

Game Design Document

GAME's Name: HAN'S LEGACY

Student Name(s): Erdem SARI C181150064

Göktuğ KARACA C181152024

Rahman REJEPOV 191180400

Sefa ERBAŞ C171150030

Introduction

Han's Legacy is a game that immerses players in Turkish mythology, offering an experience of how Turks lived in ancient Central Asia. It reflects the elements and stories from our mythology primarily through core mechanics of destruction and gathering. Additionally, it incorporates a survival mechanic. Staying true to Turkish mythology, the game is an action-adventure title where players can explore a map rich in Turkish culture and mythological elements, interact with people, and discover new items.

Problem

In the modern gaming industry, there is a noticeable lack of role-playing games that represent Turkish culture and mythology. This absence creates an opportunity to fill a gap in the market for culturally rich, story-driven games. Inspired by successful titles like The Witcher 3, our game aims to adapt Turkish history and mythology into an immersive experience.

At the same time, there is a growing demand for games where players can unwind, explore a rich world, and engage with meaningful stories. By addressing this need, our game not only provides long-lasting entertainment but also introduces Turkish culture to a global audience.

Analysis

Our game features a mission-based and progressive structure. Weapons necessary to unlock and progress to other sections can only be obtained with the money earned from missions. Additionally, though rare, some weapons can be found hidden in certain locations on the map. This mechanic encourages players to explore the map. Furthermore, the presence of potions that temporarily halt damage taken in the field—though very rare—adds new dynamics to the gameplay.

In our zero-sum game, players either achieve the happy ending by saving the lands of Turkistan from the Chinese invaders and malevolent gods or fail to resolve anything and face death. These are the only two possible outcomes of our game. Except for the health bar, the entire screen consists of a magic circle. While players are free to decide how many enemies to neutralize, where to go, and how to complete the missions, the tasks to be accomplished and the resulting animations remain fixed. Players can freely explore the currently unlocked areas

of the map by running, walking, or jumping to reach their desired destinations. The movement is confined to the currently active map area.

In the final version of our game, we control a single playable character (Oğuz Kağan) and fight against changing groups of malevolent AI-controlled characters. The interaction type of our game is player vs. Game (PvG).

Our core conflict lies in reclaiming villages from enemies who vastly outnumber us, using our limited health and attack damage. The overwhelming number of enemies creates a constant sense of urgency, pushing players to make strategic decisions in real-time. To overcome this challenge, players must leverage precise timing, environmental advantages, and skillful execution of specific tactics and combos.

Design

The game designs are shown below:

Initial Design Idea

Generally, in our epics and the historical way of life of ancient Turks, battles were fought with fewer numbers, and progress was made in this manner. To succeed, they developed tactical approaches. Taking this into account, we initially envisioned the game as one where our character adopts a collaborative style—gathering people from villages, organizing them, and relying less on collecting items for personal combat.

As a core mechanic, the game would lean more toward collaboration and strategy, requiring spatial reasoning in its mechanics. The primary objective would still involve progressing through levels by destructing, but players would also deploy the resources they gathered and supervise them when necessary.

Due to some technical challenges, we transitioned to the current single-character progression path.

Game Logic:

The game was designed with a collaborative approach where the main character gathers villagers, organizes them, and uses their collective strength to fight against enemies. Instead of focusing solely on collecting items for individual use, the gameplay involved strategic deployment of resources and villagers to overcome challenges. The core mechanics emphasized collaboration and strategy, incorporating spatial reasoning to position and manage

the gathered resources effectively. The progression system relied on destructing objectives while ensuring that players managed their group efficiently.

Premise:

Drawing inspiration from Turkish epics and ancient traditions, the game highlighted the tactical and collaborative nature of warfare, where small groups used strategic thinking to overcome larger forces. The character's mission was to unite villagers, prepare them for battle, and reclaim their homeland from invaders, all while adapting to resource constraints and environmental challenges.

Story:

The story revolved around a lone hero who travels through villages devastated by enemy forces. Realizing the need for unity, the hero begins recruiting villagers to form a resistance. As the group grows, they encounter various obstacles and enemies, requiring careful planning and tactical decisions to progress. The hero's ultimate goal is to lead this resistance to liberate their homeland and restore peace, while also discovering the deeper connection between their struggles and the ancient myths of the Turks.

