



MAYEL LYANG

A game inspired by Lepcha folklore

A game design project by
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Declaration

I declare that this written document represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea, data, fact or source in my submission.

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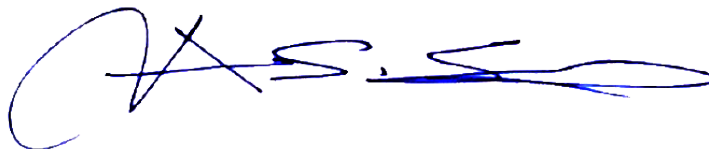


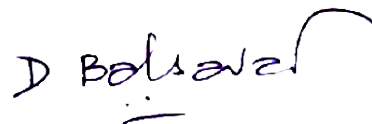
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Approval Sheet

This is to certify that the project report titled 'MAYEL LYANG : A game inspired by Lepcha folklore' by Aaron Chen Lepcha, Roll no: 22M2273 is approved for partial fulfillment of the requirements of the the Master of Design Degree in Communication Design from IDC School of Design, IIT Bombay.

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External Examiner :  29/05/24.

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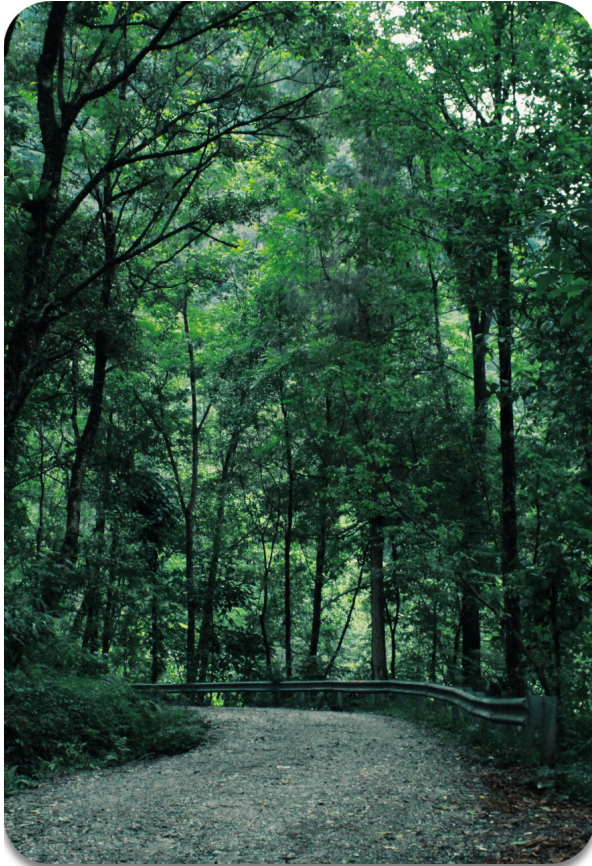


Source: Foning Family Archive

Abstract

The Lepchas are the indigenous people of Sikkim. Over the years, our numbers have diminished, and our tribal culture is gradually vanishing in the modern world. As a Lepcha who was brought up in Dehradun, far from my ancestral land, I have witnessed how obscure my culture remains, not only to the world but even within our own nation.

This project aims to educate and introduce people to the tribal culture of the Lepchas through a narrative-driven game. Rather than using a textual or motion narrative, I chose to incorporate an interactive experience. This approach ensures maximum engagement and conscious retention of the information provided by the game. Players will be introduced to basic Lepcha lifestyle and culture through the game's narrative while being able to move a character around the environment. The game will be able to raise awareness about my tribe and ensure people are aware of our existence.



Dzongu, A protected land reserved for the Lepchas

Introduction

I am a member of the Lepcha tribe, the indigenous people of Sikkim. Despite being raised in UP and Dehradun due to my family's professional aspirations, I grew up hearing a plethora of tribal stories. These stories continue to intrigue me to this day, and I hold them in great reverence. My parents did everything they could to maintain the link to our tribal heritage by sharing stories, incorporating elements of our traditional lifestyle, and preparing tribal cuisine for me and my brother.

Throughout my six years of design education, I've undertaken projects that center around my tribal heritage. For my final design project as a student, I aimed to continue this theme but with an added challenge: learning a new skill simultaneously.

