

**The Influence of Realistic versus Stylized Art
Styles on Player Preference and Immersion**

**LIEW WAN RU
BACHELOR OF ART (HONOURS) GAME
DESIGN**

**FACULTY OF CREATIVE INDUSTRIES
UNIVERSITI TUNKU ABDUL RAHMAN**

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(Declaration)

I, Liew Wan Ru declare that this thesis report entitled “The Influence of Realistic versus Stylized Art Styles on Player Preference and Immersion” is my own original work except for the citation from the references. The report has not been accepted or submitted to any party and will only be submitted to Degree of Bachelor of Science (Honours) Game Design under the University Tunku Abdul Rahman.

Signature: LIEW

Name: Liew Wan Ru

Date:21/5/2026

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Abstract

This study explores how different video game art styles, particularly realistic and stylized visuals, influence player preference and immersion. The research aims to understand which art style players prefer and how visual design affects their overall gaming experience. A quantitative research method was used, where a questionnaire was distributed online and a total of 19 valid responses were collected. The data was analyzed using a Likert scale to evaluate player opinions on various aspects such as visual impact, character design, environment design, emotional connection, and immersion.

The findings show that stylized art styles are generally more preferred by players, especially in terms of visual attractiveness, memorability, and emotional engagement. Many respondents agreed that stylized visuals are more distinctive and help them connect better with game characters. In terms of immersion, stylized art styles also showed positive results, as players reported a stronger sense of detachment from reality and engagement within the game world. However, some responses remained neutral, suggesting that immersion is influenced by multiple factors beyond visual style alone.

In addition to the research, a game titled *Once Upon A Wish* was developed as a practical application of the findings. The game adopts a stylized storybook art style, combining hand-drawn textures, vibrant colors, and interactive book-based mechanics. These design choices reflect the research results, demonstrating how stylized visuals can enhance player experience through emotional storytelling and interactive immersion.

Overall, this study highlights the importance of aligning visual style with player expectations and game design goals. It shows that while stylized art styles are highly effective in improving engagement and immersion, the success of a game ultimately depends on how well its visual design integrates with gameplay and narrative elements.

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Chapter 1: Introduction and Overview

1.0 Proposal of Team

The first proposed project, *Once Upon A Wish*, is a 2.5D puzzle game that places players inside an interactive, living pop-up storybook.

The second proposed project, *Museum of Letters*, is a 2D story-driven point-and-click puzzle game infused with magical elements.

The first proposal, *Once Upon a Wish*, has finally been selected by the team. This is due to the proposal's increased likelihood of being profitable as a franchise.

1.1 Introduction

The game tells the story of a young protagonist (the player character) receive a mysterious pop-up book which was once a gift from his mother.

One day, its pages shift, its drawings breathe, and the Traveler (storybook's main character) begins to speak to him. The protagonist learns that the Traveler is on a journey to help others fulfil their wishes. By granting 999 wishes, the Traveller will be able to realize his own.

The protagonist will assist the Traveler in overcoming various puzzle challenges to complete this journey of wishes.

As the journey draws to its end, the protagonist gradually uncovers the truth behind the book, the wishes, and the cost hidden beneath its gentle colours.

1.2 Game Goal and Objective

Assist the Traveler to complete his journey, discover the true meaning behind the story. Explore the levels, find out the hints to solve the puzzles, and fulfill the wishes for each chapter.

1.3 Unique Selling Points

- A Living, Interactive Pop-Up Storybook featuring various types of puzzles.
- Colourful and hand-drawn storybook art style.

1.4 Target Audience

- Pc player
- Teens & Adults
- Players who enjoy narrative-base puzzle game
- Players who enjoy cartoonish or storybook art style
- Players who enjoy simple control game

1.5 Hardware and Software Requirements

- OS: Windows 10+, 64 bit
- Processor: Intel Core i3-8100 or AMD Ryzen 3 +
- Memory: 1 GB RAM
- Graphics: GEFORCE GTX 1060 +
- Storage: 1 GB available space

1.6 Target Market

A 2.5D puzzle game called Once Upon a Wish. The market research focuses mainly on 2D games and puzzle games because there is less information available on 2.5D puzzle games.

Over 1.2 billion individuals frequently play puzzle video games, according to market analysis by Amra and Elma (2025). According to a different Grand View Research report (n.d.), the market size for puzzle games is expected to reach 54.19 billion USD by 2030. Apart from that, narrative games are the primary genres that are becoming more popular, according to a report on the Steam Database.

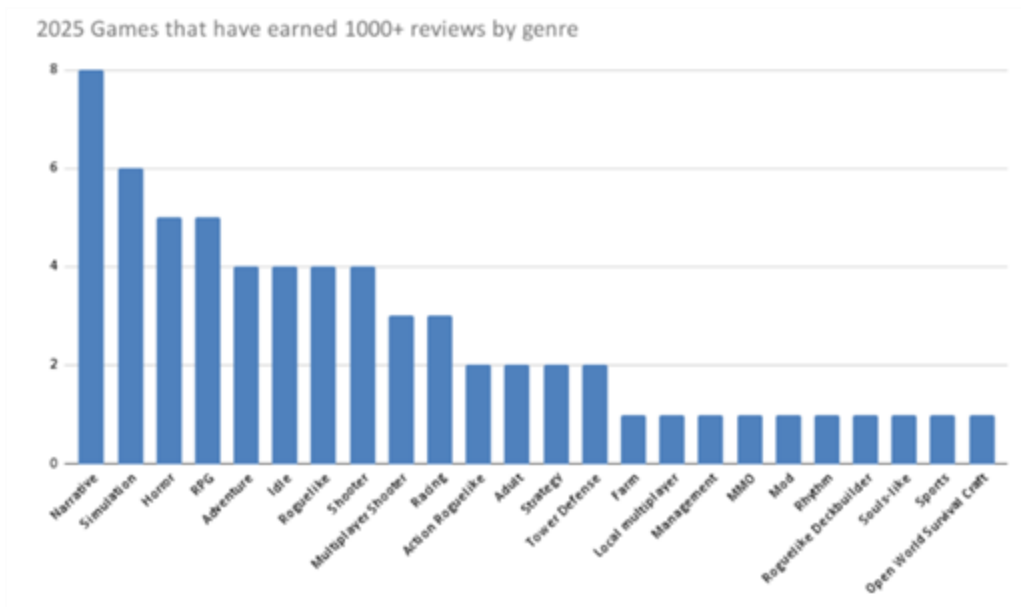


Figure 1.6.1 Marketing Research Chart

Source: <https://howtomarketagame.com/2025/04/11/the-hit-games-of-early-2025/>

Apart from that, the most popular genres are those of illustrated art. This information is consistent with the team's Once Upon a Wish visual style, which makes use of illustrated storybook-type materials.