Final Design Idea

The final design follows a more developmental storyline, closely tied to the mythological tale of Oğuz Kağan. Initially, the game focused on destructing and survival as core mechanics. Now, a collection mechanic has also been added. In its final version, the game progresses with a cinematic and fast-paced flow. It begins with Oğuz Kağan's childhood, with the main quests starting at that age and following his growth.

One day, after completing his daily tasks, he returns to his village to find it plundered and destroyed. At that moment, he encounters Kayra Han, to whom he is spiritually connected, in human form and learns who is responsible. The game's title stems from this connection. As there is a sacred bond among the Khans, Kayra Han knows that Oğuz Kağan is capable of resolving the issue. Kayra Han informs him that the Chinese are behind this and

have attacked other villages as well. After receiving this call, Oğuz sets out to rescue the nearest village.

Upon arriving, he interacts with the villagers and neutralizes the Chinese invaders. Wanting to eliminate the threat at its source, he then heads toward the Chinese fortress. Players have the option to explore additional villages to acquire better weapons and gear, making them more effective for the final mission. Compared to the initial version, Oğuz Kağan's powers are showcased more in alignment with the epic.

Implementation

The game begins with the player waking up in their home village. This serves as the starting point where the player familiarizes themselves with the environment and begins their journey. The first mission is to explore the nearby Sacred Forest, which acts as an introductory task to teach players the basics of movement, combat, and item collection.

Upon completing the Sacred Forest mission, the player returns home to find their village in ruins. Here, they encounter KayraHan, who reveals the source of the attack and provides the player with their main objective. This pivotal moment introduces the core storyline and sets the player on their journey to restore peace.

The player is then tasked with accepting a new mission to rescue a nearby village (Village 1). Completing this task is mandatory to progress the story. Along the way, the player can choose to visit additional villages, such as Village 2 or Village 3, which offer optional side quests. These side quests allow the player to gather resources, improve their inventory, and prepare for the main mission. Each village provides unique challenges, such as defeating enemies or helping villagers rebuild, encouraging exploration and strategic planning.

Once the player feels adequately prepared, they embark on the main mission: infiltrating the China Castle. Here, the stakes are high, and the outcome depends on the player's skill and preparation. A victory in this mission unlocks access to the Celestial Palace, where the final battle takes place. If the player succeeds, they achieve a "Happy Ending," bringing peace and restoring order to the lands. However, failure at critical points may result in setbacks, requiring the player to revisit earlier stages to rebuild their strength.

This branching gameplay flow allows for replayability and a mix of linear and non-linear storytelling. The inclusion of optional villages and side quests provides players with the freedom to customize their experience and strategy, making each playthrough unique.

The technical gameplay flow is illustrated below figure.

