

ALTERA

The Quest of Ogi



Game Design

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Introduction

Have you ever pondered the existence of parallel dimensions alongside our own? Now, take a moment to imagine an abrupt journey into one of these alternate realms. How would you respond, and what choices would you make in this unfamiliar environment? Would you opt to remain or strive to return home, and what kind of connections would you forge with the inhabitants of this foreign world? How would your presence influence them? In an increasingly individualistic world, it's easy to overlook the interconnections we share with others and how our unique dimensions intersect, exchanging energy. It's crucial to acknowledge that taking more from someone without reciprocity

can deplete their resources. This concept reminds us that we are all, in a way, parallel universes coexisting simultaneously, each with its unique experiences and dynamics. Throughout this course, we've explored game design, considering various societal, psychological, technological, mechanical, dynamical, and aesthetic approaches to crafting video games. Armed with these tools and utilizing the Unity game engine, we aimed to create Altera (= The Other in Latin), a narrative-driven game that serves as a metaphor, prompting players to reflect on their impact on various relationships, often unconsciously affecting them.

Alterra: The Quest of Ogi

In the following section, we will delve into the narrative of 'Alterra: The Quest of Ogi'. This game's story unfolds as Ogi, hailing from a harsh desert realm, embarks on a resource-gathering expedition that leads him to an otherworldly forest. We will explore the game's storyline, stages, player actions, engaging elements, its parallels with 'Undertale,' and its cultural relevance in reflecting contemporary individualistic tendencies.

Storyline

In this captivating adventure, you assume the role of Ogi, a denizen of a harsh desert realm where resources are scarce, and survival is paramount. As a courageous ranger, Ogi embarks on perilous missions to secure vital resources for his village, and the story commences as he sets out on another resource-gathering expedition, leaving the safety of his camp behind.

As Ogi traverses the unforgiving desert, his journey unfolds across both day and night, culminating in the discovery of an oasis that holds the promise of salvation for his village. The allure of rest and the opportunity to replenish his supplies leads him to a tranquil lake. However, a startling twist unfolds as he is inexplicably drawn into the water, finding himself in an otherworldly realm – Alterra, a lush forest world infused with magic and mystery.

While Alterra's beauty beckons, Ogi grapples with the urgency of returning to his village to avert hunger and dehydration. His quest for a route home leads him through the enchanting forest, where he encounters The Wise One, a gentle giant towering over Ogi. The Wise One becomes Ogi's guide, but an intriguing condition is imposed – Ogi must collect Giggle berries as an offering.

As Ogi's journey progresses, his compulsion to gather resources intensifies, driven by the belief that there's enough for everyone. Along the way, he acquires powers from the Wise Ones, believing them to be gifts. Unbeknownst to Ogi, these "gifts" come at a significant cost as he unwittingly depletes the world's resources by collecting more.

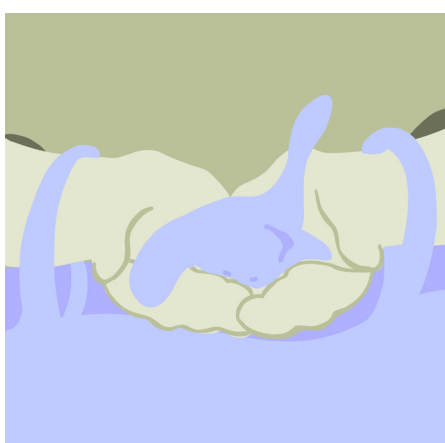
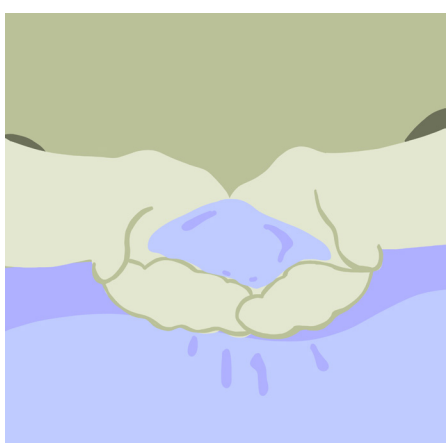
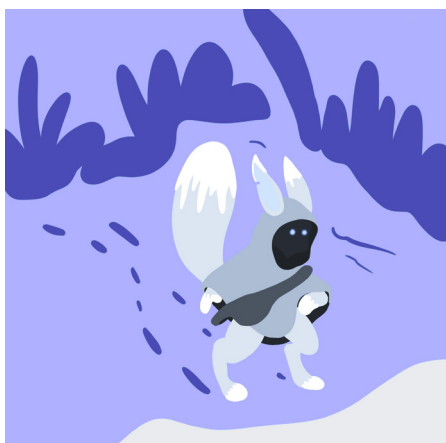
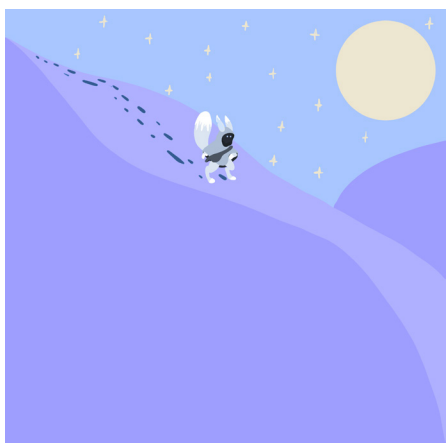
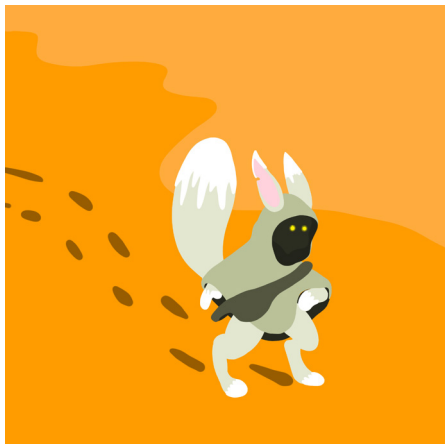
The journey culminates with Ogi encountering the eldest of the Wise Ones, who possesses the power to create portals to other dimensions. Here, Ogi faces the consequences of his actions, with the final Wise One seeking retribution.

In a climactic struggle, Ogi returns to his world armed with extraordinary powers and resources that his village desperately needs, but at a profound cost. The haunting question remains – at what price was this bounty acquired?



