

# **Game Design Document**

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## **Preface**

The aim of this document is to give an overview of the game that our team has been working on for several months now. As the project's producer and game designer, I am responsible for most of the contents of this document. However, some parts of it, such as lore and character descriptions, as well as concept art, have been made either in joint effort or personally by other team members and will be marked correspondingly.

Since we use a flexible wiki-approach to documentation and do not have a single solid game design document, this paper does not provide an extensive description of the game and each of its elements. Instead, it focuses on key points, most necessary for the understanding of the game system and of the product in general. Some of the game features are still being discussed and developed.

This document was compiled and translated to English particularly for the purposes of portfolio showcasing. Enjoy!

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# 1. Game Concept

#### 1.1 Game genre

RPG, city-builder, narrative game

#### 1.2 Platform

PC (Windows, MacOS, Linux)

### 1.3 Game setting

Colonial settlement, mystic realism, horror

### 1.4 Game engine

Unity

## 1.5 Brief description

"The Port of Alexandria" is a game about managing a construction site in a small colonial port town, that combines RPG and narrative mechanics with the elements of city-building and economic simulator. The main feature of the game is the interplay between narrative and economics: the player's economic decisions always lead to a change in relationships with other characters and groups, and vice versa.

## 1.6 Story synopsis

The game protagonist, Maurice, is a foreman whose aim is to build a colonial town in accordance with the construction plan. He has a team of workers under his leadership, and he has to report the progress regularly to his supervisor, the architect. Soon after the beginning of construction, bone-chilling incidents start happening: things go missing, workers have disturbing visions and odd things like ripped out bird tongues appear in the site out of nowhere. An investigation of these events leads to a discovery: the land, where the town is constructed, is inhabited by an ancient coven of witches. The witches, yet, have little understanding of the reasons for the mysterious occasions and are disturbed by them as much as the settlers. Maurice keeps looking into these events, now teamed up with one of the witches, Arezsalda, while still trying to keep on with the town's construction and prevent total mayhem, caused by endless conflicts between the architect, the workers and the witches.

#### 1.7 Core mechanics

Walking (side-scroller), interacting with items / characters, choosing dialogue options. Resource and building management are realized through dialogue.

### 1.8 Gameplay references

Reference	Similarities	Differences
Life and Suffering of Sir Brante	The key role of dialogue and in-game texts; branching narrative	Game mechanics are not reduced to in-text interactions, choice options unlimited
Reigns	Each decision impacts relationships; game events are randomly generated	Random events are accompanied by main story, unified for all players
Yes, Your Grace	The combination of economic and narrative mechanics	Economics influences narrative instantly (not only the ending), clearer decision consequences
<u>Frostpunk</u>	Resource management influences relationships	Relationship system is more complicated than 'hope' and 'discontent' scales

## 1.9 Art style

The game features low-poly 3D graphics, imitating origami and paper dioramas or shadow boxes. The key art references are <u>Kentucky: Route Zero</u> and <u>Oxenfree</u>.

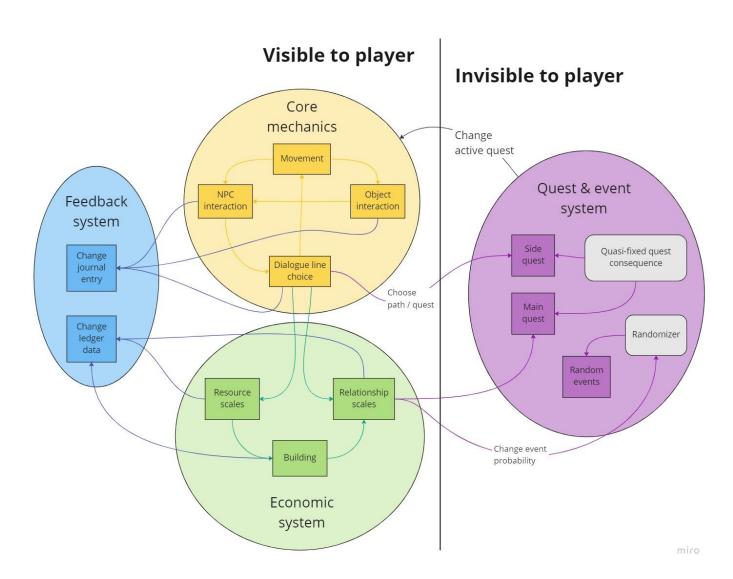
## 1.10 Unique selling points

- A unique combination of narrative and economics, game narrative depends greatly on resources and economic decisions;
- Branching narrative and space for emergent storytelling provided by randomly generated events.
- Origami-inspired art style and the atmosphere of paper puppet theater
- Colonial setting, narrative exposing problems of colonialism

# 2. Game system description

The game builds on a series of quests, like a classic adventure game. Some of the quests are mandatory for completion, as they are included in the main storyline. Other quests are optional, as they belong to either side-quest storylines, or random events and accidents that the player can choose to attend to. Economic mechanics, such as constructing buildings and managing resources, are embodied in quest interactions. The player's freedom of choice regarding economic decisions is therefore limited by particular circumstances of a given quest.

Globally, the game system can be divided into four subsystems. Those are (1) core mechanics, (2) economic, (3) quest and (4) feedback systems. The interaction of these systems is demonstrated in the graph below.



## 2.1 Core-loop and game progression

### 2.1.1 Core-loop

The game's core-loop equals the completion of a single quest within a given time slot. Following the logic of RPGs, a quest usually consists of a series of actions:

- Choosing a quest to complete (when applicable)
- Starting a quest (receiving an assignment / problem report)
- Performing a series of actions (talking to NPCs, inspecting objects)
- Making a decision (solving the initial problem)

The decision is a key mechanic here; decisions can concern a number of issues, such as managing the amount of resources, constructing buildings, changing relationships and building states. Taking a decision always leads to a change in the game's time slot and the transition to a different quest or quest choice.