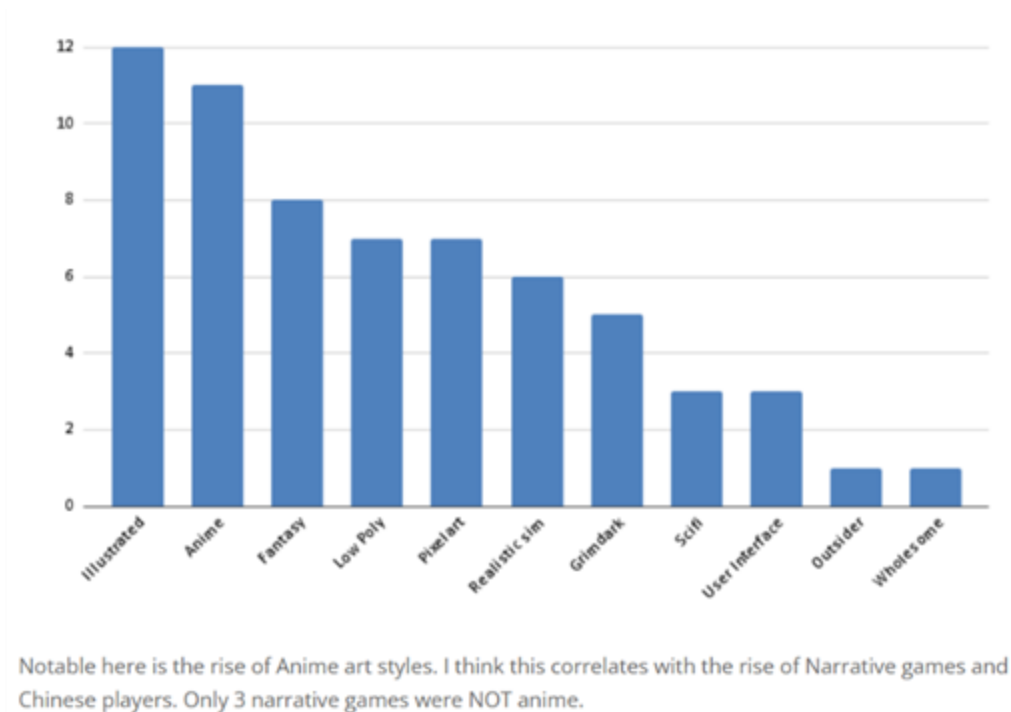


Figure 1.6.2 Marketing Research Chart

Source: <https://howtomarketagame.com/2025/04/11/the-hit-games-of-early-2025/>

In addition, the team has investigated the approximate cost of Once Upon a Wish. According to research on Steam's page, 2.5D independent puzzle games with comparable gameplay and aesthetics often cost between RM20 and RM40. For instance, Storyteller (2023) costs RM24, whereas UMAMI (2025) costs RM31.

Other than that, the costs are RM40 (Gorogoa, 2017), RM8.50 (The Book of Hiro, 2023), and RM39.00 (Little Misfortune, 2020), based on the references and inspirations for this game.

Therefore, it would be appropriate if the game costs between RM28 and RM35.

1.7 Game Mechanics

- Dialogue System

Player can interact with the characters in game to get hints based on their dialogues

- Interact with the game world

Player use point and left click to interact with the game environment and the objects

- Move the book

Player uses middle mouse click and drag to pan the book

Player uses middle mouse scroll to zoom in and out the book

- Inventory system

Player can collect item from game scene to solve the puzzles

1.8 Game Design

1.8.1 Level Design

The level design of this game is based on recreating a real three-dimensional pop-up storybook experience. Each level is designed as a “page” of a storybook that the player can explore, interact with, and manipulate. Instead of a flat environment, the game world unfolds like a physical pop-up book, where different layers, objects, and scenes appear as the player progresses.

This design allows players to feel as if they are inside a living storybook. Elements such as folding pages, collectable items, and layered scenes are used to create depth and interactivity. Players are able to zoom and interact with different parts of the book, which enhances both exploration and puzzle-solving.

In addition, each level is designed to match the narrative of the chapter. The environment, puzzles, and interactions are closely connected to the story, allowing players to understand the plot through gameplay rather than only dialogue. This helps create a more immersive experience, as players actively participate in unfolding the story.

Scope

- FYP 1
 - Tutorial
 - Chapter 1-Puzzle 1

- FYP 2
 - Chapter 1- Puzzle 2 and 3
 - Chapter 2 - Puzzle 1,2 and3
 - Chapter 3- Puzzle 1