Hi
I'm Ogi

Story Board Start



Ending Option 1



Ending Option 2



Final Level (Boss Level)



Gameplay

Stages

The game is structured into various stages, each offering a unique experience. This includes an introductory tutorial, the first implemented level involving Ogi's resource gathering, and planned upcoming stages designed to provide increased challenges and confrontations with the final boss.

The tutorial: The tutorial's primary objective is to acquaint the player with the realm of Altera. We have chosen an intuitive tutorial approach, allowing the player to explore the level and grasp the game's mechanics through trial and error. In this phase, players will identify the adversaries, and familiarize themselves with the types of collectibles they will encounter in the initial level. This approach aims to provide players with a sense of autonomy and encourage self-exploration. This is also where Ogi gets introduced to the world of Altera and meets the first Wise One.

1st Level: This is the only implemented level currently in the game (other than level 0). In this level Ogi must traverse his way through the leaves of the trees and avoid enemies and collect the Giggle berries on his way. This level is a big level with multiple collectibles and enemies implemented. Ogi must also avoid the deadly pink goo scattered around the level.

2nd , 3rd , 4th Level: have not been integrated into the game yet. These levels will entail navigating through a forest area with increasing levels of difficulty, aimed at challenging and satisfying the player's competence needs.

5th Level (final): While this level is not implemented in theory, it will be our only boss level in the game. The level will start like all other levels where Ogi will talk to a Wise One but this time the Wise One instead of being friendly confronts Ogi regarding the excessive stealing he has been doing with the collectibles and starts to chase him. The level will be another platformer level where certain regions will have deadly pink goo

thrown onto the level by the final boss.

Actions

As Ogi progresses through the game, the player's actions become crucial in shaping both the narrative and the gameplay experience:

Gather Resources: Ogi's primary task is to collect vital resources and store them in his satchel, ensuring his village's survival. Each resource is a lifeline, making this mission all the more urgent.

Use Power Up Positions: Ogi can discover special positions that grant him unique abilities, from speeding through obstacles to soaring to new heights, or even rejuvenating his strength. These power-ups offer valuable advantages as he navigates the forest.

Run or Avoid Enemies: In the enchanting but perilous forest, Ogi must make quick decisions when confronted by menacing adversaries. He can choose to make a hasty retreat or use his wits to evade these threats and secure his safety.

Chat with Forest Inhabitants: Throughout his journey, Ogi can engage in conversations with the intriguing inhabitants of Altera. These interactions provide valuable insights into the forest's mysteries and offer light-hearted moments with humorous stories.

Gather the Giggle Berries: These special berries are more than just collectibles; they act as vital keys to understanding and guidance from the enigmatic Wise One. Ogi's success hinges on locating these elusive Giggle Berries, which lead him deeper into the heart of the forest.

In 'Altera: The Quest of Ogi,' every action is a narrative thread, weaving Ogi's story in the rich tapestry of Altera's world.

Engagement Elements

Altera: The Quest of Ogi," a deliberate focus was placed on creating an engaging gaming experience, catering to both short-term enjoyment and long-term immersion. These elements include:

Short-Term Excitement: Immediate Gratification through swift rewards like collectibles and power-ups, Engaging Gameplay with interactive NPCs offering unique stories, Visual and Auditory Allure with captivating art and immersive audio, and Humor through dialogues that create a lighthearted gameplay experience.

Long-Term Immersion: An Intricate Storyline with a complex and gradually unfolding narrative, and Player Agency, where choices impact the game world's ecology, resulting in more significant consequences and potential dissatisfaction from the Last Wise One.

These carefully integrated elements in "Altera: The Quest of Ogi" combine to provide a gaming experience that balances short-term excitement with long-term engagement.

Inspiration and deviation from existing games and other media

Altera: The Quest of Ogi" draws inspiration from a variety of sources while distinguishing itself from games like "Undertale." In "Undertale," player choices significantly impact the game's progression, particularly in interactions with monsters. In contrast, "Altera" focuses on a unique resource collection mechanic, which adapts to the player's usage.

A key difference lies in player awareness. "Undertale" provides early guidance, while "Altera" initially keeps players unaware of the consequences of their resource collection actions, using subtle hints via the changing level map.

As Ogi's resource collection practices unfold in "Altera," the inhabitants of Altera become

aware of the harm inflicted on their world. The enigmatic Last Wise One plays a central role in confronting Ogi. This game opts for subtle character portrayals, conveying a central message about overlooking the impact on others.

Inspired by "Mario Bros," "Altera" offers a non-linear platformer with roaming enemies and encourages exploration for collectibles and Giggle Berries, even allowing backward movement.

The game draws creative influence from various sources, shaping a diverse cast of characters. Elements from everyday life, inspired by "Stardew Valley," infuse humor and relatability into the characters, creating an engaging and immersive experience.

Cultural Aspect

Altera" thoughtfully explores modern society's individualistic inclinations. It delves into the notion that in our self-centered pursuits, we might inadvertently neglect the broader impact of our actions. In an era that often promotes personal growth over collective well-being, this game presents a subtle paradox—encouraging introspection while addressing the consequences of self-absorption.

The game metaphorically conveys the idea that prioritizing personal development is acceptable, but it underscores the need for mindful consideration of how our actions affect others. Players are prompted to contemplate whether their pursuits may inflict harm and whether they are ready to bear the associated responsibilities. In essence, "Altera" raises questions rather than imposing moral judgments.

To achieve this, the game employs a compelling narrative, player-influenced dynamics, and morally complex characters. The chosen pixel art style resonates with the current demand for indie games, evoking nostalgia and fostering players' emotional connections.

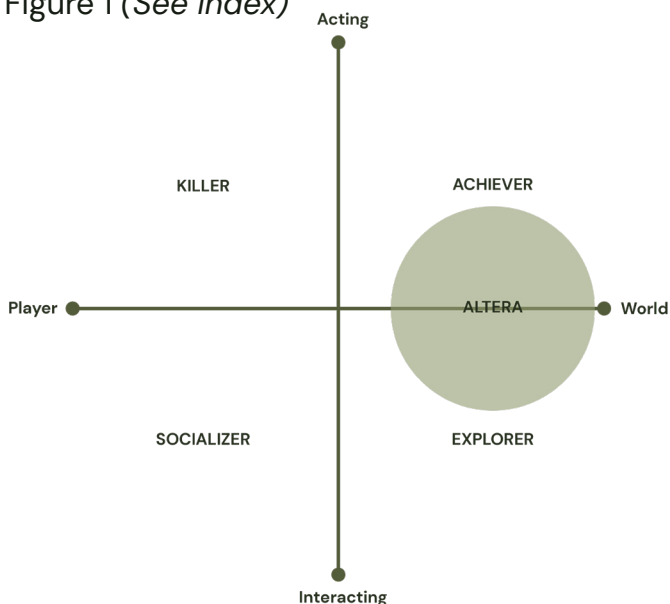
Target Audience

“Altera” has been thoughtfully designed to engage two distinct types of players: The Explorer and The Achiever, as identified by Stewart (2011). The Explorer is driven by curiosity and the desire to uncover the hidden mysteries within the game, from secret collectibles to “Easter Eggs” that add layers to the game world. On the other hand, The Achiever seeks points and status, eagerly pursuing in-game accomplishments and friendly competition. Refer to (figure 1) for a visual depiction of player types based on Stewart’s research.

