit. The area is more open than most other levels, and is thus better lit – changing into a werewolf is much more common here.

### 3.4.3 Festival Level

The third level is built around a parade that circles around the level. The target, Devin Alwell, is a bishop, and uses the Villager type.

The level is split in two by a central river, and is decorated with festive lights and other props. The area is reasonably populated with villagers who have come to watch the parade. The target is part of the parade, and is thus constantly moving around the level. There will be plenty of unique ways to kill the target.

### 3.4.4 Fortress Level

The fourth level is built around a central fortress. The target, Calvin Bayleigh, is the captain of the guard, and uses the Guard type. He is better armed and trained than other guards, and will attack faster. He also has more health, making it harder to kill him.

The level will be less populated than most other levels, with only few villagers walking around. The number of guards is greatly increased, however, making the level more challenging. The target will be held up somewhere in the fortress, where he is protected by a large group of guards. The player will have to either infiltrate the fortress and seek out the target, or lure him out of the fortress and ambush him.



## 4 User Interface

### 4.1 Heads-Up Display

The HUD will feature a number of elements, as detailed below:

#### 4.1.1 Health Bar and Detection Status

A segmented health bar is displayed in the top left corner of the screen. Every segment of the bar represents a single health point. Lost segments are coloured grey, filled segments are red.

The detection status indicator is displayed just below the health bar, and shows whether or not the guards can see the player. When the player is hidden from view, the indicator is coloured grey, and the eye icon inside is closed. If a guard sees the player, but he or she is not yet detected, the icon is yellow, and the eye half open. When the player is detected, the icon turns red, and the eye is fully opened.

#### 4.1.2 Transform Bar

A transform bar, shaped like a circle with a wolf's head inside, shows how close the player is to transforming into a werewolf. When the player moves into the moonlight, the bar fades in and starts filling. Once it is full, the player transforms into a werewolf and the bar fades away after a few seconds. If the player moves back into the shadows, the bar fades back in and starts to empty. When the bar is fully emptied, the player transforms back into a human.

#### 4.1.3 Guard Status

A guard status icon is displayed floating above the heads of guards when they have spotted the player (see (REF) for conditions).

When the player has been spotted, the icon will look like a yellow circle with a question mark inside. The circle will fill up like with a red colour as long as the guard can see or hear the player. If the bar is full, the player becomes detected, and the icon changes to a red triangle encompassing an exclamation mark.

If the guard is alerted, but does not hear or see the player, the yellow question mark icon is shown.

#### 4.1.4 Interaction Indicator

An interaction indicator is shown floating above interactive objects when the player is within range of the object, and can interact with it. The icon looks like a Circle button.

#### 4.1.5 Key Icon

An icon of a key is shown above the heads of NPCs carrying a key. If the key is an alerted guard, the icon is shown to the right of the guard status indicator.

### 4.2 Map

By pressing the down button on the D-pad, the map can be opened. The map will show an overview of the current level. When opened, the map will cover part of the screen, but still allows the player to see some of their surroundings: the game does not pause when viewing the map, and the player can still be spotted and attacked by guards. Therefore, it is best to find a safe spot before opening the map. Pressing the down button on the D-pad again will close the map.

The map shows an overview of the current level, showing where buildings are located, where water is etc, and also shows the player's current location and rotation using a green arrow. The general area in which the target can be found is marked on the map using a red outline.

By collecting Paper Scraps, the player can gather additional information on the target (see (REF) for details), which will be added to the map.

### **4.3 Main Menu**

The Main Menu offers the player three options: Play, Options and Extras.

Choosing Play will allow the player to either start a new game, continue a saved game or select a level and play it directly. Continuing a saved game will load the last level reached when the game was last saved.

Options will allow the player to view and change the control layout, turn subtitles on and off or display a 'how to play' screen, which details the basic interactions with the game.

Extras allows the player to view the Credits.

### **4.4 Pause Menu**

The Pause Menu is activated by pressing the Options button. The game is paused, and the player is offered three options: Resume, Options and Exit.

Choosing Resume will resume the game from the point where it was paused.

Options will allow the player to view and change the control layout, turn subtitles on and off or display a 'how to play' screen, which details the basic interactions with the game.

Exit will show the player a confirmation screen. Choosing 'No' will return the player to the Pause Menu. Choosing 'Yes' will return the player to the Main Menu, without saving the game.

### **4.5 Level Start Screen**

The Level Start Screen will show the map of the level, with the general area in which the Target can be found marked on this map. The game is paused while this screen is active. By pressing the Cross button, the player can close the screen and start playing the level.

### **4.6 Level Complete Screen**

The Level Complete Screen will be shown when the player successfully completes a level (i.e. kills the Target and escapes the level through an Exit Gate). It will show the player basic information on how well they performed within the level. The game is paused while this screen is active. Pressing the Cross button will close the screen, after which the next level is loaded. If the current level is the last level, the Game Complete Screen will be shown.



Once this screen is activated, the game will automatically save the game.

#### **4.7 Level Failed Screen**

The Level Failed Screen will be shown if the player is killed. The game is paused while this screen is active. Pressing Cross will reload the current level, while pressing Circle will return the player to the Main Menu. If the Circle Button is pressed, a confirmation screen is displayed. Choosing 'Yes' will return the player to the Main Menu, while choosing 'No' will return the player to the Level Failed Screen.

#### **4.8 Game Complete Screen**

The Game Complete Screen will be shown after the Level Complete Screen is closed on the last level. The screen will display basic information on the performance of the player throughout the game. Pressing the Cross button will return the player to the Main Menu.