First Sketch

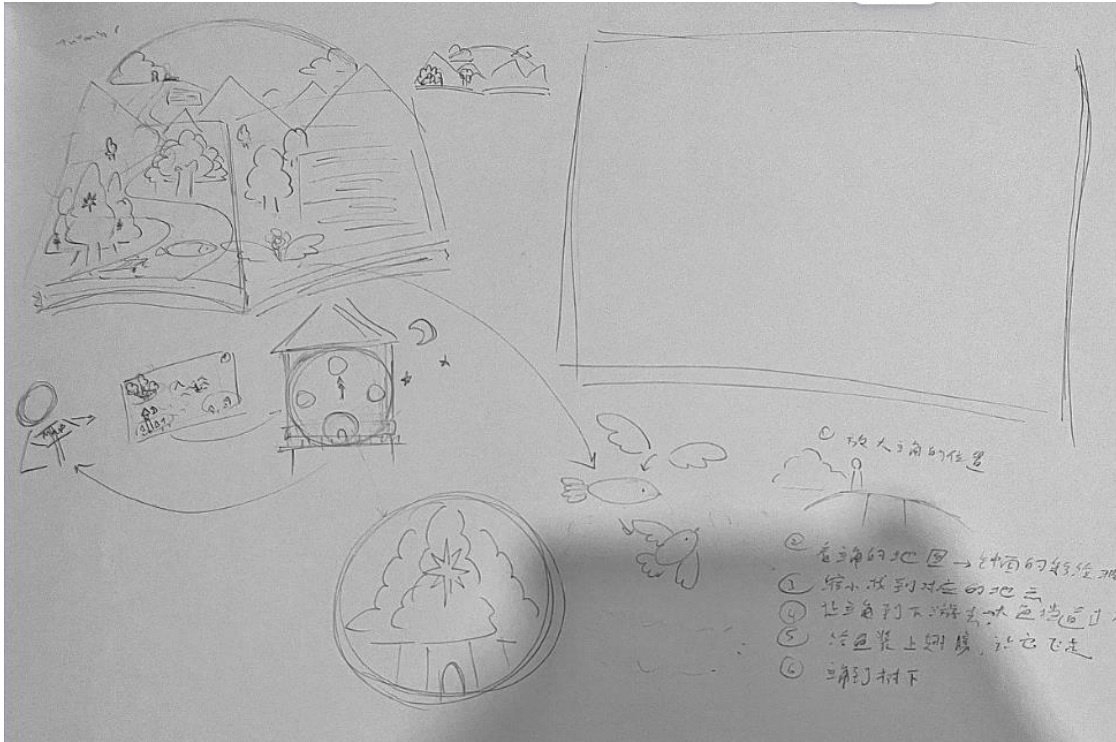


Figure 1.8.1.1 Tutorial Level Design Sketch

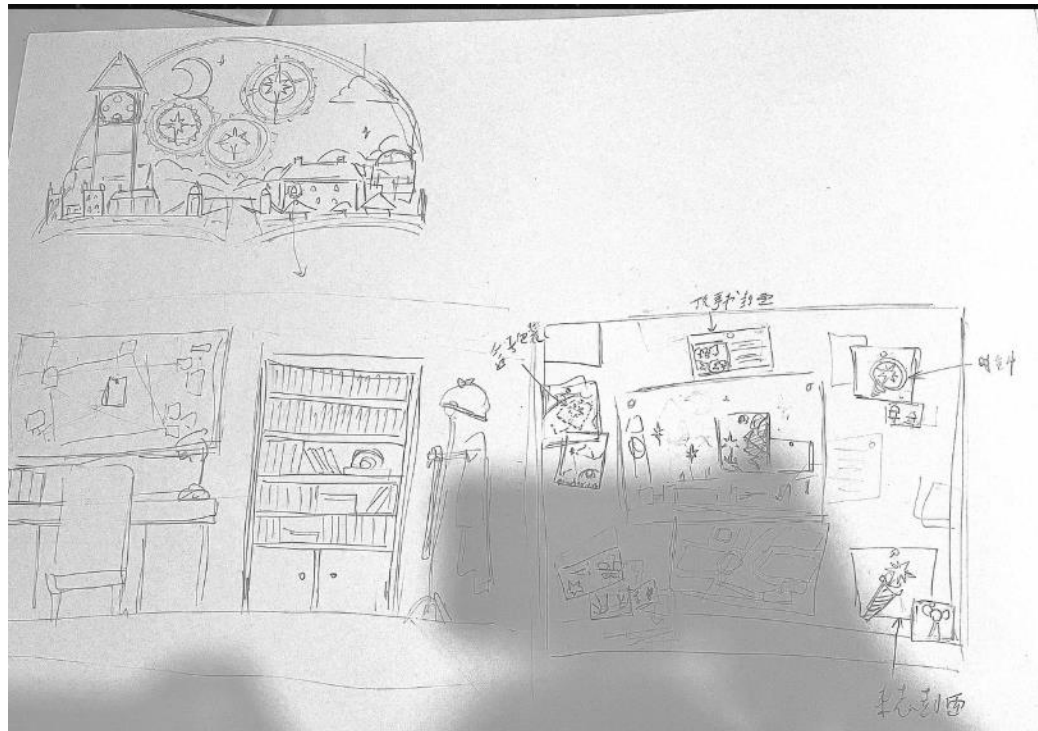


Figure 1.8.1.2 Chapter 1 - Level Design Sketch

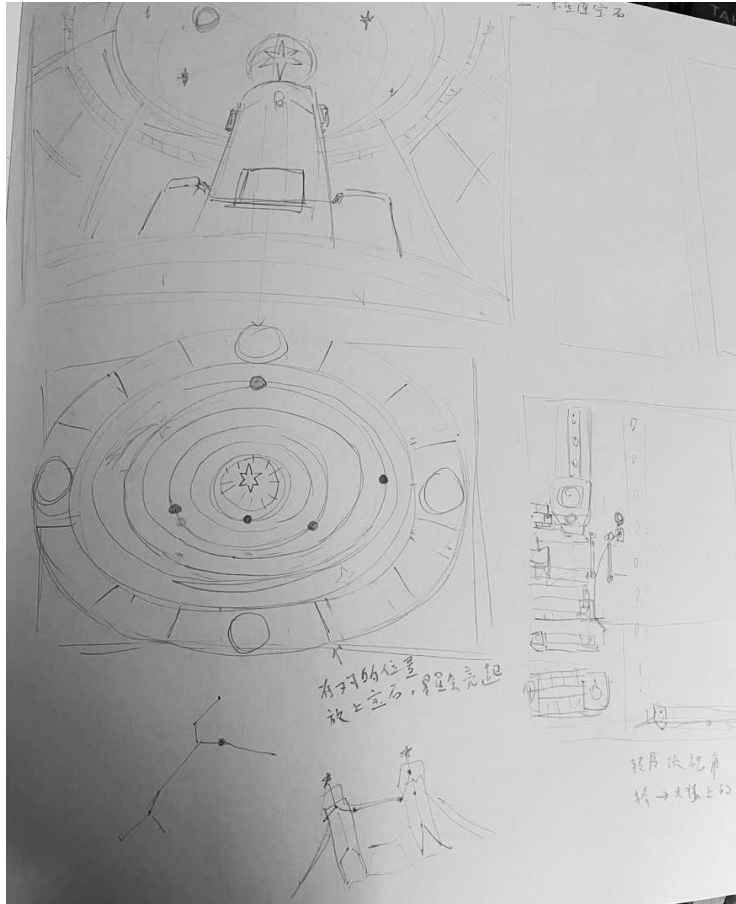


Figure 1.8.1.3 Chapter 1- Level 2 Design Sketch

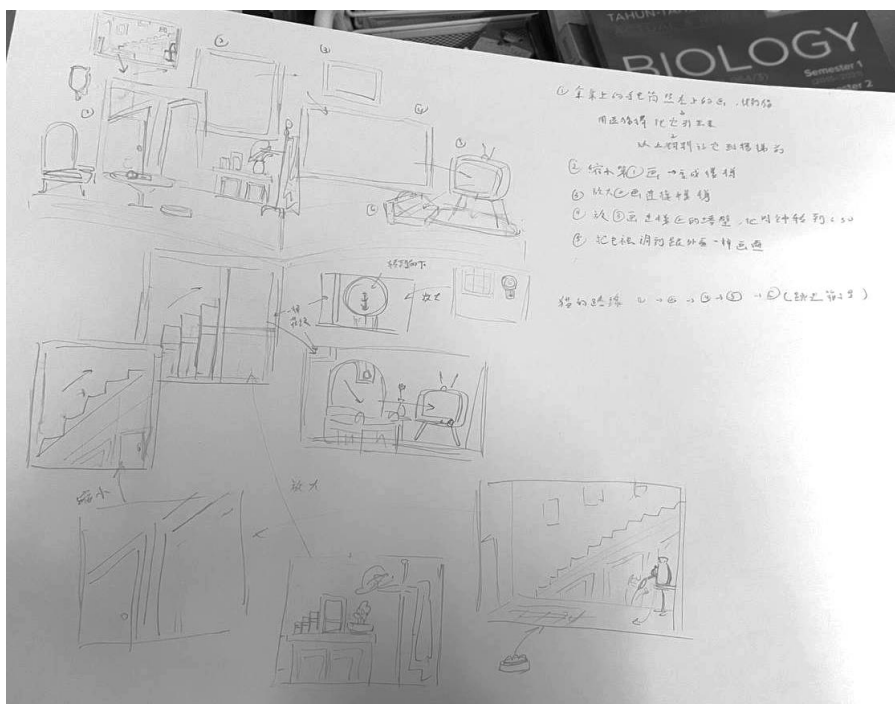


Figure 1.8.1.4 Chapter 2- Level 4, 5, Design Sketch



Figure 1.8.1.5 Chapter 2- Level 6 Design Sketch

Figure 1.8.1.6 Chapters 3- Level 7 Design Sketch

1.8.2 Final Design In Game

Tutorial

In this level, players learn the basic controls of the game and become familiar with the game systems and mechanics.