To effectively cater to both player types, our game incorporates specific elements throughout the stages of play, following the principles outlined in the study by De Valk, Bekker, and Eggen (2015) in their work on designing for social interaction in open-ended play environments.

Bartle’s Player Type

Figure 1 (See Index)



Invitation

Through storytelling, we immerse players in Altera’s world. Ogi, a ranger from a harsh desert realm, embarks on a journey triggered by a mysterious oasis, which transports him to Altera. This captivating opening scene, enriched by narrative, aesthetics, and music, evokes a sense of mystery and magic. The pixel art visuals, minimalistic 2D cut scenes, and mystical music enhance immersion.

Exploration

Altera’s gameplay offers an intuitive experience. Our tutorial allows players to explore game mechanics at their own pace, gradually introducing them to Altera’s world. The narrative encourages interaction with non-playable characters (NPCs), promoting curiosity and motivation.

Players enjoy autonomy and freedom of exploration, as levels are designed to provide a genuine sense of autonomy (Przybylski et al., 2010). This open approach enables players to interact with NPCs, confront enemies, and collect items without predefined paths.

Immersion

To maintain player engagement, we implement a gradual increase in difficulty. Levels become progressively challenging (Przybylski et al., 2010), introducing more enemies, complex layouts, and harder-to-find collectibles. NPCs play a significant role in the storyline, unveiling plot twists and consequences, fostering immersion in the game world.

Transformation

The final stage of the game introduces a plot twist where players face the consequences of their actions throughout the game. This stage acts as a mirror, reflecting Ogi’s impact on Altera. Players are prompted to contemplate the effects of their choices on the game world and its inhabitants, emphasizing the importance of balance and reciprocity (Ryan et al., 2006).

By thoughtfully incorporating these diverse aspects, we cater to both The Achiever and The Explorer. The Achiever can gather

resources, achieve higher resource rates at the game's conclusion, and acquire power-ups by collecting Giggle berries for the Wise One. Simultaneously, The Explorer can quench their thirst for discovery by exploring Altera, discovering treasures, interacting with various NPCs, and uncovering hidden Easter Eggs.

While not all our unique features are incorporated at this stage of development, we are confident that a full Altera demo holds great promise.

Systems

Mathematical system

To analyze Altera as a mathematical system, we must consider its elements, attributes, internal relationships, and environment, as outlined by Salen and Zimmerman (2004). These elements interact to create a complex system that goes beyond the sum of its parts.

Objects: In Altera, the fundamental objects include the player, non-playable characters (NPCs), collectibles, and various blocks. These entities are the building blocks of the system.

Attributes: define the properties of these objects. For the player, attributes encompass aspects like movement capabilities, respawn points, and health. Meanwhile, NPCs possess attributes tied to their roles, behaviors, and dialogue, differentiating between friendly and enemy NPCs. Collectibles have attributes related to their placement and quantity within the game. Blocks, whether damaging or non-damaging, share attributes tied to their positioning within the game world.

Internal Relationships: The internal relationships within the system mainly involve interactions between the player and other elements. NPCs offer goals and context, impacting the player's actions. Enemy NPCs pose challenges by damaging the player, altering their movement strategies. Collectibles influence the player's route and engagement, as each acquisition increases their score. Blocks affect the player's path, either guiding them or presenting obstacles.



Environment: The environment in Altera encompasses various elements like level design, background art, music, sound effects (SFX), and the narrative. It extends beyond physical attributes, influencing the player's mood and immersion in the game. These atmospheric components enhance the player's engagement and immersion.

Experiential System

Salen and Zimmerman (2004) posit that games are systems of experiences. In the case of *Altera: The Quest of Ogi*, the player's experience is shaped by interactions with the game world, emphasizing the experiential dimensions.

Objects: Looking at *Altera* as an experiential system shifts the focus to the players themselves as the primary objects of the system.

Attributes: Player attributes include the pieces they control and the current state of the game, including their choices and actions.

Internal Relationships: The interaction between players constitutes the internal relationships within the system. These relationships encompass strategic interactions, social dynamics, psychological aspects, and emotional communication.

Environment: In an experiential context, the environment extends beyond the game to include the immediate surroundings of the player, forming the context of play. This context in which the game is played could be in their home on their PC. In *Altera*, cultural elements are seamlessly integrated, enhancing players' emotional engagement. The game's themes, characters, and narratives draw from cultural norms, myths, and traditions, creating relatability. Dramatic plot twists evoke emotions, while player agency allows personal interactions, respecting preconceptions. Cultural references enrich authenticity and resonate with players, making *Altera* deeply engaging.

By considering *Altera* as both a mathematical and experiential system, we gain a comprehensive understanding of the game's complexity and how it engages players on multiple levels.

MDA-model

The game's aesthetics are shaped by a combination of dynamics, aligning closely with the principles of aesthetics outlined in Hunicke, Leblanc, and Zubek's MDA (Mechanics, Dynamics, Aesthetics) framework (2004). Among these dynamics, challenge and discovery prominently contribute to the overall aesthetic experience.

Discovery takes the center stage as the primary aesthetic, mirroring the game's central goal of finding the route back to the player's realm. The sense of exploration is a driving force throughout the game, guiding players through the captivating world. This aesthetic is reinforced through the incorporation of numerous collectibles scattered across the game's landscape, intertwined with the game's narrative, compelling players to embark on a journey of discovery.

In parallel, the game leverages challenge as a significant dynamic, significantly impacting the player experience and contributing to the challenging aesthetic. The level design presents intricate challenges, and encounters with various foes along the way intensify the game's difficulty. These elements align with the MDA framework, where mechanics related to player mobility, obstacle damage, and respawn systems contribute to shaping the challenging aspect of aesthetics.