It all began in 2019 when I embarked on a craft documentation project in Dzongu, North Sikkim. Spending a week in the sacred land of the Lepcha people, I delved into the ancestral origins of my tribe. Immersed in the lifestyle of my native people, I felt a profound connection with my roots by the end of my research. This experience quenched my thirst for knowledge and left me with a new passion: to embrace my roots and share my tribe's culture with the world.



Jorden Lepcha, one of the few remaining Thyakthuk craftsmen.



Sumok-thyakthuk, a traditional Lepcha bamboo hat.

Background | My story

As I documented one of the oldest craft-work of Sikkim, I was stunned by the richness of my tribal culture.

I documented the work and life of Jorden Lepcha, one of the few remaining Thyakthuk makers, now a Padma Shri awardee.

Interacting with the Lepcha inhabitants of Dzongu helped me gather a plethora of tribal stories and knowledge about my own culture previously unknown to me.

I became deeply interested in tribal life-style and wanted to share it with the world. There was something about the simplicity of my tribespeople in Dzongu that stayed with me for years.

Ideation

As a tribe, Lepcha's remain obscure even in their own homeland. The rapid decline of our culture is a serious threat. This is an effort to not just create an entertaining narrative but also educate people about my tribe.

Since my aim was to re-tell Lepcha folklores and present them in an interactive format, I decided to work on a 2D side scrolling adventure game based on traditional Lepcha tribal stories.

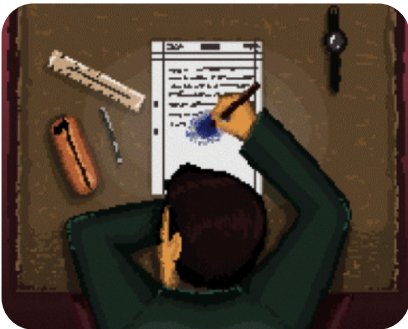
Why did I decide to make a game?

I have a deep-seated childhood love for retro games. The nostalgic feel of retro gaming would perfectly complement my project and its background story.

Additionally, creating a game would stretch my creative boundaries since I've mostly worked on animation and graphic projects in the past. I've always dreamt of making my own game, particularly one styled in retro pixel art.

Why pixel art?

Pixel art was the hallmark of retro games like Mario, Contra, and Pokémon. As I mentioned before, I was captivated by this art style and the overall visual appeal of retro games from a young age. When I began creating digital illustrations, I adopted pixel art as my primary style. After working on several pixel art projects, I decided to merge my love for retro games with my pixel art expertise to create my own game.



Some of my pixel artworks.



My introduction to the world of gaming was a TV gaming console.



My most prized possession as an early teen was my Nintendo Gameboy advance. It was during this time that I developed an interest in retro games, going beyond just playing them.

I often questioned the possibility of making my own self designed game.

Top to Bottom: Dan the Man, Mission Impossible, Pokemon Sapphire, Terraria.



Research | Understanding retro games

Since I lacked experience in game design, I opted to develop a straightforward 2D side-scrolling game emphasizing narrative-driven interactivity over reward or strategy-based objectives. To gather inspiration, I embarked on a research phase to explore retro games more thoroughly before delving into the technical and practical aspects of design.

This allowed me to develop a solid understanding of gaming fundamentals, offering insights into narrative progression and expectations.

Additionally, I purchased a PC controller and a handheld gaming console to deepen my immersion in gaming. This step was intended to enhance my understanding of the intricacies of motion and controls within retro games. Considering that controllers were the primary input method for playing retro games in the past, I made the decision to develop a game that is compatible with controllers.

PROCESS

Concept | Setting up the plot

Inspired by my week-long immersion in Dzongu, I resolved to weave a narrative around the tribal lifestyle and the rich lore shared with me by the indigenous people I encountered.

Tribal narratives, not confined to the Lepcha community alone, often possess a profound abstract quality, intertwining with elements drawn from nature itself. The Lepchas, adhering to animistic beliefs, exhibit a unique harmony with their natural surroundings.

During the documentation of a traditional hat-making process, the artisan, Jorden, regaled me with numerous tribal tales. Among them, one story resonated deeply with me, a myth surrounding a legendary creature known as Jyamphi Moong, akin to the Himalayan Yeti in popular culture.

Elevating the legend of Jyamphi Moong as the focal point of my narrative, I resolved to fuse various Lepcha folklores and aspects of tribal life. Through this fusion, my aim is to craft a game environment and storyline that offers players a window into the mystical world of the Lepcha tribe.