Figure 1.8.2.1 Tutorial

Chapter 1

Level 1: Detective's Room

The player assists the protagonist as a detective assistant to solve puzzles on the clue board.



Figure 1.8.2.2 Detective's Room

Level 2: Observatory

The player helps the protagonist repair the projection system in the Observatory.



Figure 1.8.2.3 Observatory

Level 3: Thief's Hideout

The player works with the protagonist to solve the puzzles left behind by the thief and find the final story-related item.



Figure 1.8.2.4 Thief's Hideout

Chapter 2

Level 4–5: World in a Painting

The player helps the protagonist assist a little girl in finding her lost cat.



Figure 1.8.2.5 Level 4–5: World in a Painting

Level 6: Gift Box

The player helps the protagonist piece together a gift given to the girl by her father.

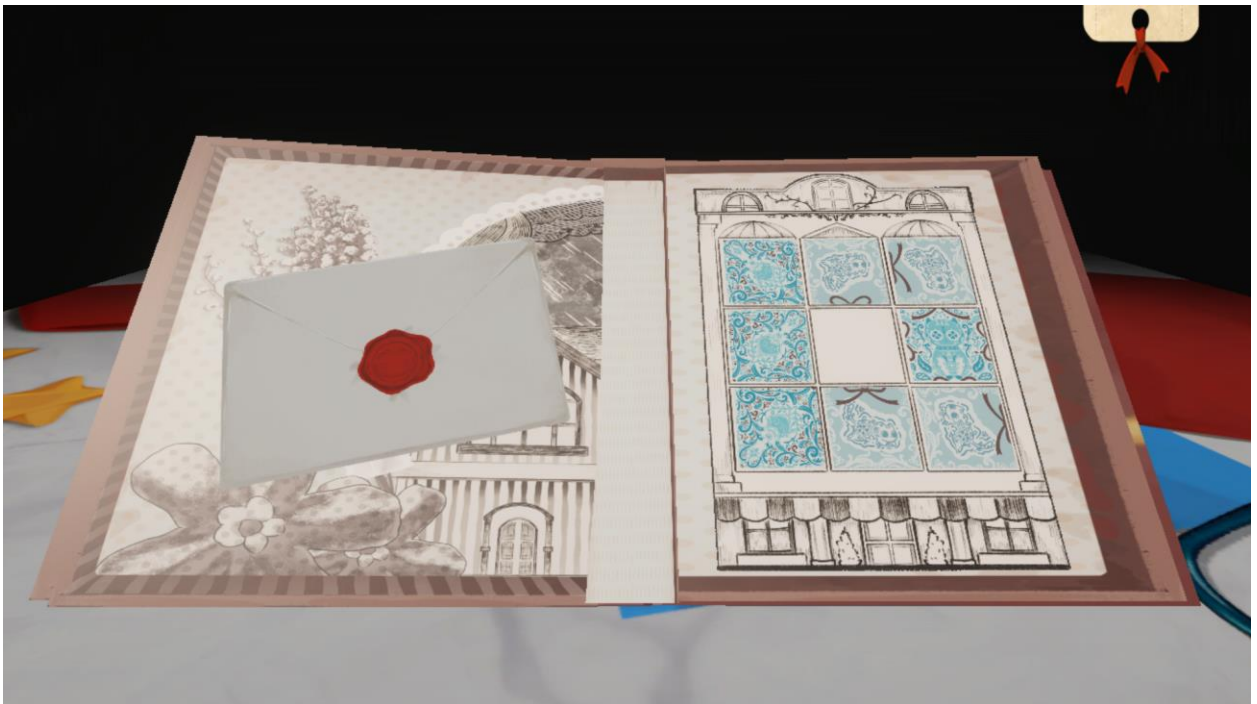


Figure 1.8.2.6 Level 6: Gift Box

After Puzzle Completion: Father's Friend's Studio

Figure 1.8.2.7 Before Puzzle Completion: Father's Friend's Studio.

Level 7: Inside the Painting

The player helps the protagonist guide the character in the painting to leave the lighthouse.