These aesthetics are brought to life through a range of interactive aspects, in line with the MDA framework. Players engage in activities like collecting objects, experiencing opening sequences, and participating in in-game conversations with non-playable characters (NPCs). These mechanics amplify the feeling of discovery, providing players with a rich and immersive experience. Additionally, the systems controlling player mobility, obstacle damage, and spawn locations enhance the challenging aspect of aesthetics, creating a gameplay experience that captivates and challenges players.

By incorporating these aesthetics and dynamics, the game offers a balanced and engaging experience that aligns with the principles of game design and research as proposed by Hunicke, Leblanc, and Zubek (2004).

Process

The creation of Altera began with a workshop focused on ideation. We initially started with the word “building,” and from this, we brainstormed and developed the idea for a game where players would build and collect resources to prepare for battles with bosses. However, this concept became too complex, and some of the ideas we generated were challenging to implement. As a result, we decided to simplify the game to make it more manageable and to work more effectively with certain game mechanics.

To refine our brainstorm, we initiated a second brainstorming session to help us envision what a level would look like and what elements, such as collectible NPCs, would be included in the game. The results of this brainstorming session can be seen in (Figure 3).

Some of the items, like power-ups, were not implemented in the game due to time constraints. Our primary focus during development was on the main character, the inhabitants of the game world, and the elements of danger.

Following this ideation phase, we concluded that it was essential to create a clear list of the game’s necessary features and the reasons behind our choices. This step was taken to ensure that all team members shared a common understanding of our objectives. The resulting list includes:

1. 2D games

As designers, we believed that opting for a 2D game was a wise choice, primarily due to its suitability for our artistic vision where we wanted to give the player a sense of nostalgia. We also decided to go with the 2d

game because the ID group never worked on a video game and we wanted to take out some of the complexity that a 3D game could have.

2. Platform

Our decision to incorporate platforming elements, including various levels, was motivated by our desire to appeal to different types of players. We recognized that some players are motivated by achievement, while others are driven by exploration. The platforming aspect offered a structured and engaging experience, allowing achievement-oriented players to conquer challenges and exploration-focused players to discover hidden secrets within the game world. This diversity in gameplay experiences was essential for us to create a well rounded and captivating gaming environment. In the diagram (Figure 2) explains how the story and the structure of the game in a platform way help reinforce the story.

3. Collection Mechanism

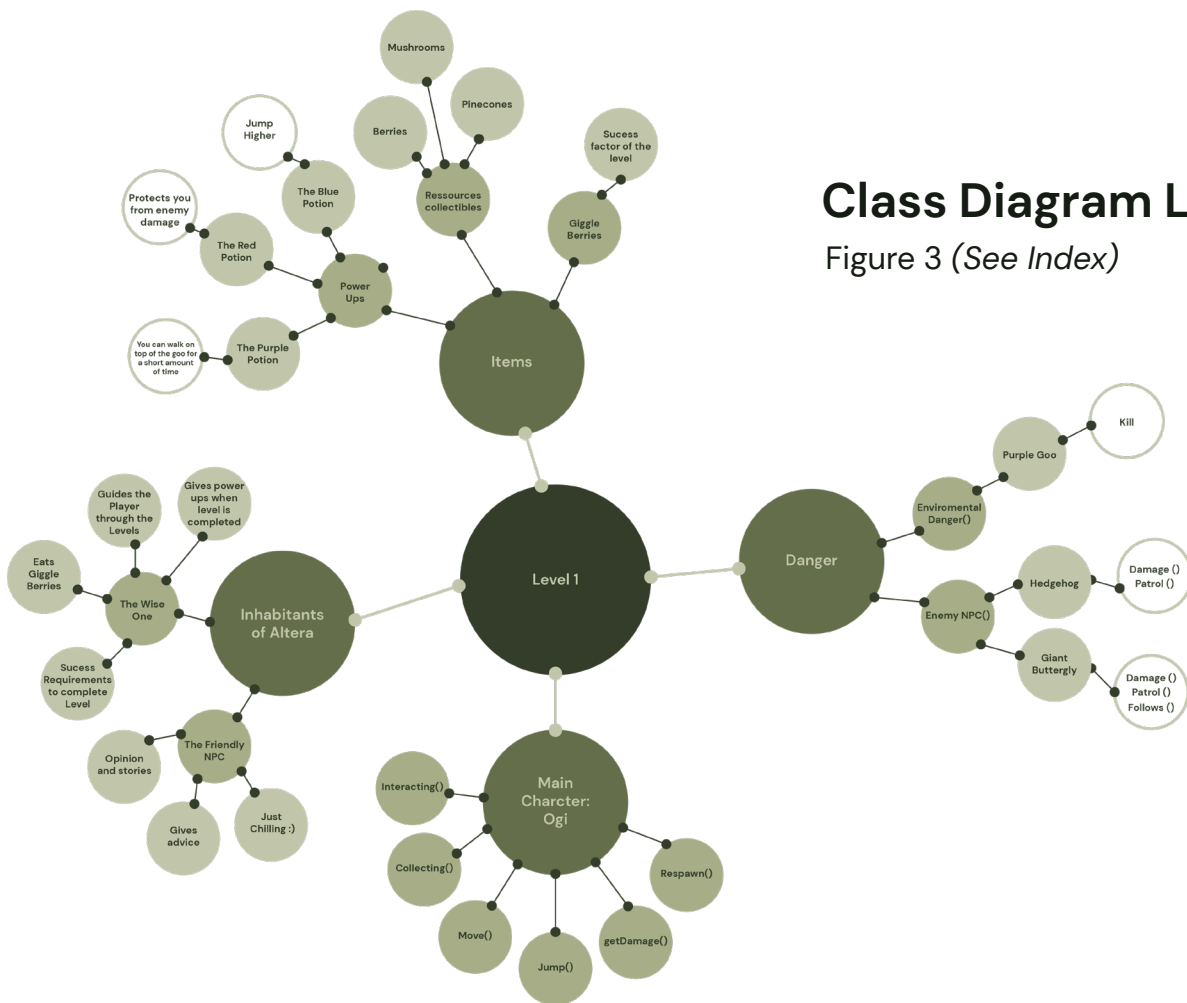
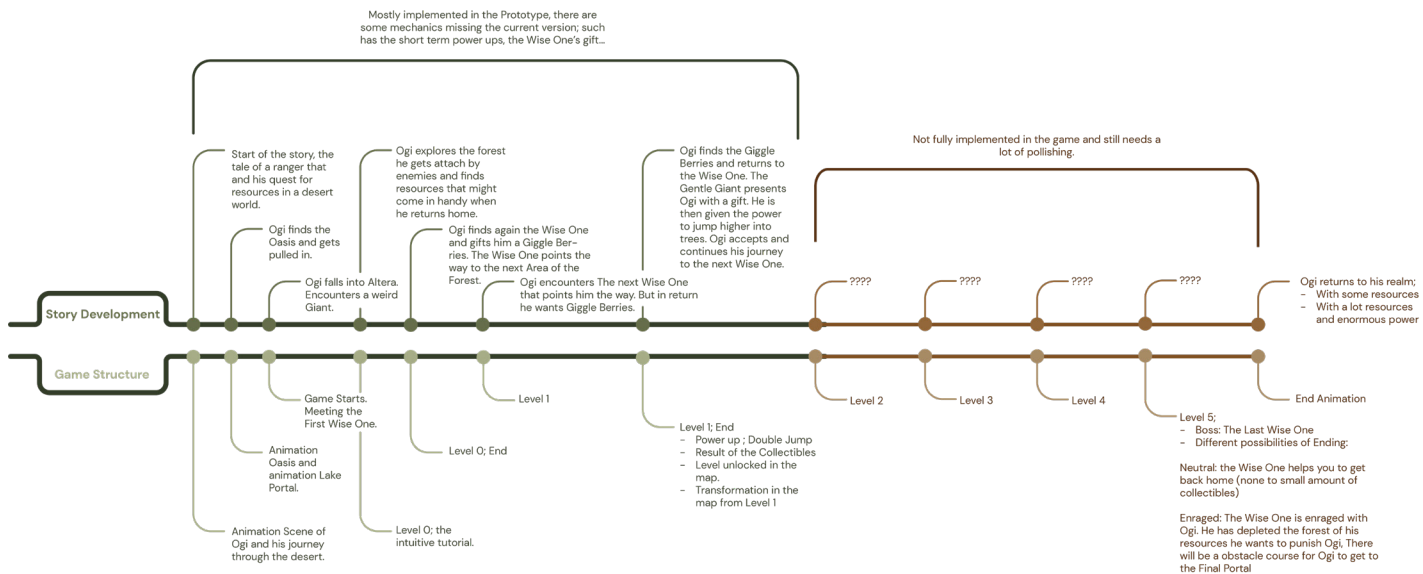
We agree to have a collection mechanism as an integral part of the game’s design. This decision stemmed from our understanding of player psychology. By including collectibles, we aimed to provide external motivation to players, encouraging them to keep playing and exploring the game world. Collectibles create a sense of accomplishment and reward, making players feel a sense of progress and achievement to reach their final goal.