Synopsis of the plot

Ong, son of Athup, a tribal artisan, resides in the Lepcha village of Dzongu, assisting his father in craftsmanship and partaking in playful adventures with friends amidst the forest.

While on an errand to procure crafting materials for his father, a mishap befalls Ong, leaving him stranded in the forest, where mythical perils abound.

The primary goal is to aid the boy in reuniting with his father, utilizing the survival skills imparted to him by his father.

Narrative | Fixing the game's narrative

After finalizing the game's plot synopsis, the next step was to create a detailed outline of the game's story.

This narrative framework would intricately map out every aspect of the game, including stage objectives and all interactive elements, providing a structured roadmap for its progression.

CHARACTERS

Ong (*Protagonist*)

Athup (*Ong's father*)

Ranu (*Ong's pet dog*)

Wild animals (*Enemies*)

Boars

Snakes

Monkeys

Jyamphi Moong (*Forest monster*)

Acts | Simplified

Act 1: INTRODUCTION

Ong's home

Ong is tasked with collecting crafting materials from the forest.

Act 2: COLLECTION

Green Forest

Ong interacts with the forest and his inventory of items.

Act 3: RESCUE MISSION

Dark forest

Ong ventures into the dark forest to rescue his dog and encounters the forest monster.

Story of the game | An overview

As Ong, a youthful Lepcha lad, awakens from his slumber, he is roused by his father Athup calling out his name.

Promptly rising, Ong leaves his room to discover his father searching for something.

Athup asks Ong to collect a few crafting materials.

Venturing into the forest, Ong is tasked with gathering Micah stones, Kaferlop leaves, and totola flowers : essential components for crafting the hats. Ong's pet dog Ranu follows him. Ong practices shooting with his catapult while on his errand.

After collecting all the items, Ong reaches the edge of the forest. He remembers his father's warnings to not enter the forest. Considering entering the forest, Ong, displaying prudence beyond his years, opts to return home.

Ong returns home and hands his father the items.

At night, Ong asks his dad about the edge of the forest. Athup narrates the story of Jyamphi Moong. He also tells Ong that he'll be leaving the next day to collect bamboo from the mountains. He asks Ong to be responsible while he's gone for a day.

Ong tucks himself in to sleep.

Ong wakes up after hearing his dog Ranu barking loudly. He panics and goes outside to investigate.

He chases after Ranu, who runs away into the forest after something unidentifiable.

In the ensuing chaos, Ong ventures deep into the forest. It gets darker. Having exhausted all other options, Ong continues into the forest with no sense of direction, clinging to hope that he'll find his dog. Along the journey, he encounters wild boars and snakes, chasing them away with his catapult.

Ong finds his dog hiding behind some bushes and as he approaches, he notices the Jyamphi Moong behind him.

Ong escapes the monster that follows him relentlessly and, remembering his father's teachings, defeats the monster by constructing a flute and putting it to sleep.

The ordeal makes Ong extremely weary and he loses consciousness. The next day, he's woken up by a frantic Athup, who carries his child back home while listening to Ong recount his ordeal.

Learning game coding | Unity to GDevelop

My initial plan was to use Unity to develop the game since it's the most preferred game development platform in the industry. However, I soon realized that having no background in coding was a significant handicap. Unity requires advanced coding knowledge, and learning to code from scratch would take a lot of time.

I explored other options and ended up choosing GDevelop. The coding process in GDevelop was much easier to grasp, and I managed to learn the basics within a week. This free software provided many resources to ease my learning process, such as an excellent asset store from where I could use assets that facilitated quicker learning.

I spent almost a month learning the software properly before proceeding with the final game development. During this phase, I charted out the game mechanics I wanted to use and followed multiple online tutorials to implement these functions effectively in my game.



The entire game has been developed in GDevelop 5 with a few assets and sounds being borrowed directly from GDevelop's asset store.