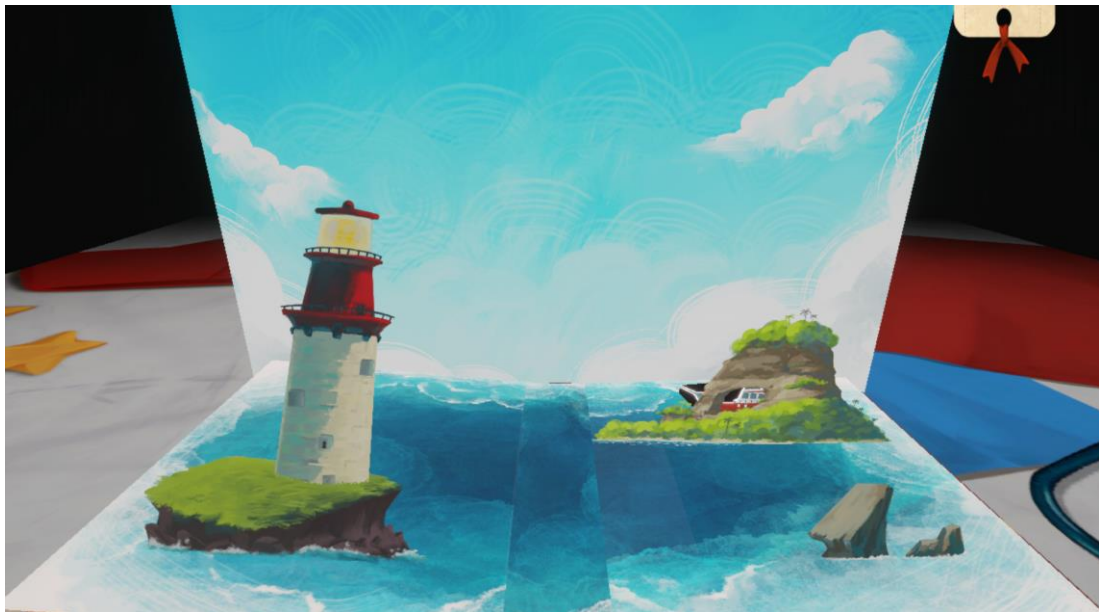


Figure 1.8.2.8 Level 7: Inside the Painting



Figure 1.8.2.9 Light Tower Window 1

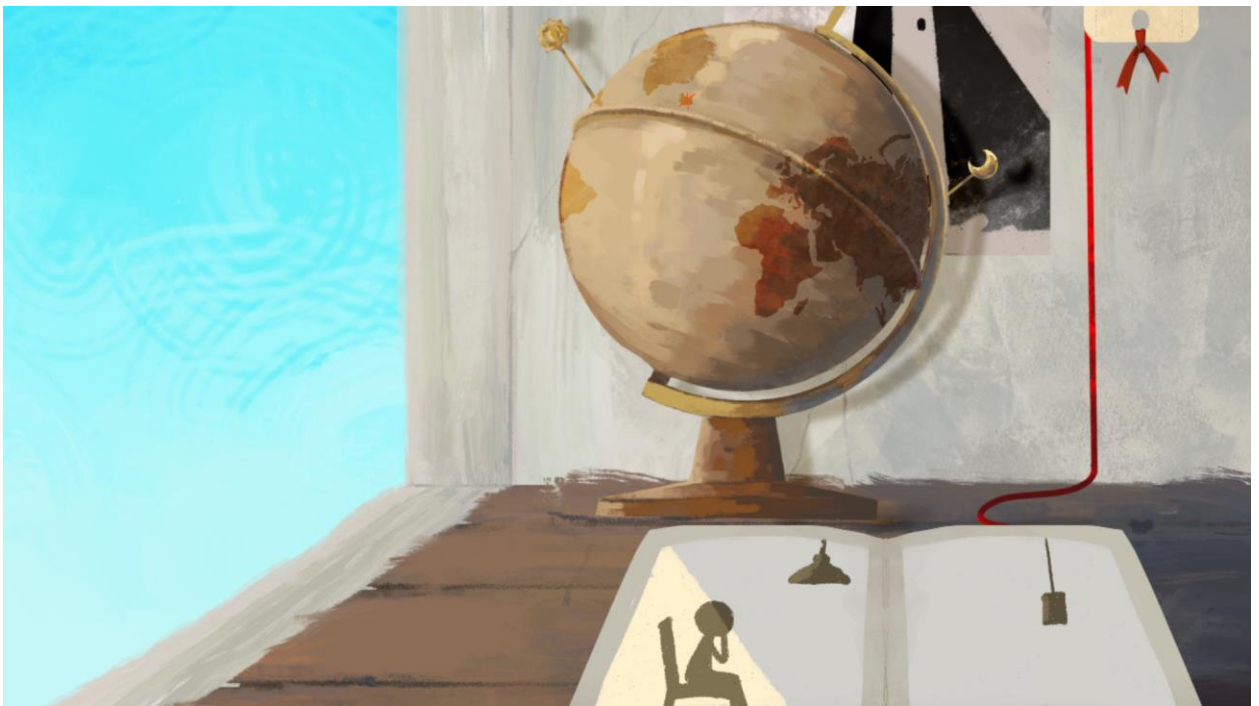


Figure 1.8.2.10 Light Tower Window 2



Figure 1.8.2.11 Light Tower Window 3

After Puzzle Completion: Father's Friend's Studio



Figure 1.8.2.12 After Puzzle Completion: Father's Friend's Studio

1.8.3 Audio

The visual effects used in this game are sourced from copyright-free assets obtained from platforms such as Pixabay and YouTube. These resources are used to enhance the overall visual experience while maintaining accessibility and efficiency during development.

The background music used in the game is sourced from copyright-free music libraries provided by Bilibili creators, specifically “乌鸦Produce” and “星空魔法师.” These audio resources are selected to match the emotional tone and atmosphere of the game, supporting the storytelling and enhancing player immersion.

1.9 UI Design

1.9.1 Main Menu

The main menu provides players with the core navigation options:

- Play: Starts a new game or continues the story.
- Load: Allows players to load previously saved progress.
- Settings: Opens the settings interface for customization.
- Credit: Displays information about the development team and resources used.
- Exit: Closes the game.

To enhance the player’s first impression, the main menu includes animated elements. The buttons appear with smooth transitions, creating a dynamic and magical storybook feeling. This animation helps draw the player’s attention while reinforcing the theme of an interactive book.



Figure 1.9.1.1 Main Menu

Credits Screen

The credits screen displays information about the development team and external resources used, including:

- Game designers and artists
- External assets such as 3D models, music, and sound effects

This screen is presented as a certificate-style page, reinforcing the narrative theme of a completed story.



Figure 1.9.1.2 Credit UI

1.9.2 Settings Menu

The settings interface allows players to customize their gameplay experience. It is divided into three main sections:

Audio Settings

- Master Volume
- Background Music Volume
- Sound Effects Volume



Figure 1.9.2.1 Audio Setting Menu

Display Settings

- Fullscreen toggle
- Resolution selection
- Refresh rate adjustment



Figure 1.9.2.2 Display Setting Menu

Graphic quality settings

- Control Settings
- Zoom sensitivity
- Zoom preference (invert or normal scroll direction)



Figure 1.9.2.3 Control Setting Menu

The settings menu also includes subtle animations to maintain visual consistency. Decorative elements such as rotating gears and moving or glowing stars are animated, making the interface feel more alive and integrated with the storybook world.

1.9.3 Pause Menu

The pause menu allows players to temporarily stop the game and access quick options:

- How to Play: Displays gameplay instructions.
- Settings: Opens the settings menu.
- Main Menu: Returns to the main menu.

This interface is designed to look like a layered paper card, maintaining the handcrafted storybook aesthetic.