## 2.1.2 Quest example

Name: The Sawmill

Logline: Maurice needs to order the sawmill be built to supply the

construction site with wood

Quest line: Main quest

Time slot: day 3, morning

Quest giver: Herbert Rockwell

Quest stages

- 1. Talk to architect Rockwell about the sawmill
- 2. Inspect location A in the woods (near the spring)
- 3. Inspect location B in the woods (near the large stone)
- 4. Talk to the workers
- 5. Report to architect Rockwell
- 6. Talk to William to start the construction
- 7. Make a decision
  - a. Construct the sawmill near the spring
  - b. Construct the sawmill near the large stone

#### Outcomes:

- a. Sawmill construction starts in location A near the spring. Resource expense: 10 wood, 5 stone. 3 workers are busy for 2 time slots. Relationship change: +15 workers.
- b. Sawmill construction starts in location B near the stone. Resource expense: 10 wood, 5 stone. 3 workers are busy for 3 time slots. Relationship change: +15 architect, -5 witches.

The outcomes of this quest illustrate the main idea of the game and its key feature. The simple economic decision of where to build the sawmill influences not only the resource expense (wood, stone and workers), but the relationships with various people & factions, i.e. the architect, the workers and the witches.

This example implies that the decision to build a sawmill in location B satisfies the architect, as it complies with his initial plan, but dissatisfies the witches, because the stone in location B is their ritual stone. As for location A, workers like it because the location has already been cleared of trees and they will have to work less. All of this information is available to the player through quest dialogues preceding the construction decision.

## 2.1.3 Game progression

Through the game, the player completes a series of quests that allow them to (1) progress through the story and (2) complete economic objectives, i.e. build a city. Upon completion, the player reaches one of multiple (about six) endings - the ending depends both on the narrative and economic choices.

The game can end before the main storyline does, if the player fails to maintain good relationships with the fractions. If so, the protagonist may be:

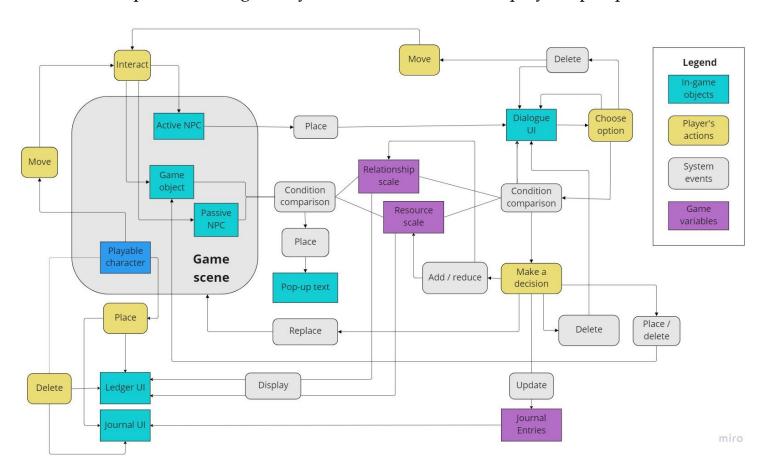
- fired and sent home by the architect,
- killed by a mob of angry workers,
- deadly cursed / sacrificed by the witches.

# 2.2 Core mechanics and game objects

#### 2.2.1 Core mechanics

The mechanic	The input
Moving left and right (side scroller)	A, D / ←, →
Interacting with objects	E / Space
Scrolling dialogues	Mouse wheel
Switching between dialogue options	Mouse / ↑,↓
Choosing dialogue option	Left mouse button / Enter
Activating the journal	J
Activating the ledger	L

The graph below illustrates how the game mechanics are integrated in the core-loop & how the game system functions from the player's perspective.



### 2.2.2 Game objects

Throughout the game, the player can interact with multiple game objects, resulting in different outcomes.

- Environment objects. These are usually quest-bound interactions. The player can inspect some objects / building sites, resulting in small animations being played or playable character's or NPC's comments being displayed in a small pop-up window.
- Passive NPCs. These interactions are often not bound to a particular quest and result in playable character's or NPC's comments being displayed in a pop-up window.
- Active NPCs. These interactions result in displaying dialogue UI, where the player can choose dialogue options and make decisions.
- Signposts. These objects serve the purpose of transition between various in-game locations, i.e. the town, the woods, the caves and the harbor.

#### 2.2.3 Game scene & camera

The player's activities and interactions take place within the game scene. In accordance with the game's overall art style, the game scene is an elongated space, limited by walls from both sides to create the feeling of looking inside the box. Each 'box' is a separate location, transition between the locations if possible via the interaction with the signposts.

The camera is linked to a playable character and follows them automatically, with a little delay. The playable character's position is tilted from the center of the screen to either side, depending on the movement direction. The ratio is by default 2 : 3 (axis X). The camera field of view is limited by the walls on both sides.

# 2.3 Quest system

## 2.3.1 General description

Progressing through the game, the player completes a series of quests. Each of them belongs to a time slot in the game's timeline matrix. Generally the game can be divided into 3 chapters, each chapter contains 7-10 days, and each day consists of 4 time slots, i.e. morning, afternoon, evening and night. Each of the slots is filled with a single quest that a player has to complete, or with a pair of quests to choose between.

### 2.3.2 Quest types

Quests can be divided into two large categories: fixed and random. The position of the fixed quests in the time matrix is determined manually, whilst random quests are assigned to a time slot in a random or a quasi-random way.

The fixed quests are: the main quest line (MQl), side quest lines (SQl) and single side quests (SSQ). The quests belonging to a quest line, i.e. MQl and SQl, are always single - the player has to complete them in order to proceed. These quests are usually, but not necessary, narrative-oriented and serve the purpose of unfolding the story. Yet they may contain management-oriented elements and decision options. Each of the quests in MQl or SQl has many outcomes, allowing the player to progress even if their resources are scarce and their faction relationships leave much to be desired.

Random quests, or random occasions (RO) are the small quests that can occur anytime within a chapter or the whole game (depending on each quest's specification). They allow for the creation of emergent storytelling, as well as serve as a buffer for the game's economic system, adding elements of randomness and chaos to each walkthrough. Random occasions are sometimes quasi-random. Their probability can depend on the player's resources and faction relationships. For example, workers are more likely to sabotage their work on the sawmill if they are dissatisfied.