4. Moving jumping

To maintain simplicity in character movement, we made the decision to restrict it to left and right movement and jumping. The diagram (Figure 4) illustrates our ideation for the mechanics of these movements within the game.

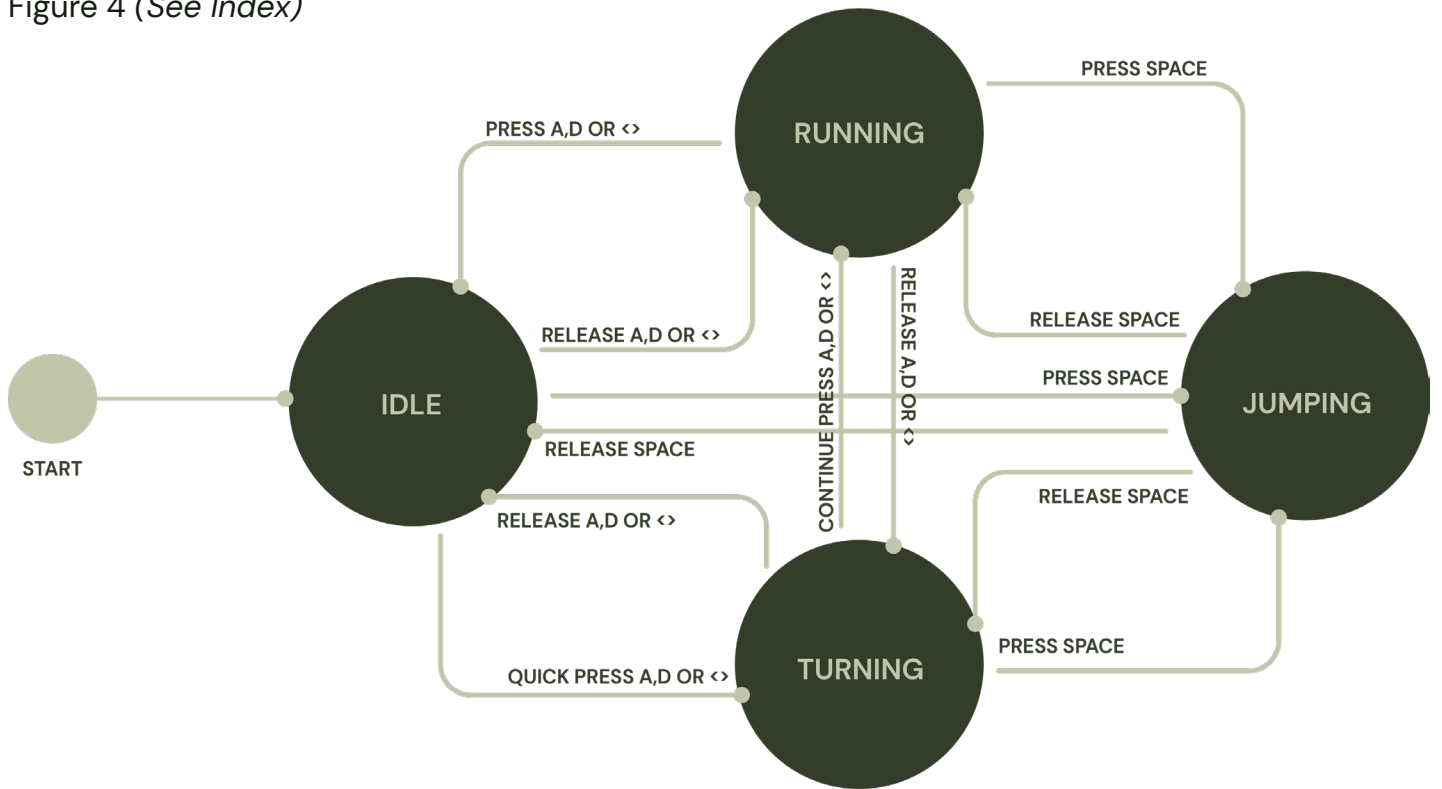
Story development in the game structure

Figure 2 (See Index)



FSM Modeling

Figure 4 (See Index)



5. Pixel art

Our decision to utilize pixel art stemmed from several key considerations. Firstly, we aimed to instill a sense of nostalgia in players, drawing upon the aesthetics of classic video games. Pixel art possesses a unique charm that can transport players back to the early days of gaming, creating a feeling of familiarity and warmth. Secondly, we believed that pixel art seamlessly aligned with the indie game style we aimed to encapsulate. It allowed us to craft a visually distinctive and cohesive art style that would set our game apart in the competitive gaming market.