1.10 Game Flow Chart

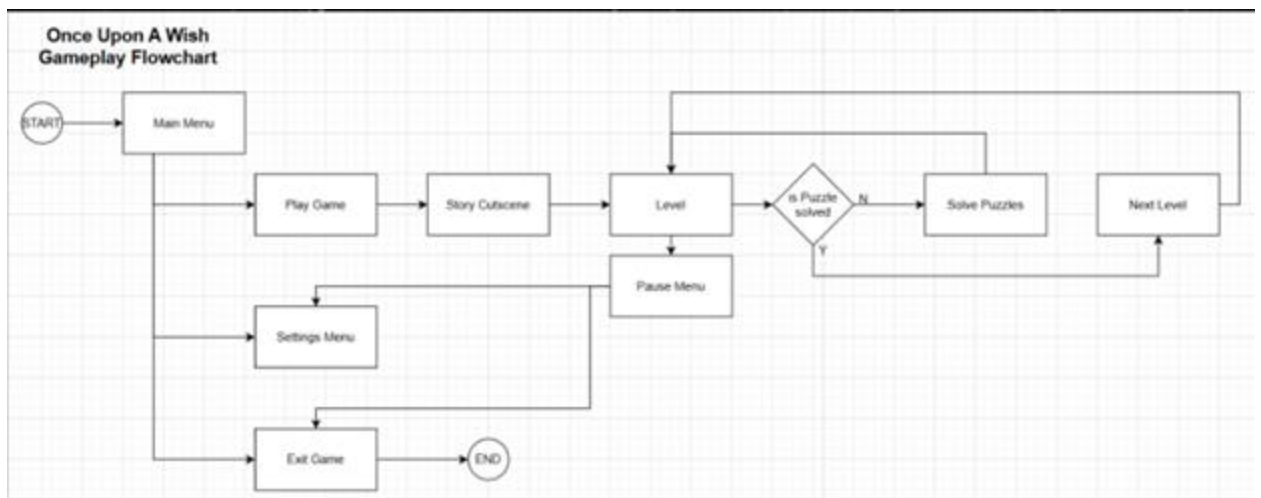


Figure 1.10.1 Gameplay Flow Chart

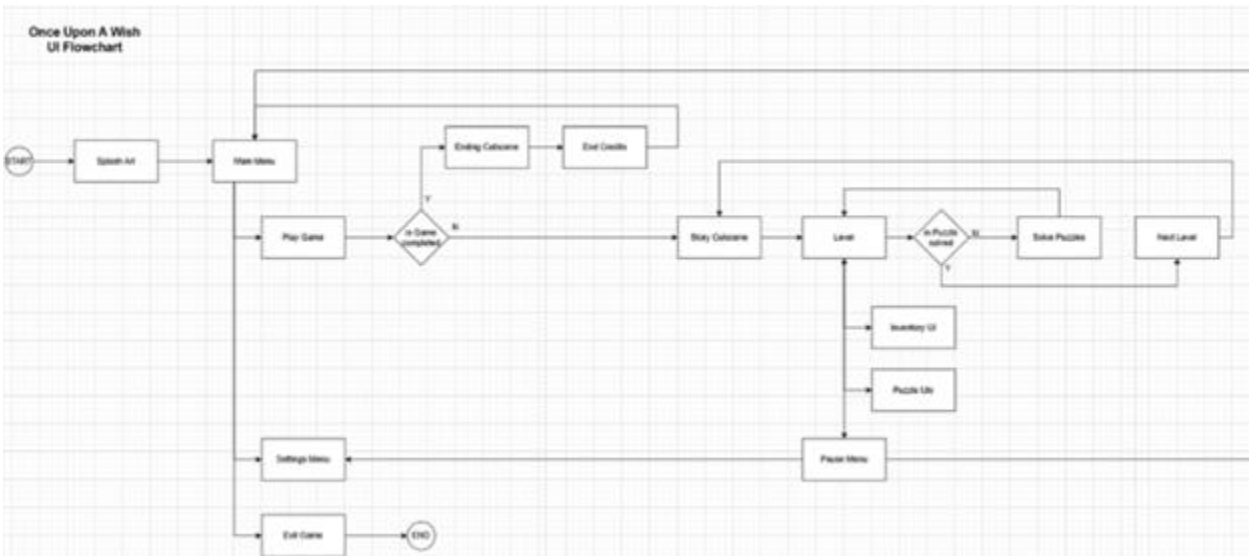


Figure 1.10.2 UI Flow Chart

1.11 Gantt Chart

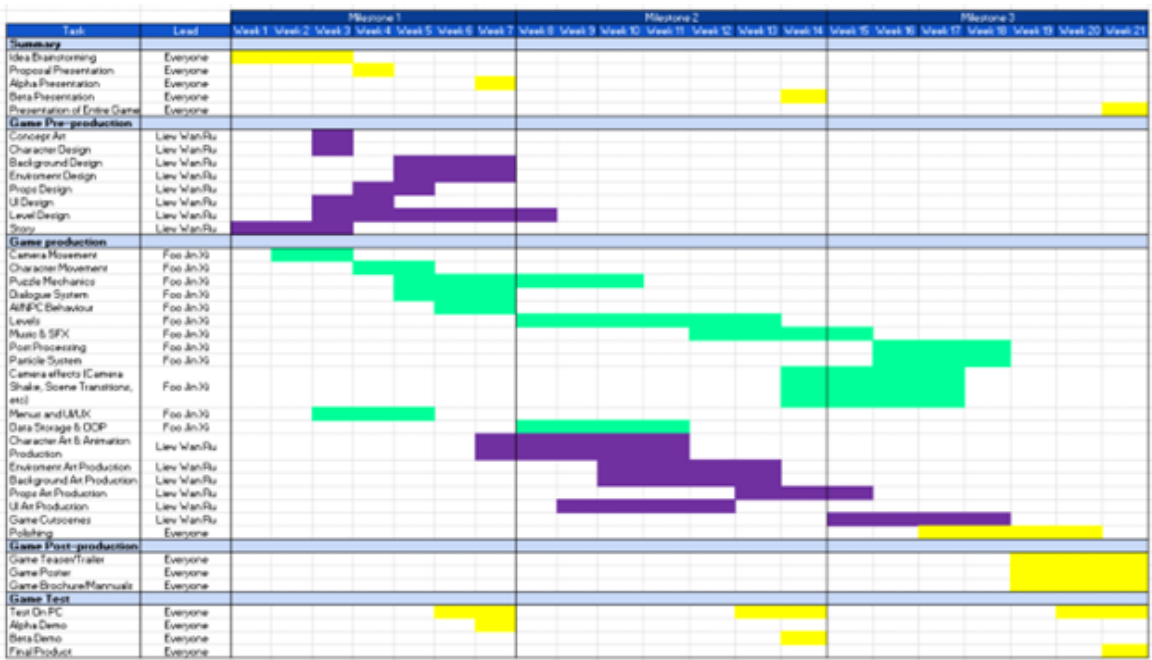


Figure 1.11.1 Gantt Chart

1.13 Research Introduction

The art style of a video game is an important aspect of a player's experience. It can be one of the first things a player encounters when playing a game, and can make or break their expectations, preferences, and engagement (Isbister, 2016). Various art styles provide various methods of representing the worlds, characters and feeling of video games.

Realistic art styles are those that are trying to duplicate a real-world image in terms of texture, lighting and proportions, which can help give the game a more authentic and present feel (McMahan, 2003). Stylized art styles, however, can include exaggeration, simplification and creative visual design and provide a unique and expressive experience that can be more visually distinctive and emotionally engaging (Togelius et al. 2011).

Today's video games are becoming more and more complex, and designers are turning into more and more interested in the perception and immersion brought about by various visual styles. It has been demonstrated that the visual presentation can greatly impact the player's perception of a game world, and the emotional response to its characters (Birk et al., 2016). However, although it is generally assumed that more realistic visuals equates to more realistic, stylized visuals might offer clarity, memorability and emotional connections.

Hence, this study is intended to examine the effect of various art styles of video games on player's preference and immersion. This study uses a qualitative approach to understand the role of art style in the overall player experience in modern video games, through examining their reactions to realistic and stylized visuals.

1.14 Research Objectives

This research aims to explore the way different video game art styles, particularly realistic and stylized visuals, influence player preference and immersion. Focusing on various factors that impact player's preference on game art choice.

Additionally, the research aims to examine how different art styles contribute to players' sense of immersion and overall gaming experience. By studying these aspects, the research seeks to better understand how game art style choices affect player experience in modern video games.

1.15 Research Questions

1. Which art style do players prefer in video games?
2. How does art style influence player immersion?

1.16 Research Hypotheses

1. Players are more likely to perceive stylized art styles as more visually impactful and attention-grabbing than realistic art styles.
2. Players show a stronger preference for stylized art styles in character design compared to realistic art styles.
3. Players show a stronger preference for stylized art styles in environment and world design compared to realistic art styles.
4. Stylized art styles are perceived as more visually distinctive and memorable than realistic art styles.
5. Stylized art styles enable stronger emotional connections between players and game characters compared to realistic art styles.
6. Stylized art styles allow players to feel a greater sense of detachment from reality and immersion in the game world compared to realistic art styles.