#### 2.3.3 Time matrix

This is an example of the time matrix showing how the quests distribute in the time slots within a single chapter. The layout demonstrates the main quest line (MQl) marked red, single side quests (SSQ) marked blue, random occasions (RO) marked yellow and side quest lines (SQl1 & SQl2) marked green and pink.

Day	Morning	Afternoon	Evening	Night	
1	MQI	MQI	SSQ SSQ	Sleep	RO
2	RO	MQI	RO	Sleep	RO
3	SQI1 SQI2	SQI1	MQI	SSQ Sleep	RO
4	MQI	RO <sub>SQI2</sub>	SQI1 RO	Sleep	RO
5	SSQ RO	RO	RO sql2	MQI	RO
6	SQI1 RO	MQI	RO	Sleep	RO
7	RO <sub>SQI2</sub>	RO	MQI	Sleep	miro

As it is shown, the MQs are always single within a slot as they are obligatory for completion. The SSQs can either neighbor other SSQs or be accompanied by ROs. Some of the ROs are excluded from the matrix, as they were not assigned to the slot during the quest generation for this particular playthrough. They are potentially available and can be assigned to open slots during a different playthrough, even if the player restarts a single day.

The "night" slot serves as a buffer for the player and usually contains a typical quest of checking the ledger and going to sleep ('Sleep', marked purple), though it may contain some other unexpected events.

The matrix also demonstrates the choice between two side quest lines. This particular layout implies that the player chose to complete SQl1 (marked green). In this logic, all the slots potentially reserved for SQl2 (pink) were automatically filled with ROs.

### 2.3.4 End of the day

The classic night quest that encourages the player to check their ledger, after the protagonist goes to sleep and the day ends. Upon completion of the quest, the special 'end of the day screen' is being displayed.

This screen contains information on the player's quest progress during the day, i.e. what kind of quests they have completed and what choices did they make during the day. Totally, 4 to 6 entries are displayed, depending on the quests that were available.

End of the day entries are presented from the perspective of the narrator, giving a brief overview of the protagonist's actions, such as "The morning of that day, Maurice went to Herbert Rockwell to discuss the mysterious occasions. Herbert assumed that workers were behind all that, so Maurice agreed to conduct an investigation. I believe that this was not the best Decision, but little did Maurice know about what was to come".

In this manner, the day's end screen, firstly, reminds the player of the current progress. Secondly, it enhances the game's general atmosphere. Thirdly, it provides feedback on the player's actions, though the feedback is not always reliable, just like the narrator.

# 2.4 Economic system

## **2.4.1 Resources** | by D. Kovalenko & A. Emelyanov

Resources are the key entities to the game economic system. They may vary on their source and usage, as well as recovery time. Below is the list of in-game resources available for management, their source and usage indicated.

Resource name Source (supply type)		Usage (consumption type)	
Workers	Fixed worker amount, backup available (one-time)	Building (temporary)	
Wood Sawmill (regular), mainland shipment (one-time)		Building (one-time)	
Stone	Stone Stone mine (regular)		
Food	Hunter's hut (regular), fisher's hut (regular), kitchen (regular), mainland shipment (one-time)	Daily dinner (regular)	
Water	Well (regular), aqueduct (regular)	Daily dinner (regular), building (one-time)	
Iron mine (regular) mainland shipment (one-time)		Building (one-time)	
Glass	Mainland shipment (one-time)	Building (one-time)	
Alcohol	Mainland shipment (one-time)	Daily dinner (regular)	

Most of the resources are used for building, so that they are consumed one-time, when the construction starts. Food, water and alcohol, if available, are consumed regularly. The resources are renewed by special utilities (sawmill for wood, etc) and by mainland (or other) shipments.

The only special resource is the workers. The pool of workers available for assignment is limited, and workers are used only for the time of construction, becoming available again after it ends. The pool of available workers can be expanded several times during the game through quest interactions.

## 2.4.2 Faction relationships

The faction relationships are the second component of the in-game economic system. They indicate the sympathy of the three (four) factions towards the protagonist. From a narrative standpoint, each of the groups has their own interests, likes and dislikes.

Faction	Representatives	Likes	Dislikes
The supervisors	Herbert Rockwell, mainland supervisors	Building according to the plan, preserving the resources	Violating the plan, unnecessary expenses
The workers	William Wellington, the workers	Having a day-off, good food and alcohol	Overworking
The witches	Areszalda, Mankhekka, others	Building worship places, sharing resources	Blocking access to resources, desecrating ritual sites
The ancient evil	Patgun Nun-Gatgantakk	[Spoiler deleted]	[Spoiler deleted]

Satisfying these likes leads to an increase in relationships, and the opposite happens when the player takes disliked decisions. Faction relationships influence narrative: the main quest path, the endings and the availability of side quest lines depends on the relationship indicators.

The economic influence of faction relationships is realized through increasing or decreasing the random occasions (RO) probabilities or changing the utilities' characteristics.

Faction Boons (good relationships)		Penalties (bad relationships)	
The supervisors	Shipping additional resources or backup from the mainland	Firing workers (constantly decreases the available number)	
The workers	Utilities upgrades available	Utility breakage or sabotage	
The witches	Providing rare resources (or workers from their numbers)	Stealing resources, breaking utilities, killing workers	

The faction relationship scale indicator varies between 1 and 100. The values on a scale are divided into tiers.

- 1. **85 to 100.** Perfect relationships, high boon likelihood, no penalties
- 2. **70 to 85.** Good relationships, increased boon likelihood, no penalties
- 3. **55 to 70.** Normal relationship, standard boon likelihood / penalty risk
- 4. **25 to 40.** Tense relationship, medium penalty risk, no boons
- 5. 10 to 25. Bad relationships, high penalty risk, no boons
- 6. 1 to 10. Pure hatred, the protagonist gets killed / fired / cursed

*Note:* The exact tier rates are being negotiated, as well as the possibility of changing tier rates to regulate game difficulty

The information about the current tier can be accessed through the ledger in the form of protagonist's notes, or via passive NPC interaction, as their comments on the protagonist differ depending on the tier.