To achieve this, we initiated the creation of two mood boards (Figure 5, 6) which can be seen below. These mood boards were independently developed by two individuals without prior communication, and yet, when presented to the rest of the team, they exhibited striking similarities. This convergence provided us with a strong sense of direction for the aesthetics, particularly regarding color choices and character design.

6. Mechanics Process

In the course of our development, we diligently engaged in iterative processes to enhance various facets of our game. Our choice of Unity, due to its user-friendly nature and ample learning resources, allowed us to structure our work efficiently with the C# scripting language.

At the outset, we initiated our project with a 2D platformer template. However, we soon identified the need for substantial modifications. The default health system and character movement did not align with our game's vision. Consequently, we undertook a comprehensive overhaul of the codebase, introducing new scripts and mechanics.

To facilitate our collaborative efforts, we employed GitHub, providing an effective platform for individual work. By creating distinct branches for each team member, we ensured that our contributions remained organized. Periodic convergence meetings

allowed us to synchronize our work, resulting in the seamless integration of various features. This approach enabled us to maintain productivity even when working remotely, despite some team members' initial unfamiliarity with GitHub. Thanks to the support of their peers, they swiftly mastered its operations.

Our approach to the camera system was another pivotal component of our development. Extensive testing and deliberations led to the selection of an optimal camera style. Multiple iterations culminated in a hybrid solution that perfectly balanced our objectives. Our camera tracks the player while maintaining proximity to predefined anchor points within the game environment. We implemented smooth transitions between these anchor points using linear interpolation (Lerp), yielding a visually pleasing and user-friendly camera system.

Regarding in-game adversaries, specifically a vigilant hedgehog and a menacing giant butterfly, we conducted exhaustive assessments to fine-tune their behavior. Various prototypes were tested to determine the most suitable behavior patterns. The final design, while not without minor imperfections, effectively adheres to our game's core objectives. The hedgehog now adheres to a designated patrol route, adding predictability and challenge, while the giant butterfly consistently hovers near the player, contributing to the game's overall difficulty and engagement.

This iterative approach, marked by continuous refinement and adaptability, has played a pivotal role in shaping "Altera: The Quest of Ogi" into an immersive and thought-provoking gaming experience. It underscores our unwavering commitment to delivering a polished and engaging product.

Figure 5

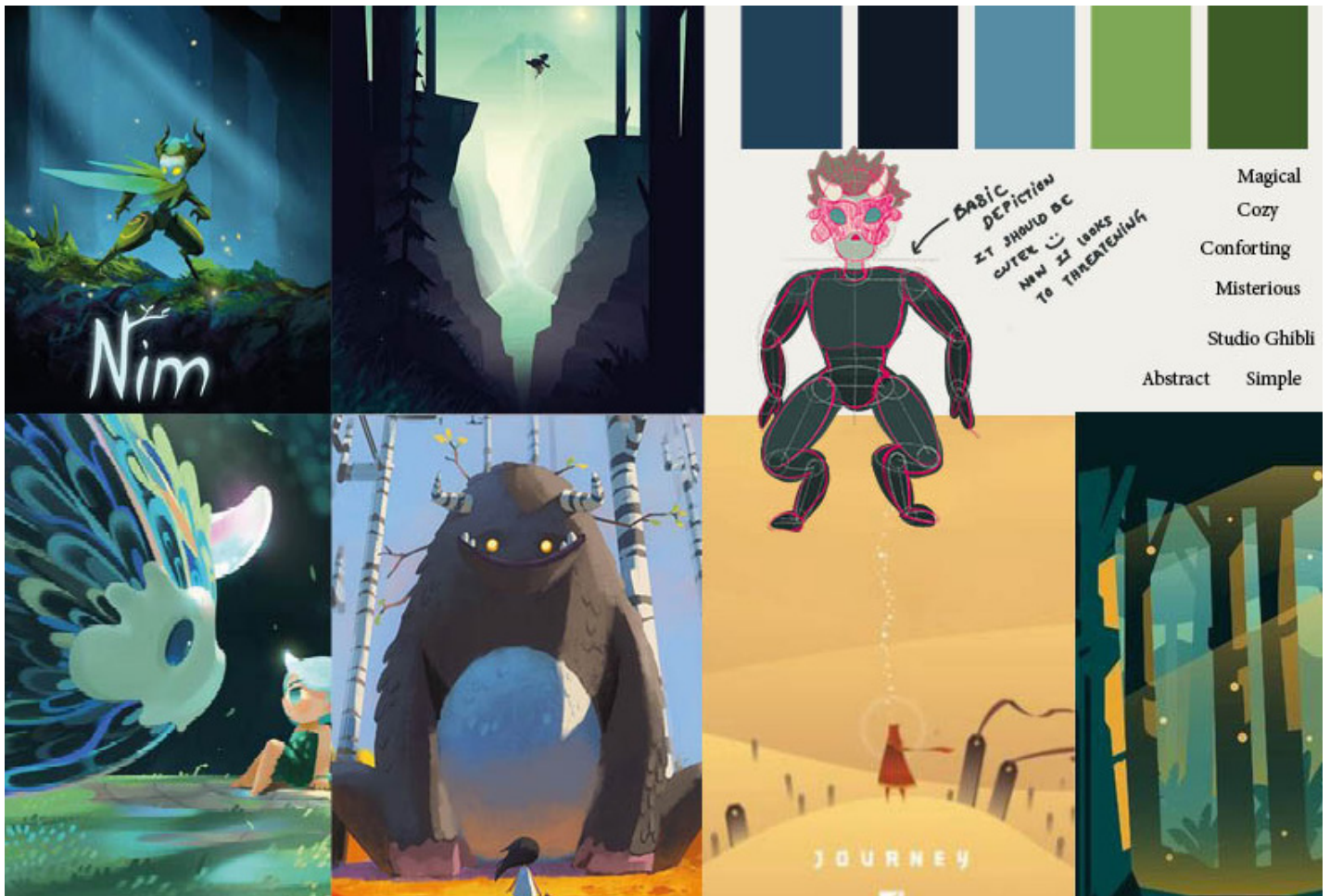


Figure 6



Future improvements/ Recommendation

Levels design

At present, our game is constrained by two levels: an introductory stage and a challenging/final level. To enrich the player's experience and align it with the narrative's essence, we recognize the imperative need for a more extensive array of levels. These additional levels will serve to vividly illustrate the world's gradual degradation as players collect fragments of its history. Moreover, the new levels will feature a progressive difficulty.