Chapter 2: Background Study/ Literature Review

2.1 Background

Video game art style is one of the key factors contributing to the success of a game. It's often one of the most apparent aspects of a game and a major consideration that players consider when evaluating their general experience. Game visuals, before you even begin to play, can make a big difference in players' initial perceptions of a game. The appearance of a game will have a massive impact on players' feelings about that particular

video game. It has an impact on players' sense of immersion, emotions, focus, and enjoyment (Author, 2025).

If it is well designed, the art style can help to build an imaginary game world, grab players' attention, and enhance the emotional interaction between players and the game environment. In today's video games, the use of various art types is to make completely different experiences. There are some games that have realistic graphics, which are supposed to be as close as possible to the real world. Other games feature anime or stylized art styles, which are characterized by exaggerated features, bright colors, and expressive character designs. Both methods are well-used in the gaming world and have specific merits in terms of impact on player involvement and perception.

Realistic Art Style

For games, the term "realistic art style" is defined by the ability to accurately portray the real world, using a detailed 3D model, advanced lighting, and high-quality textures (Liubchuk, 2025). This kind of art style is aimed at closely replicating the appearance of the real world. It is based on high degrees of detail, believable lighting, realistic character models and realistic environments with advanced 3D rendering techniques. Realistic art styles are often employed to create a sense of realism and immersion for the player, by trying to replicate real-life images. This is often used in narrative or simulation games to give the environment and effects a more realistic feel and effect.



Figure 2.1.1 In-game Screenshot from The Last of Us Part II

The Last of Us Part II, created and launched by Naughty Dog in 2020, is known for its incredibly realistic presentation. The game features state-of-the-art motion capture systems, realistic character models, and immersive environments, ensuring a cinematic and emotionally charged experience. This realistic art style will add to the authenticity of the story and increase players' immersion in the game world.



Figure 2.1.2 In-game Screenshot from Cyberpunk 2077

As created by CD Projekt Red in 2020, Cyberpunk 2077 has a very detailed and visually complex futuristic city, depicted with medium to high detail. The game's realistic

visuals are showcased by the advanced lighting, environmental design and detailed character models that are set in an urban area called Night City. All these factors are important for a visual immersion effect, where realism meets science fiction.

Stylized Art Style

Stylized art is a style of art that is not realistic, but uses exaggerated or abstract elements to produce art that is visually striking and imaginative. (Argentics, 2021). Stylized art is art that goes beyond the point of realism, and features over-drawn character proportions, lively color schemes, hand painted textures, and fantastic environments. Stylized game art gives game developers artistic freedom and allows them to convey themes, emotions and stories in unique ways. Stylized graphics also tend to be seen as more timeless since they're not as reliant on graphics rendering advances to be appealing. A good example of this is the stylized art style of many popular games, which produce memorable and expressive game worlds, where artistic identity is more important than realism.



Figure 2.1.3 In-game Screenshot from The Legend of Zelda: Breath of the Wild

Released in 2017, Legend of Zelda: Breath of the Wild is a game developed by Nintendo with a large open world full of imaginative creatures and environments. The visual style is cel-shaded and hand-painted for a colorful and unique look. This artistic

approach enhances the game's visual identity and contributes to its immersive and memorable player experience.



Figure 2.1.4 Official Key Visual for Version 4.0 from Honkai: Star Rail

Honkai: Star Rail, a game developed by HoYoverse and released in 2023, has vibrant colors and expressive character designs and is inspired by anime. The game features a variety of environments and characters, all of which are visually appealing and contribute to the overall atmosphere of the game. This stylized gameplay helps to give the game a visual identity and adds to its engaging and immersive player experience.

2.2 Literature Review

2.2.1 The impact of visual style on player's preferences

Visual style is an important aspect that can create an influence on a player's choices and choices in choosing video games. It is one of the first things that the player interacts with, setting expectations, emotional reactions and perceived quality. Visual style is not only a visual layer, but also a communicative layer that helps to transmit mood, narration tone, and game information that directly impacts how the player perceives and interacts with a game (Suranov, 2024).

There is no easy dichotomy between visual style and player experience: it's not just about realism or not. Photorealistic graphics can be used to increase the sense of space and the sense of "being there," but stylized graphics can often help to communicate a stronger visual message and build a stronger visual identity. Stylized techniques can also lower cognitive overload and direct players' attention to the action, potentially resulting in more fluid gameplay and engagement.

Further, visual preference alone has been identified as an important player engagement and enjoyment signifier. While certain visual factors (e.g., colour, form) might not have a statistically significant impact on engagement, players who prefer a certain visual style are likely to express greater enjoyment and involvement. This indicates that there is a significant role for subjective preference in the relationship between visual style and game play experiences.

Additionally, various visual styles might be more suited to particular viewers and types of games. Visual styles may be chosen by game designers depending on what they believe is expected of the player, with some styles being more attractive or suitable for players or gameplay. Even if visual style is well-designed, if it's different from what players expect, it can have a negative effect on player reception.

In general, the literature suggests that there is no one best visual style. Rather, a variety of factors such as emotional resonance, clarity, artistic coherence and personal taste determine the player preference. Hence, knowing players' preference of different visual styles is crucial for creating games that can successfully attract and engage players (Suranov, 2024).

2.2.2 Character Appearance and Player Preferences

The character design is playing a crucial role in player preference and engagement in video games. Specifically, the difference between stylized character and realistic character has been an important subject to learn about the effect of visual presentation on player perceptions. Realistic characters tend to use accurate proportions, detailed textures and capture movements of people to recreate their appearance, whereas stylized characters

will overdraw the proportions, shapes and expressions to be more artistic or interpretive (Maestri, 2006).

A stylized character design has one great benefit: flexibility in visual communication. Overdrawing may be done on facial features like big eyes or a more basic shape to make it easier to read, and to add more emphasis to the emotions. This clarity can enhance players' comprehension of character emotions and personality, fostering a stronger emotional connection and engagement. Realistic characters, on the other hand, are limited by the real world, where even the subtlest deviations from life-like facial expressions or movements can seem unnatural or disturbing.

One of the problems with realistic character design is the uncanny valley effect, which means that characters that look almost human but not exactly will create an uneasy feeling or eeriness (Trentini, Y. A. 2021). It has been demonstrated that gamers are very perceptive of slight discrepancies in realistic facial and gestural expressions, and that this can detract from immersion and emotional interpretation. This means that realism is meant to make things more believable, but if not done right, can lead to a decrease in player preference.

However, there are lower perceptual expectations for stylized characters. Stylized art styles are not meant to be a realistic depiction, so viewers tend to be more tolerant of inaccuracies. Furthermore, the larger and more unusual the facial features, the more noticeable and memorable they will be, potentially leading to better character recall and player impression. This can help to create a more visually strong identity and player retention.

There are also industry practices that will further support the effectiveness of stylized character design. In the world of big animation companies like Disney or Pixar, the importance of exaggeration and caricature is a fundamental rule to produce attractive and expressive characters. All of these techniques suggest that stylization can be more than

a constraint; it becomes a conscious and effective design choice that enriches the experience for audiences and makes it more accessible.