This fraction relationship system also changes as the narrative unfolds. In chapters I and II, the system works as described above, with an exception that in chapter I the protagonist does not know about the witches, so their attitude is masked by a note about 'a feeling of foreboding'. In chapter III, the player aligns with one of the fractions, thereby securing their good attitude. Yet, they have to prevent the ancient evil from breaking out, and another scale adds up to the list with a slightly different tier system.

# **2.4.3 Buildings and utilities** | by D. Kovalenko & A. Emelyanov

Buildings (B) and utilities (U) are two types of in-game objects that the player can order to construct during the game. The difference between these is functional: buildings are the entities related to the narrative, the player has to build them to progress with the town's construction; utilities are the entities that produce resources. Due to this distinction, buildings and utilities have functional differences, though sharing common mechanics.

Below is the list of variables describing buildings & utilities. Variable relevance for each type of structure is marked with a check.

В	U	Variable	Description	
<b>✓</b>	>	Construction cost	The amount of resources of each type spent to begin the construction	
<b>✓</b>	>	Construction time	Time (in active slots) to build the structure	
•	>	State (status)	<ul> <li>In construction. The structure is inactive and being constructed</li> <li>Active. The structure produces resources and gives its boons</li> <li>Broken. The structure is inactive until it gets repaired</li> <li>Each status has its model and animation</li> </ul>	
<b>✓</b>		Relationship boon	A permanent bonus to relationship scales that the structure gives while it's active	
	>	Active time	Basic schedule of an active utility (e.g. 'active: morning, afternoon; inactive: evening, night')	
	>	Basic productivity	Basic amount of resources produced by a utility per time slot; increases with the level	
	<b>/</b>	Level	Level of utility's productivity; increased manually through quests	
	~	Upgrade cost / time	The amount of resources of each type / time (in slots) spent to upgrade the construction	

Both buildings and utilities appear on the game scene after the respective orders have been given by the player through quest dialogues, during the next time slot. The initial status of any structure is 'in construction'. After the construction time ends, it becomes active and remains active until a random occasion changes its status to broken. Broken structures, as well as the ones being repaired, cannot be broken again before they become active.

There are some differences between how the 'active' status works for buildings and utilities. Buildings are considered active, in terms that they work and give their boons, all the time after their construction ends. On the contrary, utilities' active status implies that they work according to their schedules, i.e. produce resources during active hours.

Unlike buildings, utilities can be upgraded several times during the game. Utility level-ups are random occasions that occur at a certain rate, the rate increases if the relationships with the workers faction are good (because satisfied workers want to work more productively).

The complete list of buildings and utilities, as well as their characteristics, will be designed during later production phases, as many of the constructions are quest-bound and require an approved storyline. The draft version is presented in the table below. All units in Chapter III can be considered optional due to the story features.

Chapter I	Chapter II	Chapter III
<ul> <li>Camping (B)</li> <li>Hunter's hut (U)</li> <li>Well (U)</li> <li>Sawmill (U)</li> <li>Docks (B)</li> <li>Stockades (B)</li> <li>Fisher's hut (U, optional)</li> <li>Barracks (B, optional)</li> </ul>	<ul> <li>Stone mine (U)</li> <li>Houses for settlers (B)</li> <li>Dock warehouses (B)</li> <li>Lighthouse (B)</li> <li>Chapel (B)</li> <li>Town square (B)</li> <li>Kitchen (U, optional)</li> <li>Tavern (B, optional)</li> </ul>	<ul> <li>Iron mine (U)</li> <li>Villa (B)</li> <li>Town hall (B)</li> <li>Sanctuary (B)</li> <li>Aqueducts (U)</li> <li>Phalanstery (B)</li> </ul>

# 2.4.4 Breakage and repair

Breakage is a type of negative random occasion that changes the status of a building or utility from active to broken (or downgrades utilities if their level is higher than 1 - *negotiated*). Breakage events can occur under two conditions:

- 1. if the current time slot is available for random occasions
- 2. if the next time slot is also available for random occasions (prevents the player from being unable to fix the construction)

Each of the breakage events is also a repair quest. Each of these quests specifies the reason for the breakage, the cost and the time for repair. Repairing costs are usually 30-50% from the initial construction cost and are comparable with level-up costs.

## 2.5 Meta-game system

#### 2.5.1 Journal

Journal is a game UI window that contains information about available quests (if any), passed quest stages & current quest stage. The journal updates with the completion of every quest stage. When the quest is completed and the time slot changes, journal entries display information about the new quest, therefore containing information only about one active quest at a time. Journal entries are written from the perspective of the narrator commenting on the protagonist's actions, like the day's end screen.

### 2.5.2 Ledger

Ledger is an in-game UI window that contains information about:

- in-game date and time slot
- available resources, by type, and their maximum capacity
- list of structures available for construction within current chapter
- constructed buildings and utilities list, indicating their states
- notes on relationship scales, by tier / faction

Ledger entries are updated every time slot. Unlike the journal, ledger entries contain information from the perspective of the protagonist. For example, a note on the architect relationship scale (tier 4, tense relationships) might sound like "I feel that Mr. Rockwell isn't exactly satisfied with my work".

## 2.5.3 Main menu & settings

Apart from the in-game screens and core loop, the game contains several meta-elements, like the game menu. Game menu is the first screen that the player sees upon starting the game. It contains the following options: (1) start a new game; (2) continue, i.e. load the last save; (3) load custom save; (4) settings; (5) exit game. The exact contents of the settings screen is being developed and will depend on the game's technical realization.