Tile Map

Our game's tile map design currently leverages a color scheme harmonious with the lush forest background, fostering a sense of exploration. However, this harmony presents a significant gameplay issue since it blurs the line between walkable and non-walkable blocks. In certain parts of the levels, it is hard to distinguish the two, which impedes smooth navigation. In the photo below you can see this issue..



To address the current confusion in the tile map, we have a solution that will make it easier for players to understand and engage with the game. We will create two types of tile maps. The first type will have walkable tiles with vivid and distinct colors, making them stand out from the background. The second type will include non-walkable tiles that share the same color scheme as the background but may have subtle visual cues or patterns to differentiate them from walkable platforms. This approach will seamlessly integrate walkable platforms with the background while ensuring players can easily tell which areas are navigable and which are not.

Character Visibility

In response to feedback about character visibility, we are dedicated to strengthening the player's connection with the main character. To achieve this, we will adjust the background's lighting and color scheme. By darkening the background or using lighting techniques that highlight the main character, we aim to make the main character more prominent. Additionally, we will ensure that the main character's color scheme effectively contrasts with the background. This approach will address the issue of players losing track of the main character during gameplay and provide a visually engaging experience.



Boss/Ending

The game's current structure lacks a definitive conclusion, leaving the player's journey without a fulfilling endpoint. To rectify this, we propose the creation of a final level, culminating in a climactic showdown with a boss character. This encounter will not only provide closure to the narrative but also underscore the central theme of environmental degradation due to greed, adding emotional weight to the story. The final level in our game is a crucial element that contributes to a more satisfying gaming experience. This ultimate stage will feature an intense boss battle, providing a conclusive ending to the story. This battle underscores the game's central theme of environmental degradation due to unchecked greed, adding depth and emotional impact to the narrative. It also gives players a sense of accomplishment, ensuring that the game leaves a lasting impression.

Enemy Types

Diversifying the roster of adversaries is central to our plan for a richer gaming experience. Variety in enemy types is crucial for player engagement, and we currently only feature two adversaries: butterflies and hedgehogs. To enhance gameplay, we intend to introduce a wider variety of enemies, including creatures like trolls and sentient trees, each with unique behaviors and attack.

Player Choices

Incorporating player choice is a key feature we aim to implement to deepen player engagement. Player decisions will significantly impact the game's progression and the state of the forest. For example, choices related to collecting resources will have tangible consequences, resulting in either the forest degrading or thriving based on the player's actions. This dynamic choice system will make players feel more invested in the game's world and offer replay value with multiple endings and outcomes, encouraging players to explore different paths and consequences.

In conclusion, our plans for enhancing various aspects of the game promise to create a more engaging and immersive gaming experience. We are addressing concerns related to the tile map, camera speed, character visibility, and enemy types, ensuring that players can navigate the game world with clarity and enjoy an enriching narrative. The addition of a climactic boss battle in the final level and the incorporation of a dynamic choice system will further deepen player engagement, leaving a lasting impact and encouraging replayability. The dynamic system will allow player decisions to influence the state of the forest and the game's storyline, with consequences such as degradation or improvement based on their choices regarding collectibles.

Score for Collectables

To better align with the achiever gamer, we would like to implement a score system that will help this type of player understand how much they have achieved. Currently, there is not a count of how many collectibles the player has collected, which can make this type of gamer less interested in playing, as it doesn't find it interesting why they are collecting the collectibles. A score system that counts how many times you respawn the collectable and the time you took to complete the level can help have score comparisons with other players, adding a competitive element and fostering social interaction among players, enhancing the overall experience.

In conclusion, our plans for enhancing various aspects of the game promise to create a more engaging and immersive gaming experience. We are addressing concerns related to the tile map, character visibility, and enemy types, ensuring that players can navigate the game world with clarity and enjoy an enriching narrative. The addition of a climactic boss battle in the final level and the incorporation of a dynamic choice system will further deepen player engagement, leaving a lasting impact and encouraging replayability. Additionally, the implementation of a score system for collectibles will cater to a wider range of player preferences and enhance the overall gaming experience.

Conclusion

“Altera: The Quest of Ogi” is a remarkable game that artfully engages players, delivering both immediate excitement and lasting engagement. Designed to cater to The Explorer and The Achiever player types, it weaves cultural elements, plot twists, and player agency into a captivating narrative, accommodating diverse player preferences.

Furthermore, “Altera” aligns with the aesthetics framework outlined by Hunicke, Leblanc, and Zubek (2004), emphasizing discovery and challenge. The game immerses players in the thrill of discovery through collectibles and presents challenging level design and adversaries.

The game’s journey began with ideation, initially complex but later streamlined to simplify game mechanics due to time constraints. Key decisions included opting for a 2D game, introducing platforming elements, and embracing pixel art for a unique visual style.

Iteration and collaborative tools like Unity and GitHub were instrumental in development, leading to an effective camera system and finely tuned adversaries. This iterative approach underscores our commitment to delivering a polished product.

In summary, “Altera” promises an engaging and replayable gaming experience with expanded levels, improved tile maps, enhanced character visibility, a climactic boss battle, diversified enemies, and a score system for collectibles. These enhancements aim to leave players with an unforgettable gaming journey.

Individual Reflections

Arda

This course has provided me with a valuable foundation in game design, enabling me to develop a deeper appreciation for the various components that contribute to a well-rounded gaming experience. I began the course with limited knowledge of the game mechanics, different player types, and other theoretical knowledge required to craft a successful game. However, through the lectures, discussions, and this project, I gained a comprehensive understanding of the game design process.

My primary focus in this project was the programming of some essential elements of the game. Particularly the creation of the movement mechanics of the player character, the camera system (even though it wasn’t perfect at the end) and the save and load mechanics. Even though I had almost never used Unity or GitHub before, the tools were easy to learn and use. My previous knowledge on C# gave me some important insights on how to use Unity effectively.

I would like to reflect on some of the things I would have done differently during the course. First of all, I would have liked to be more involved in the writing of the story. I worked on the software side of the project as we initially had only two programmers and three artists. Another change I would make is to work more on the music and art of the game. I designed a draft version of a splash screen but never finalized it. I would have also liked to work more connected with my team, as in working on something in the same room. The group work was mostly task distributions and meetings.