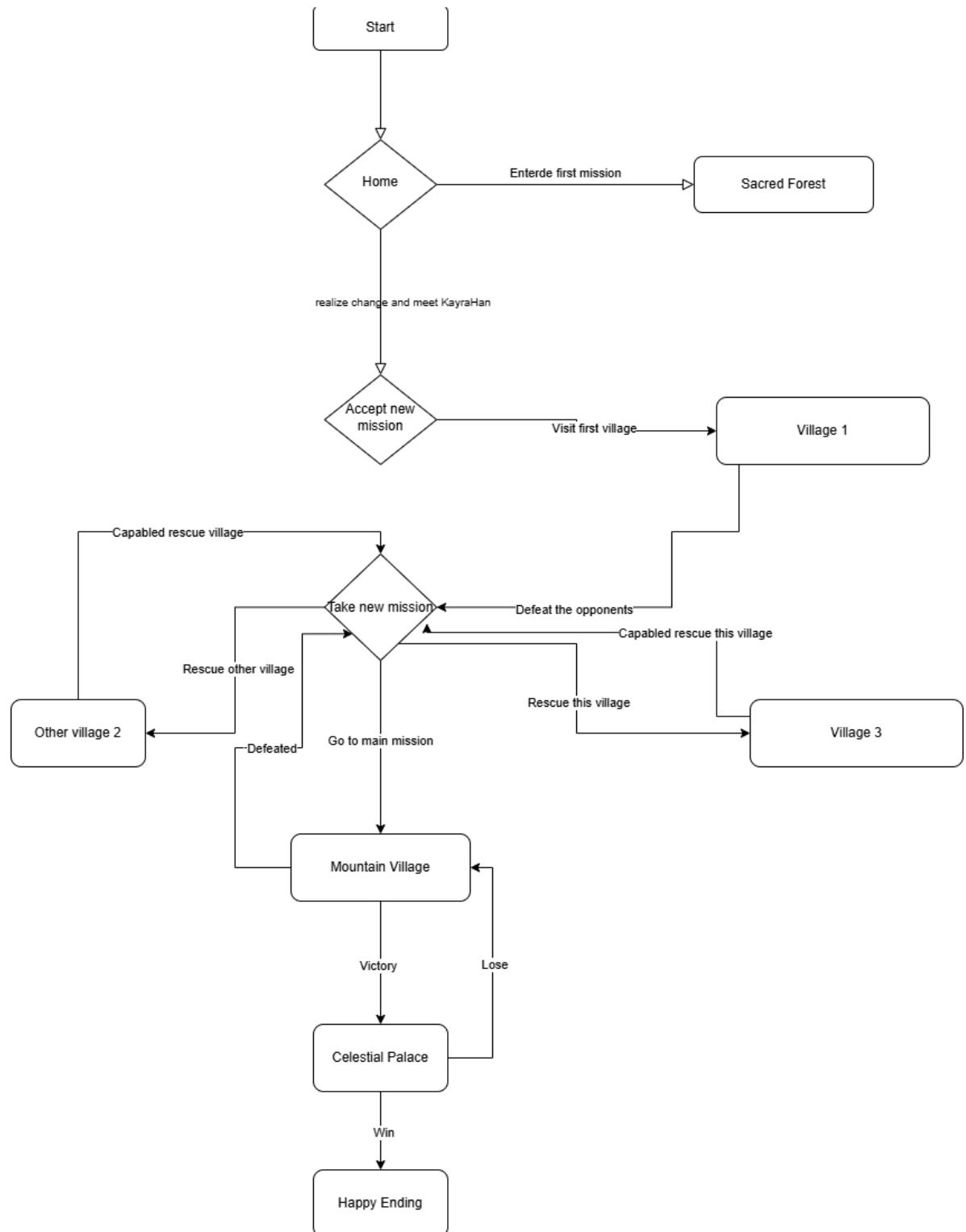


Figure.1: Game Flow

The figures below are from the initial development stages of the game, and the later ones are from the more advanced stages, closer to the final version.



Figure.2: Inventory Screen



Figure.3: Firstly combat example



Figure.4: New mission consol test new maps

Evaluation

We had the game tested by individuals with prior experience in playing and even creating games during their university years. These testers had played various genres of games. The tests were conducted during the early stages of development.

In the first test version of the game, voiceovers were present, but testers suggested adding music. They wanted houses to be more interactive, with additional in-game events happening inside them. They also mentioned that the grass should look more visually appealing.

Another observation was that gravity felt too low, causing slower falling, which was subsequently corrected. On the positive side, the design and appearance of the health bar were well-received. However, the story was considered incomplete, so efforts were made to enhance it.

Lastly, the axe animation was requested to be improved, and it was refined accordingly.

Results of Your Play Testing Session

Audio and Music:

- Testers suggested adding music to complement the existing voiceovers.

House Interactions:

- Houses should be more interactive, with additional events or activities taking place inside them.

Visual Improvements:

- Grass visuals should be enhanced to look more appealing.

Gravity Adjustment:

- Gravity felt too low, causing slower falling. This issue was identified and corrected.

Health Bar:

- The health bar's design and appearance were appreciated, requiring no major changes.

Storyline:

- The story was considered incomplete, and testers recommended expanding it further.

Axe Animation:

- Testers requested improvements to the axe animation, which was subsequently refined.

Recommendations & Conclusions

Recommendations:

One of our missions in the game is to showcase the culture of that era. Introducing a trading mechanic could significantly enhance interactions with the environment and the characters, increasing both playtime and in-game possibilities.

Additionally, side quests that include changes to weapon types and combat mechanics beyond the existing system could make these quests even more engaging.

If unique elements or features are added to different villages, players will explore them with greater enthusiasm, knowing they'll experience something distinct in each location.

Conclusions:

We attempted to implement an archery and bow combat mechanic, but integrating the necessary AI into the characters proved to be challenging, so it could not be fully realized. Similarly, the currency system lacked the variety we initially envisioned, though it still functions well as a system overall.

While mechanics like blocking could have been added, the current design allows players to evade attacks effectively, making such an addition less essential.

On the other hand, the combat system and enemy spawning mechanics turned out to be highly polished and well-executed.

If the game is to be further developed, focusing on the areas we highlighted would be a logical step forward.

References

Yilmaz, M. (2024). CENG 447: Game Development Lecture Slides. [Gazi University].