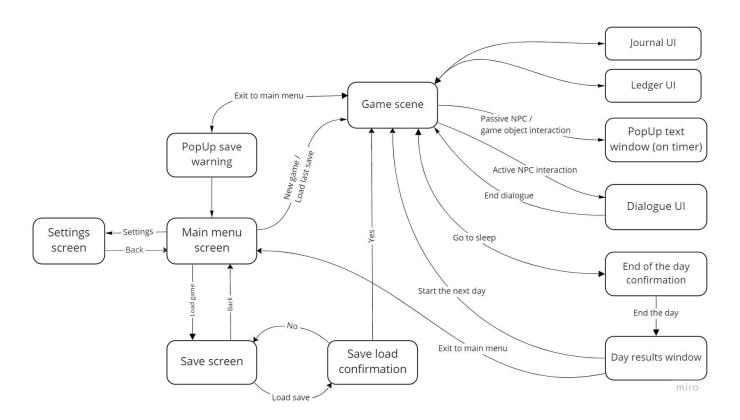
#### 2.5.4 Save system

The game saves automatically after the end of each day (every 4 time slots). The saved data contains quest progress, game scene, available resources and relationship scales. The saves can be accessed through the main menu, and the player can restart the game from the morning of each day, creating a separate playthrough branch, thus imitating the save system of 'Papers, Please'.

Each of the displayed saves on a save screen is also expected to contain information on the quest progress in the form of 'end of the day' narrator's comments. It is still discussed whether the saves should display information about the available resources.

The game is expected to contain no more than 30 in-game days (more realistically, 24-25), so the saves are not expected to be a burden. Also, the random occasions mechanic is expected to prevent save system abuse.

### 2.5.5 Game interface map



## 3. Game lore & narrative

## 3.1 Lore and story background

### 3.1.1 Historical setting

The story happens in an undefined location in the New World, i.e. America, in 1790-1800s. Though Great Britain of that time is used as a main cultural reference, we refrain from stating that the game characters came exactly from Britain, assuming instead that they are from an imaginary colonial Empire. By the time the game's events take place, the American Revolutionary War has already ended, and similar wars in South America are yet to come. The Empire still proceeds with its expansion, establishing the new colonies with the help of the United Trade Company (an analogue of East India Company).

# **3.1.2 Story background** | by D. Kovalenko & X. Sorokina

Herbert Rockwell, who has no brothers, but happens to be an owner of Rockwell & Brothers architectural bureau, hears multiple success stories of United Trade Company shareholders and becomes one of them. Shortly after, he decides to engage more with the Trade Company's activities, and use his remaining resources and rich architectural expertise to build a trade port on a very prospective route, to increase his fortune. With the help of the Company and his employees he finds a perfect place - a small isolated harbor, securely protected from storms and hurricanes.

Ignoring the ominous rumors about the place, Mr. Rockwell uses the existing maps and works hard to design the town plan. When he is ready to set sail, he hires the construction team. He invites workers from Penkarni building company, but they are unable to provide a foreman, since the previous one died in an accident. For this reason, Mr. Rockwell contacts Maurice, his longtime acquaintance, and Maurice agrees to this venture. Together, they sail to the harbor to found a new colonial port, not knowing yet that the land is populated by an ancient witch coven.

### **3.1.3 The legend of Dinezgriin** | by X. Sorokina

Dinezgriin, the city of golden beads and bird bones, is a long-lost ancient city, believed to once be a prosperous center of culture and commerce. Little is known about this place, except for the fact that it mysteriously vanished at some moment, and never appeared on the maps again. Legends of Dinezgriin are tightly linked to the myths about Patgun Nun-Gatgantakk, a god of prosperity.

Legends of Patgun Nun-Gatgantakk say that his name was Ganakk, and he was one of the ten children of Magun-Khanum, the Curative Precursor. He lived in Phinkhanen, the home of all gods, with his brothers and sisters. Once Ganakk was seduced by Sanka-Gyn, a bird deity. For this misconduct, Sanka-Gyn was sent to Banakott, the flaming abyss, where he is doomed to spend eternity. To keep Sanka-Gyn trapped, Magun-Khanum created Tadang, the veil between Phinkhanen and Banakott, inhabiting it with humans - mighty warriors who were supposed to protect the veil.

After his lover was banished, Ganakk was desperate. He could not live on with his perpetrators anymore, so he decided to leave Phinkhanen and go to Tadang. However, Magun-Khanum did not want to let his son go, as Ganakk was so loquacious that he could spill the secrets of Phinkhanen to humans. Thus, he ripped Ganakk's tongue out and stitched his mouth up. After that Ganakk was named Patgun Nun-Gatgantakk, 'the son with no tongue'.

In Tadang, Patgun Nun-Gatgantakk became a friend to birds, as they reminded him of his lost lover. He decided to cut his ties with Phinkhanen and soon found a new place to live, where he created new humans that were braver, smarter and more just than the others in Tadang. To praise their god, they built a marvelous city, Dinezgriin.

Alas, Patgun Nun-Gatgantakk could not answer the prayers of his worshipers, for he had no tongue, and they could not see him, for they were too blind. Unable to listen to their creator and misled by delusions, people of Dinezgriin invoked the wrath of Patgun, and were obliterated together with the city.

Iz antar girmo pergunani-na titahani,
Iz antar kuno cinhoni-na bayangi,
Iz antar pango luti-na ganuri,
Iz antar lago passeri-na angini,
Patgun maraeg.
Hanum-na Patgun,
Tiu-na maguni-na Hanum,
Magun-na Patgun,
Finhanen-na Patgun,
Patgun nun-novexo,
Patgun nun-perkatak,
Patgun Nun-Gatgantakk.

Amidst the mighty mountain slopes, Amidst the shadows of ancient oaks, Amidst the waves of somber seas, Amidst the winds of distant deserts,

The son wanders,
The son of the Creator,
The creator of our fathers,
The son of the Precursor,
The son of Phinkhanen,
The forgotten son,
The numb son,
The son with no tongue.

An ancient chant dedicated to Patgun Nun-Gatgantakk. Original chants are written in the Ganak language, made up specifically for the game.