C# PlayerMovement.cs-2.cs ✕

Users > aaronlepcha > My project > Assets > Scripts > PlayerMovement.cs-2.cs

```
1 using UnityEngine;
2
3 public class PlayerMovement : MonoBehaviour
4 {
5     [SerializeField] private float speed;
6     private Rigidbody2D body;
7
8     private void Awake()
9     {
10         body = GetComponent<Rigidbody2D>();
11     }
12
13     private void Update()
14     {
15         body.velocity = new Vector2(Input.GetAxis("Horizontal") * speed, body.velocity.y);
16     }
17 }
```



A Space key i

A Space key is released

PET

 Ong distance to  Pet is below 1000 pixels

Pet is rotated towards **Ong**

 Pet is rotated towards **Ong**

Add condition

Add action

 Play the sound 242d0e8d696e1f0577e7b4875f1d2c0f3a9a4d095de74727291077e1e

Add action

```
Move Pet to Ong.X(ToString(Ong.PointX("Pet")));Ong.Y(ToString(Ong.PointY("Pet
```

Add action

 Flip horizontally Pet: no

Add action

🔄 Flip horizontally ✨ Pet: yes

Add action

COLLISIONS

 Ong is in collision with **Wood_tile**

Add condition

Wood_tile is in collision with Wood_tile

Add condition

📦 🧨 **Ong** is in collision with 🧨 **Fire**

Add condition

  **Ong** is in collision with  **BALL**

Add condition

 Onig is colliding with Ground

Move **Wood_tile** away from **Ong** (only **Wood_tile** will move)

Move Wood_tile away from Wood_tile (only Wood_tile will move)

Add action

Move Ong away from Wood_tile (only Ong will move)

Add action

➔ Change to scene "Test"

🔊 Play the sound [262c09bc5725f9d41f2e4a6d04aa753790c4900a930cf3deefb23a967cf9ddf1_Hit 7.aac](#), vol.: , loop: no

Add action

Move **BALL** away from **Ong** (only **BALL** will move)

Add action

Enable mask ☐ for **Ong: no**

UNITY vs GDevelop: The coding process in GDevelop, which is mostly visual, turned out to be more intuitive than Unity.

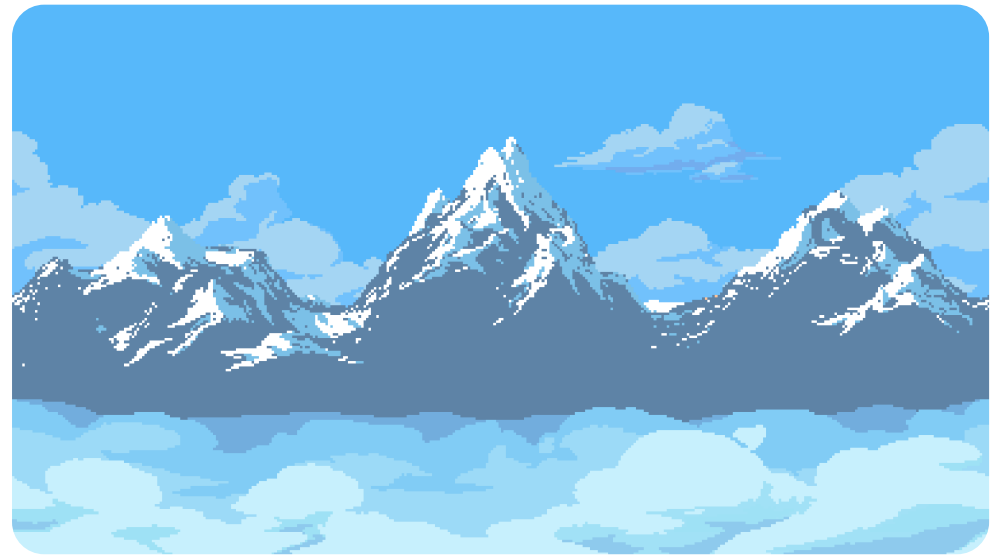
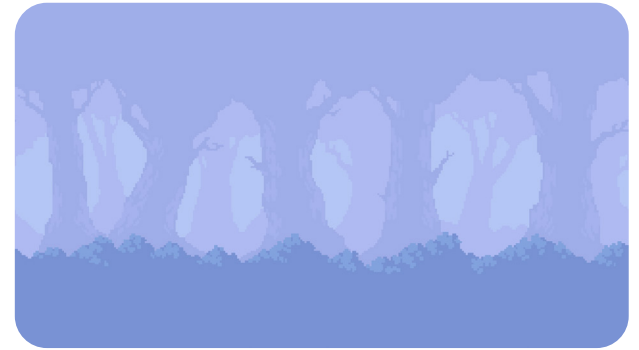


Creating game assets

Having prior experience with pixel illustrations, I was well-equipped with the necessary knowledge. Once the technical aspects of the project were sorted out, I proceeded with the asset creation process.