Overall, I am pleased with my contributions to the Altera project and the knowledge and skills that I have gained from this course. I am grateful for the opportunity to have

worked on this project with such a talented and dedicated team. I am confident that this foundation will serve me well in my future endeavors.

Erkin

Thanks to this training, I now have a solid understanding of game design and the difficulties involved in creating games. Despite possessing some experience of Unity, I had never truly completed a fully functional game with more than 2 people. For game jams and other projects, I had always begun but never usually finished, and whenever I finished it was usually a solo project. My introduction to understanding more about the theoretical aspects of game production began with this course, since before this I usually just randomly winged how I did games. Most of the course has been devoted to me working with Unity to create different game elements, like level design, enemy implementation, user interface, enemies, some art, and other game design related stuff. I would say that my primary duties for this project were implementation and game development. It was a learning experience having specific people work for the art and specific people work with the Unity aspect of game dev, as a person who dabbled in both sides, I was mostly at the Unity part of the project. I was glad to have teammates like Teoman on the Unity side which helped us create a positive feedback loop when needed and all the other teammates who were there to help when needed. Other than that, I could have spent a lot more time on the project and missed the first two weeks due to some unlucky circumstances, which made it harder for me to start my job, however I did try my best. So, it was overall a great learning experience, which taught me more about game dev teams and theoretical game designs.

Helena

During the Design for Games and Play 1 course, I engaged in the process of game design, considering various aspects such as psychology, society, technology, history,

mechanics, dynamics, and aesthetics to create a well-developed video game. I also became familiar with Unity and pixel art, which we chose for our game's visual style. I learned to use Aseprite, a pixel art software, and had the opportunity to co-manage our group during the game's development.

Throughout the game development, I developed skills in analyzing games from different angles using models like the MDA model and Bartle's player types. I gained a basic understanding of Unity and Aseprite. On a personal level, I learned to be more patient when coding and discovered my passion for pixel art.

While I learned a lot in a brief time, there were areas for improvement. My key takeaways from the course are to always keep the bigger picture in mind during project development and to avoid getting carried away by possibilities. I plan to focus more on the main goal in future projects. I also regret not spending more time exploring Unity due to my limited coding knowledge. I aim to integrate Unity into my future projects and prioritize the creative process.

Despite the need for further learning, I intend to apply the knowledge gained on this course to our group project, which aims to help teenagers understand themselves better. I believe concepts like motivation theory and the MDA model will be useful in creating a helpful and enjoyable tool. Additionally, I have a strong interest in technology's role in inclusive education, with a focus on using play as a tool to promote equality and accessibility, given that play is a universal human capability.

Giovanni

This course provided me with a comprehensive perspective on game design and the intricacies involved in game development. At the outset of the course, I found myself with limited understanding of how games are meticulously crafted. I was unfamiliar with the different player types, game mechanics, and components required to create a truly engaging and well-designed game.

At the start, I was unsure about how this course would benefit my development as a designer. However, as the course unfolded, I began to contribute more effectively. My primary focus was on the aesthetics of the game, particularly in creating background art and ideating for the tile map. During my spare time, I also experimented with Unity, though I didn't achieve the level of success I had hoped for.

While I wished to make a more substantial contribution to the team, there were times when I felt out of sync with my group members. As a result, I took on responsibilities related to project management within our game development process. In the future, I aim to become a more integral part of the group, ensuring better alignment with the team's standards. I acknowledge that much of the work I contributed primarily impacted the ideation phase and did not make it into the final version of the game. To reach this goal, I plan to enhance my knowledge of game design, with a particular focus on the programming aspects of game development while also delving deeper into aesthetics.

While I am pleased with the end result of the game, I acknowledge that my personal contribution may not have been as significant as I had hoped. This makes me hesitant to refer to the game as my own or one that I significantly contributed to creating.

Teoman

I now have a thorough understanding of game design and the complexities of game creation thanks to this course. Even though I had some basic knowledge of Unity I had never actually finished a fully fledged game. I had always started and abandoned small games for game jams. This course was also my gateway into learning more about the theoretical side of game development. I have spent most of the course working in Unity creating various game aspects such as the design of the level, the implementation of the enemies, the UI, the pause menu, level transitions, and some other stuff. I would say

that implementation and game development was my main responsibility in this project. Thanks to collaboration with my fellow teammates, especially Erkin I got some much-needed feedback on my work and was able to learn from my mistakes. However, contrary to my other game experiences this time I also got to work on some art and music. I was able to draw and animate an enemy and learn music software to create the background music. This increased my talent palette and gave me important knowledge for the future.

Tessa

Looking back on our collaboration with the Computer Science students, it all began on a pretty high note. The team was buzzing with enthusiasm and trust. My role in this adventure was pretty diverse – think character design, cooking up engaging dialogues, animating our main character, setting the mood with some moodboards, getting the story rolling with storyboards, picking the right tunes, and throwing in some Unity experimentation for good measure.

As we journeyed deeper into the project, we hit a few bumps in the road. Communication issues and misunderstandings about our roles started to pop up. We had initially divided tasks between the Computer Science and Industrial Design students, but we realized that the details were a bit fuzzy. That created a noticeable gap between our groups, and it definitely showed in the final product.

But you know what they say, it's never too late for a turnaround. As the project deadline loomed, we all recognized that it was now or never. So, we rallied, put in the extra hours, and reopened the lines of communication. In that last-minute scramble, we managed to fix a bunch of the issues that had been bothering us. It wasn't perfect, but we pulled off a more cohesive final product, and I'm honestly pretty pleased with how it turned out.

Before we dived into this project, I had some pretty big misconceptions about game

of complexity and confusion. But when we started working with Unity, I was pleasantly surprised by how user-friendly it was. It felt like the doors to game creation swung wide open. On top of that, I had no clue about the deep well of theory and research in game design. Now, I'm excited to explore all of that in my future game-making endeavors.

Looking in the mirror, I've realized there's room for improvement in my design and teamwork skills. Better communication and a deeper understanding of the technical side of game development are definitely on my to-do list. And clear roles within a team? That's now on my radar for future collaborations.

So, in a nutshell, this reflection is all about the power of teamwork, knowing who's in charge of what, and just plain talking to each other. I've learned a lot, grown a bit, and shifted from thinking game development was rocket science to realizing it's actually quite accessible. I'm stoked to carry these lessons into my next projects and dive into the world of game design theory and research.



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