## **3.1.4 The Urfion coven** | by X. Sorokina & D. Kovalenko

The Urfion coven (cufinna wrfiwn, 'the divine sisterhood') is a coven of witches that populates the harbor. Their population is primarily female, since all of the witches suffer from an ancient curse. Each woman of the coven, when giving birth, has a chance of delivering a bird-like monstrosity, 'pagal', that will tear its mother apart. Sometimes the children are born normal, but they turn into monstrosities several years after. Males, notably, have a much higher chance of becoming pagali. All of the monstrosities are thrown down in the ancient well that, according to the belief, leads directly to Banakott, so that they never come back. Also, the curse mentions 'the deadly light', and the witches are afraid of the sun, never leaving the deep mountain caves where they dwell, though no one knows for sure whether sunlight is truly deadly or not.

Due to the affliction, the coven's life is hierarchical and strictly regulated. The coven is ruled by Mankhekka and her three counselors: 'mulwt, telinga y ganŋa', the mouth, the ear and the eye. All other witches are assigned to their professions, 'irnagi', at birth, and they never change their occupation. The most prestigious irnagi are fishers, bird breeders and priestesses, the least

prestigious ones are miners and chroniclers. Men are practically excluded from the social life, being used only for reproduction and raising children.

The coven worships Patgun Nun-Gatgantakk, performing various rituals that usually involve living organs of humans, animals and birds. For example, when Mankhekka dies, the new one, chosen among her counselors, consumes the ceremonial stew made of her predecessor's brain and tongue. An important symbolic value is assigned to birds, different birds have separate ritual or ornamental functions.

All the coven witches aim to achieve Matlamakk-Gin, 'the great purpose'. The witches believe in the legend of Dinezgriin and consider themselves the descendants of that ancient civilization. They aim to find Patgun Nun-Gatgantakk to beg for his forgiveness, no matter what caused his wrath, so that he leads them to prosperity and opens them the path to Phinkhanen. The witches have little understanding of where and how to search for Patgun and Dinezgriin, so they perform rituals to summon the deity. To date, none of them succeeded.

## **3.2 Character descriptions** | by D. Kovalenko & X. Sorokina

This is a description of four main characters, crucial for the narrative.

#### 3.2.1 Maurice Drok

**Age:** 40-45 years

**Height:** 170-175 cm

Hair color: black

**Occupation:** *foreman* 

**Unique marks:** 

thick black eyebrows & bushy mustache

**Alignment:** 

depends on the player

## **Description:**

The game's protagonist, Maurice is a foreman in the town construction site. Little is known about his previous life, as Maurice is not much of a talker. He has vast work experience, which makes him a good professional. He is not married and has no children. He is quiet, tepid and a bit unsociable. His face is exceptionally inexpressive. Maurice likes to play whist and to look at the starry sky, and dislikes fried fish. In fact, Maurice is a cipher character and his biography is mostly free for players to make up.

#### 3.2.2 Herbert Rockwell

**Age:** 55-60 years

**Description:** 

Height: 175-180 cm

**Hair color:** *grey* 

**Occupation:** *architect* 

**Unique marks:** 

a golden monocle, bushy mustache and ducktail beard

Alignment:

lawful good

Mr. Rockwell comes from an aristocratic family. He inherited his architectural bureau from his father and worked hard to make it prosper. Yet, his business did not excel the expectations, so he decided to invest in the United Trade Company and

build a colony.

Herbert is lofty and aristocratic, little prone to melancholy. He loves his work and is really excited about it. As an aristocrat, he values dignity and honesty. He always keeps to his word and expects the same from others. Some may say that he is meticulous is a more precise grouchy, but description. Mr. Rockwell is strict, but benevolent.

### 3.2.2 William Hamish Wellington

**Age:** 24-26 years

Height: 165-170 cm

Hair color: ginger

Occupation:

company clerk

**Unique marks:** 

glasses, messy hair, whiskers and freckles

**Alignment:** 

chaotic neutral / neutral evil

**Description:** 

William Wellington works as a clerk for the Penkarni building office. He is a college graduate, who dreams of starting his own business, or at least he says so. Though he has never done any physical work, he seems to feel extreme affection toward the working class, and acts as an informal leader of the workers' team, following them in their expedition.

appears to be self-confident, if not William narcissistic. He hides his anxiety behind mannerism and assertiveness. In truth, he is rather secluded. Prone to dreaming, he believes in his own exceptionality and unique mission in life. He is pragmatic, prudent and shrewd. William believes in God, but his relation to them is a wild mixture of fraternizing and piousness.

#### 3.2.3 Areszalda

**Age:** young, precise

age is unknown

Height: 170-175 cm

**Hair color:** black

Irnag:

coven's chronicler

**Unique marks:** *shaved temples,* 

tattooed arms, hair plugged with feathers

**Alignment:** 

true neutral

**Description:** 

Areszalda is a witch, who can speak the Imperial language as 'the bird has brought it to her on a tail'. Though she likes to dwell on the past, which is her work, she thinks that the future is more important

for the coven. She disagrees with Mankhekka on a

number of issues, never admitting it.

Though she has a good memory, she remembers very little about her childhood. She is appalled by childbirth and believes that she hatched out of the

egg, 'as she is'.

Areszalda is a loner, though she misses company.

She seems dreamy and awkward to other witches, as she always has her own way of doing things. She is thoughtful, sentimental and modest, yet highly

pragmatic.

**3.3 Game plot** | by D. Kovalenko, X. Sorokina & K. Kuzmin

This is the game plot synopsis that outlines the events of the main story line. The described events will be later transformed in a series of quests, generally mandatory for completion.

3.3.1 Chapter I, "The Arrival"

After a long and tiring journey, the group of colonizers led by Herbert Rockwell arrives at the harbor. When approaching the place, they get caught up in a terrible storm, losing a big part of the construction materials and food supplies that they transported from the mainland. They are exhausted but happy to finally set foot on solid ground.

The team establishes on the new land. They set a campsite in the grove, and Mr. Rockwell once again instructs Maurice on his brilliant construction plan.

The morning of the next day, the work begins. They dig a well to have a fresh water supply, build huts to store fresh meat from hunted animals or caught fish. They explore the territory, advancing to the forest, and build a primitive sawmill to ensure the wood supply. Upon exploration, Mr. Rockwell discovers that his plans are not as accurate as he expected them to be, so he insists that Maurice consult him every time before ordering any construction.