These pixel illustrations were created using Adobe Photoshop, with certain plot animations rendered in Adobe After Effects.

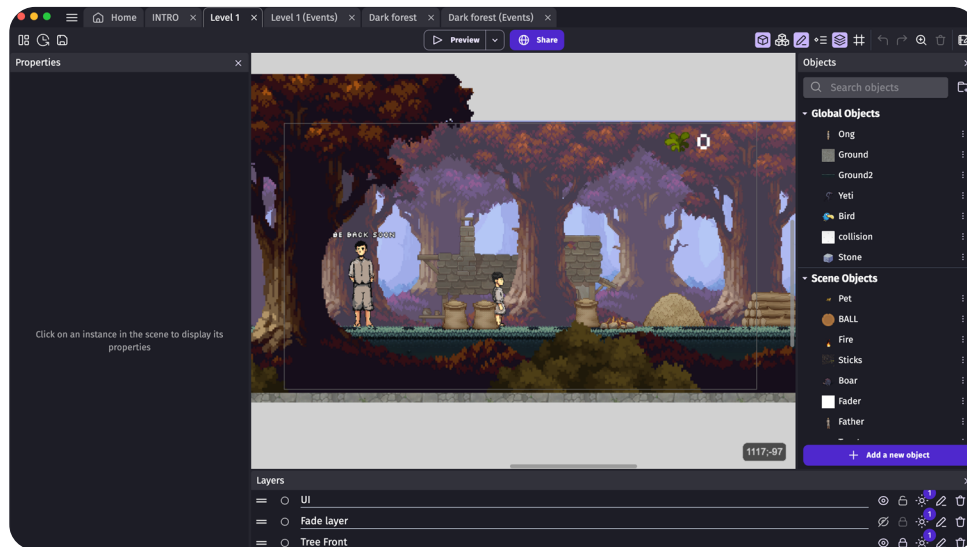
I aimed to capture the essence of the landscapes I witnessed in Dzongu through these visuals. The backgrounds were created in layers to facilitate a parallax scrolling effect, enhancing the game's immersiveness.