As the construction proceeds, they build the docks, but strange events start to happen. Hunters and fishers report that the fauna of the place is weird: fish flies above water surface, as if it had wings, and the wild cows are covered with something like small feathers, instead of fur. No one pays attention to that. Soon some workers claim that they find dead bird parts under their pillows, and see shadow lurking in the night. The atmosphere gets tense. The final straw is that one day a worker attacks Maurice, screaming indistinctive words in an unknown language. He ends up tied to the tree and soon comes to his senses, claiming that he does not remember a single thing. Mr. Rockwell fears that their work is being sabotaged and orders Maurice to take action to settle things down.

Option 1. Maurice consults William on the issue. Though William tries hard to inspire the team, he is sincerely terrified by the events. He believes that it is God's test of their faith, so he offers to invite a priest from the nearest port. When the priest arrives, he turns out to be a terrible drunkard. His gospels are at best ridiculous, and his only solution for the problem is to scatter the crosses all around the place. Of course, it doesn't help. Every night, the crosses get broken, and eventually the priest dies in a mysterious way.

Option 2. Maurice consults Herbert on the issue. Mr. Rockwell suggests that workers are for some reason trying to sabotage the construction to get away, so he offers Maurice to start an investigation to verify their claims. Maurice explores the territory, finding strange drawings-covered stones in the woods. After that, Maurice keeps watch at night to see if the strange shadows truly appear. Walking on a beach, he notices a woman's figure. He approaches and tries to start a conversation, but the woman runs away, saying something that he can not understand.

Either way, the team suspects that the land is populated by someone else rather than them. They build a stockade around the construction site to protect themselves. The time comes to build the houses, and the team needs stones to enforce the foundations. Maurice sends several workers to the adjacent cave to develop the stone mine there. The next morning, their bodies are found dead, their tongues being ripped off.

### 3.3.2 Chapter II, "The Encounter"

Everyone is terrified, as their worst suspicions about the land being populated by the natives have been confirmed. Mr. Rockwell sends Maurice to investigate the murder. Maurice descends in the caves and meets Areszlada, a young witch who can speak his language. She says that the settlers have desecrated the land and disturbed the peace of her coven that lives in the caves, and the killed workers are the price for that. She warns Maurice that her coven has noticed the mysterious occasions too, and they blame the colonizers for that. Yet, Areszalda believes that there is a different reason for the 'land's awakening' and offers Maurice to investigate together.

Maurice reports to Mr. Rockwell and the team. Herbert is relieved that the mystery of the incidents has been solved, believing that the witches are to blame for everything. At the same time, he is afraid that they are going to sabotage the construction further, so he orders Maurice to keep in touch with Areszalda to know about their plans. William and the rest of the workers are still terrified by the murder of their mates, but Herbert ensures them that they are safe now, since Maurice will keep the witch problem under control.

The construction proceeds with the building of the houses, dock warehouses, town square and the chapel. The latter severely frustrates the witches, as it is forbidden to worship anyone except their deities in this land. Maurice tries hard to keep the conflicts under control. At the same time, he, having no choice, teams up with Areszalda to investigate the mystery of the strange incidents that keep occuring. Areszalda tells him a lot about the coven's culture and history, including the legend of the Dinezgriin that she believes is somehow connected with the events.

Alongside with the investigation, Maurice can take part in other events (side quest lines, exact contents are under development):

- Mr. Rockwell is expecting the United Trade Company supervisors to visit the construction site and needs the place and the team to look in an exemplary manner. Maurice has a chance to prove his trustworthiness and get closer with Herbert Rockwell.
- William, frightened by the recent events, invites Maurice to join the workers group that aims to protect the building site from the witches.
   Maurice has a chance of getting closer with the workers and their informal leader.
- Areszalda, inspired by the fact that she has finally found a person willing to listen to her, invites Maurice on a date. Maurice has a chance to find a good friend and, perhaps, something more.

No matter what, the investigation proceeds. Eventually Maurice and Areszalda discover a long forgotten altar of Patgun Nun-Gatgantakk. When Maurice touches the altar, he receives a terrible vision of eyes staring at him from the dark. He trembles, uttering mysterious phrases in an unknown language, and faints. Areszalda wakes him up to tell the disturbing news. What was spoken through his mouth is an ancient prophecy: "When the blood, untainted by treason, spills on the land of Urfion, the Son with no tongue will awaken from his slumber, hungry for the souls that he will devour until he finds a new voice".

Though the prophecy paints a terrible future, Areszalda believes that it is helpful, as it finally gives an explanation to the mysterious occasions. Patgun Nun-Gatgantakk is awakening, and the land is awakening, too. Areszalda believes that the prophecy must be interpreted literally. All the time since Dinezgriin's disappearance, both the city and its deity have been somewhere in the harbor, deep underground. Now the coven finally has a chance to meet their god, but first they need to prevent the apocalypse. Fortunately, the prophecy contains a vague hint of how to stop Patgun Nun-Gatgantakk - the deity needs to find a new voice. The only question remaining is what exactly does that mean.

# 3.3.3 Chapter III, "The Awakening"

Chapter III plan is now being developed. According to the initial idea, in this chapter the player can choose to align with one of the factions. Factions available for alignment are those who are in neutral or good relationship with the protagonist. By aligning with the faction, the player chooses their solution to prevent the apocalypse caused by Patgun's awakening. Below are the brief sketches of quest lines corresponding to each of the factions, spoilers avoided.

- 1. Herbert Rockwell refuses to believe in the news about the prophecy and claims that all of those are just the witches' schemes. He offers to blow the cave passage up to isolate the coven and whatever the rot they claim to be living underground. The construction proceeds as planned, but Mr. Rockwell starts having visions that call him to go down in the caves. Eventually, a part of the city collapses, opening the passage to Dinezgriin. Mr. Rockwell, led by a mysterious calling, descends to the ancient city to sacrifice his life to Patgun Nun-Gatgantakk, while Maurice tries to save him and find a different solution.
- 2. William, for some reason that is yet unknown, decides that whatever is hiding deep below the town needs to be destroyed. He accuses Mr. Rockwell of being too weak and indecisive, taking the power in his hands. He gathers a group of workers, led by Maurice, to make a passage to Dinezgriin. Ignoring the witches' warnings, they descend into the depths of the ancient city to encounter Patgun Nun-Gatgantakk.
- 3. Witches try hard to interpret the prophecy and finally decide that what Patgun is looking for is a child, a chosen one. With their magic and rituals, they create a homunculus with Maurice's blood. At the same time they prepare the town for the awakening of their god, building shrines and attempting to reconstruct Dinezgriin in its former glory. When Patgun finally awakens, everything is ready, or at least they believe it is.

Each of these quest lines is expected to have two endings, depending on the player's choices and relationships with other factions.

We are also working on an opportunity to create a secret ending. Possibly, it will be unlocked if the player decides to make romantic relationships between Maurice and Areszalda, that will change the pace of events and their outcomes. For example, Areszalda can decide that she is the chosen one, so that she will prepare to sacrifice herself to the deity, and Maurice will have a chance to save her. Another option is that Maurice and Areszlda will have a child that will be sacrificed. Either way, this secret ending needs to be integrated into the story and, more importantly, game mechanics, that will require thorough consideration.

### 3.4 Meta-narrative

An important detail of the game's narrative is the meta-story, embodied in several game elements. The concept of the narrator implies that all of the game events described above are presented as a story, told by a museum keeper in the town of Alexandria, to an anthropologist, who comes to explore the culture of the city many years after the game events have taken place.

The narrator's voice is present primarily in the following game elements:

- game journal, where the narrator comments on the protagonist's actions
- end of the day screen, where the narrator gives a brief summary of the day's events and player's choices
- game UI elements, such as game leave warning: "Are you sure you want to leave now? I haven't told you what happened during the rest of the day"

This in fact introduces an unreliable narrator to the game, explaining the narrative's variability and multiple story endings. It also creates the context for many in-game events that 'break the fourth wall' addressing the player, who takes the role of that anthropologist and has a chance of changing the way the story is told. Apart from all of that, this meta-narrative creates consistency with the game's art style, described in the next chapter.

# 4. Game art style

# 4.1 General art style references

The game uses low-poly 3D graphics, stylized to imitate origami and shadow box dioramas. The closest references are Oxenfree and Kentucky: Route Zero.

#### Oxenfree

- Low-poly graphics
- Side-view
- Sinister atmosphere
- Combination of 3D and 2D painted elements





# Kentucky: Route Zero

- Low-poly graphics
- Emphasis on game lighting system
- Angular characters and buildings



### 4.2 Character art

## 4.2.1 General guidelines

The general guidelines for the in-game character art are the following:

- game characters are angular and origami-like
- triangle is the pain shape (to simplify low-poly modeling)
- faces are blank, unless face features are specified
- little details of clothing look like paper folds
- characters are 'modular' (to simplify animation)
- main characters differ in shape and size

## General character style references



Origami humans



Low-poly and origami-like satyr model

Kentucky: Route Zero characters



A good example of 'folded' low-poly wolf

# **4.2.2 Character concept art** | by P. Tishina

Below is the concept art of the four principal game characters, made by Polina Tishina, our team's artist.



Maurice Drok



Herbert Rockwell





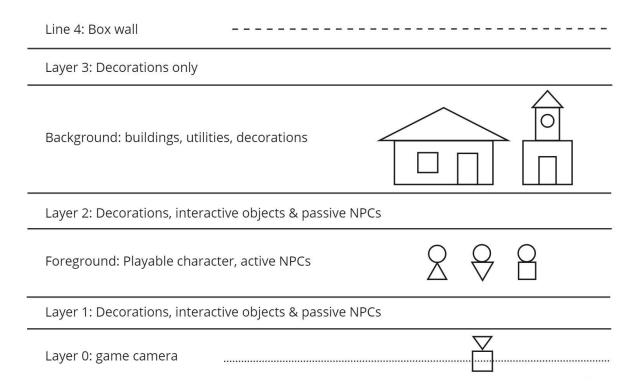
William Wellington

Areszalda

# 4.3 Game scene

The game scene imitates paper dioramas and shadow boxes to create a feeling of watching a play in a small paper theater. Thus, the game scene is organized in layers:

- Layer 0, observation line, where the camera moves
- Layer 1, decorations, interactive objects and passive NPCs
- Foreground, a space where the player character moves and interacts with active NPCs
- Layer 2, decorations, interactive objects and passive NPCs
- Background, a space for buildings, utilities and decorations
- Layer 3, decorations only
- Layer 4, box wall layer with a drawn 2D-background, extending to the side walls of the game scene



The game scene updates every time slot, allowing for decorations and NPC stage placing patterns to change and buildings to appear or change their statuses / animations.



Early game scene art prototype by Polina Tishina. A more 'intimate' and box-like version of the game scene is now being developed.

# 5. Credits

#### 5.1 Our team

The development of this game would have been impossible without the team of like-minded people who believe in the future of the project and strive to bring the common vision to life. Some of the team members have been directly involved in developing the concept of this document and were therefore mentioned, while others are working on different game parts.

- Andrey Emelyanov game designer, Unity developer
- Korney Kuzmin narrative designer, scriptwriter
- Xenia Sorokina loremaster, narrative designer
- Polina Tishina game artist, 3D-modeller
- Azat Husnúllin sound designer, music composer
- Gleb Lykov Unity developer
- Daniil Kovalenko producer, game designer

## 5.2 Special thanks

Finally, I would like to thank all of the people who contributed to the development of this project: my family, who believed in my future in game design and encouraged me to take a gap year to work on my project; my friends and my boyfriend, who support me every day and inspire me to go on; my tutors at 'Game project management' programme who gave me valuable knowledge and skills in game design and helped me gather the development team. Without these people, none of this progress would have been possible.