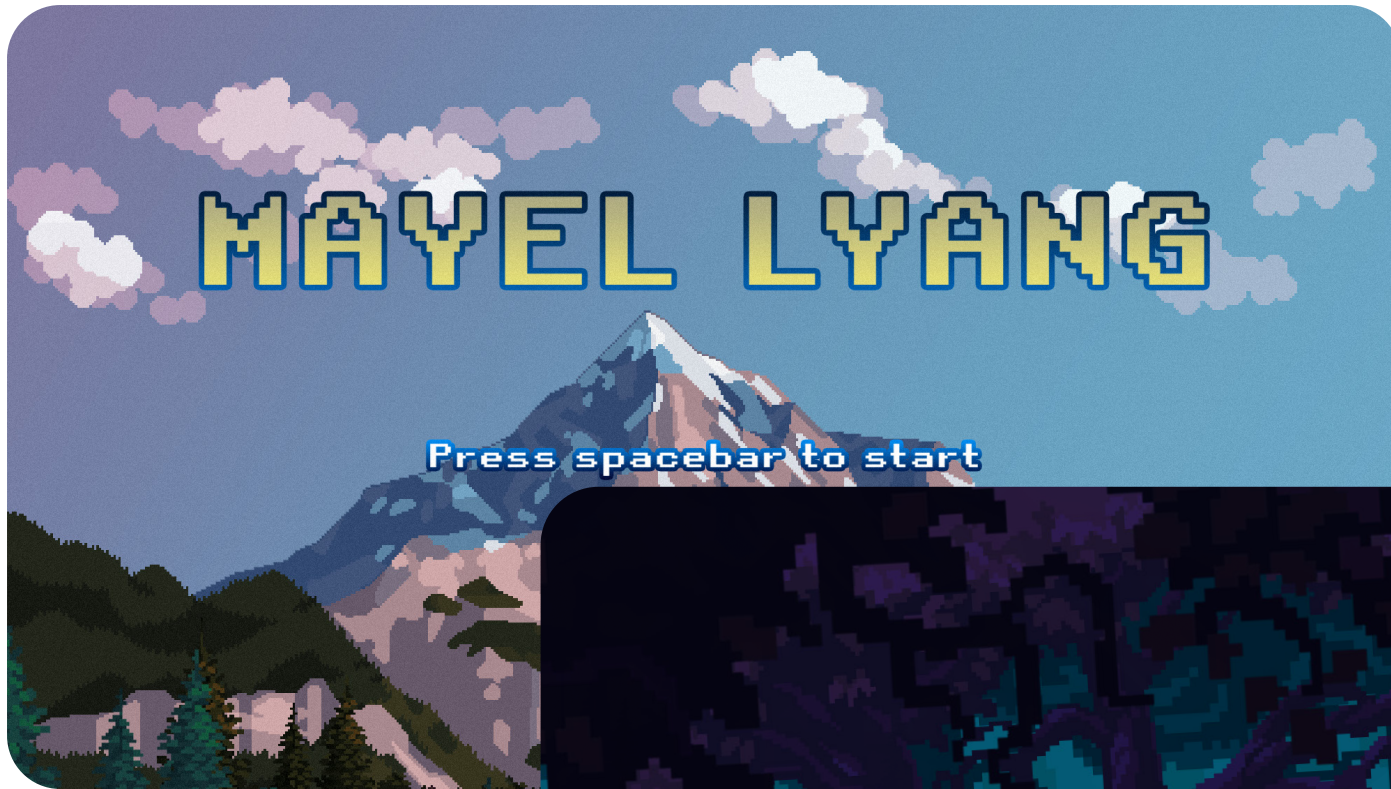


Completing the game

Once the game assets were created, I began coding the visual elements into the game and adding levels and stages. This process involved multiple trials and errors.

I left the coding process for the end because creating the assets took longer. The coding in the game was kept simple, as my intention was to let the narrative and visuals shine rather than focusing on complex gameplay mechanics.





Challenges and takeaways

The main challenge for me throughout the project was learning to code. Coming from a non-coding background, mastering a new software that involved coding was definitely a huge hurdle.

My initial plot for the game was very extensive, and I became overly ambitious, not considering the time it would take to refine the game after learning the software. My guide, Prof. Jayesh Pillai, helped me define a more realistic plot for my game. I had to adjust the narrative to create a manageable game within the project's timeframe. Cutting down the script was challenging, as many nuances were lost in the process, but I managed to retain the essence of the game and the core elements of my tribal roots that I wanted to share with the audience.

By the final week of the project, I still had a vast checklist of objectives to achieve in the game. I decided to download a few pixel assets from open-source websites, and GDevelop's asset store provided multiple items that I incorporated into the game to ensure timely completion.

Game development is certainly a highly skilled domain. I spent two weeks learning Unity, but the coding language involved proved to be extremely complicated for me. I was determined to master the software until I encountered obstacles I couldn't overcome. That's when I turned to simpler alternatives. Had I spent more time researching alternative software options, I could have saved a lot of time and refined the game to a greater level. This experience has given me a deep respect for industry alternatives that achieve the same purpose but in a simpler way. GDevelop is a software I will continue to use in the future, as I have developed a great fondness for it.

Conclusion

I've always wanted to create my own game, and finally getting the opportunity to do so was a profound experience. The satisfaction I feel when people test my game is truly heartwarming. As a kid, I anticipated this exact feeling, determined to achieve this goal. I knew it would be a huge challenge, but every skill requires time and patience. While I wouldn't say I have perfected my game development skills, I've certainly reached a good level as a beginner.

Throughout the process, I was active in several gaming subreddits where users provided feedback on my progress. I also drew a lot of inspiration from other game developers. This interaction sparked a new interest in me, one that goes beyond academic pursuits. I am confident that game development is a field I will explore more deeply in the near future.

The final game still requires modifications and refinements. The level of completion I have achieved is respectable given the time spent, but before releasing it to the world, I want to refine it to professional standards. This project will be revisited multiple times as I grow as a designer and creative individual until it meets my standards. I aim to release the game on Steam next year. If possible, I might also develop a mobile version and publish it on the Play Store for a wider audience. Until then, my goal has been partially achieved, awaiting a broader public audience and global accessibility.