To sum up, the character design style has a significant impact on the players' perception, interpretation, and emotional connection with the game characters. In cases where realistic characters can improve immersion, stylized characters can be more emotionally expressive, memorable, and able to withstand design changes. Thus, it is crucial to know how players prefer stylized and realistic character design in order to direct the game art and enhance the player experience (Cunningham, 2013).

2.2.3 The Influence of Game Art Style on Player Immersion

The art style in games is a crucial factor to consider in video games as it can influence player immersion. Immersion is defined as a state one enters into where they are extremely engrossed and feel like they are “inside” the game. One of the critical factors that influence this experience is visual presentation, which directly impacts players' perception of the game environment, characters, and the overall atmosphere (Suranov, 2024).

The studies indicated that the realistic art style can boost the sense of presence to make the space more real. With high fidelity graphics and detailed textures and lighting, a believable environment is created, letting the player feel like they are physically in the virtual world. This is consistent with the spatial presence theory which suggests that realistic visual stimuli contributes to increasing the sense of realism and enhances immersion (Skalski & Tamborini, 2007).

Stylized art styles are also important in immersion however in a different manner. Stylized visuals are used to express information more clearly by using simplified shapes, pronounced features and contrast between light and dark. This can alleviate cognitive burden and focus players on gameplay and narrative components, aiding the creation of flow and ongoing involvement (Suranov, 2024).

Stylized art styles, moreover, can be useful in attaining emotional immersion. Stylized visuals can enhance character expression, mood and atmosphere since they don't have to be accurate in the real world. This empowers the developer to direct the emotions more directly and thus increase the players' emotional commitment and binding with the game world.

One of the other significant factors is the consistency in art style and game design. Research suggests that immersion is highest when the visual style is consistent with the gameplay mechanics, narrative themes and overall tone. For instance, for a game that is driven by simulation or story, it might be better to go with a realistic image, but for a game that provides an abstract experience or a game of pure fantasy, a more stylised image could be better. The style of art and the way a game is designed may create a conflict in the player's sense of immersion and lessen their engagement (Hunicke , 2004).

In conclusion, literature suggests that both the realistic and stylized art styles have a positive impact on player immersion, albeit in different ways. Realistic art styles are mainly used to create spatial presence and realism, while stylized art styles help to increase clarity of the spatial, emotional expression, and engagement. Thus, the level of success that an art style can have hinges on its ability to facilitate the intended player experience and game design.

Chapter 3: Methodology

3.1 Sampling

The purpose of this study is to explore the preference and immersion differences between two respective art styles of video games: realistic and stylized. Target Population: The population of this research will be the people who had experience with playing video games. 19 responses were received from an online questionnaire.

The sampling technique of this study is convenience sampling due to the participants being recruited online. The questionnaire was shared via social media like Discord, WhatsApp and Instagram, and the voluntary participation of those who could be reached by the researchers was allowed.

The research is of quantitative type because the data is collected by the use of structured questionnaires with the questions based on Likert scale. The questionnaire consists of two types of questions: one aimed at measuring participants' preferences for various art styles, and the other aimed at measuring the extent of experience participants feel when interacting with different art styles.

Participants' inclusion criteria were those who had played video games before. It is important that the participants know the visuals of the game and can give informed answers about their preferences and experiences of being immersed in the game.

3.2 Scope

The objective of this research is to explore how different video game art styles influence player preference and immersion. The study aims to understand how players respond to realistic and stylized visuals, and which art style they prefer in different aspects such as character design, environment, and overall visual impact.

In addition, this research seeks to examine how different art styles affect players' sense of immersion during gameplay. It focuses on how visual elements contribute to player engagement, emotional connection, and the overall gaming experience.

3.3 Limitations and Delimitations

The main limitation of this research is the small number of participants. The survey was only shared within a limited group of people such as friends and classmates, as the researchers do not have a large social media reach. Another limitation is the short time given for data collection. Due to time constraints, the researchers were unable to wait for more responses.

These limitations may affect the accuracy and generalizability of the results, but the study still provides useful insights for this research.

3.4 Research Design

This study adopts a quantitative research design using a survey method. Data was collected through a structured questionnaire created using Google Forms. The purpose of this approach is to gather measurable data that can be used for statistical analysis and to identify patterns in player preference and immersion.

The questionnaire consists of Likert scale questions, which allow participants to rate their level of agreement with statements related to different video game art styles. This method enables the researchers to quantify participants' perceptions and compare responses between realistic and stylized art styles.

A descriptive survey design is applied to examine the characteristics of participants, focusing on their preferences, perceptions, and experiences with video game art styles. The survey collects both demographic information and responses related to player preference and immersion, providing an overview of how different art styles influence player experience.

Since this study relies solely on survey data, no qualitative methods such as interviews or experiments were conducted. The use of a quantitative survey allows for efficient data collection within a limited time frame and provides a clear and structured way to analyze the relationship between art style, player preference, and immersion.

3.5 Data Collection Method

The data collection used in this research is through surveying to gain feedback and responses for our research.

The questionnaire that is used to gather our responses using Google Forms provided by Google. Using Google Forms, as a lot of people are familiar with this, we are able to

gather information through the internet without having to meet face-to-face with people. This helps in getting responses without taking too much time from other people.

Questions presented in the questionnaire provide us with significant information to take note of the demographics of our surveyees.

Our method of collection uses a 5 point scale that provides a scale from 1 to 5 in which a higher score means in agreement with the question or statement that is presented. Through this method, we are able to accurately confront the feelings and the thoughts of the surveyee.

The following is the data analysis of the respondent's demographic using the questionnaire method.

Characteristics		Frequency	Percentage (%)
Age	20 or Below 20	4	21.1
	21-25	9	47.4
	26-30	3	15.8
	31-35	1	5.3
	36-40	0	0
	40 or Above 40	2	10.5
Gender	Male	3	15.8
	Female	14	73.7
	Prefer not to say	2	10.5
Educational level	SPM	2	10.5
	Diploma/STPM	1	5.3
	Bachelor Degree	13	68.4
	Master	0	0

	PHD	0	0
	Diploma	1	5.3
	Foundation	1	5.3
	Degree	1	5.3
How often do you play video games within a week	Less than 5 hours	5	26.3
	5–10 hours	0	0
	10–15 hours	5	26.3
	15–20 hours	6	31.6
	20+ hours	3	15.8
Favorite Game Genre	RPG (Role-playing games)	14	73.7
	FPS (First-person shooter)	0	0
	MOBA	1	5.3
	Simulation	1	5.3
	Horror	2	10.5
	Adventure	0	0
	Casual	1	5.3

Table 3.5.1 Demographic

The questionnaire has a total of 19 valid respondents collected for this study.

The age groups of respondents vary, with the majority being between 21–25 years old, which accounts for 47.4% (n=9) of the total respondents. This is followed by respondents aged 20 and below at 21.1% (n=4), and those aged 26–30 at 15.8% (n=3). A smaller number of respondents fall into the 31–35 age group at 5.3% (n=1), while no respondents were recorded in the 36–40 group. Respondents aged 40 and above account for 10.5% (n=2).

In terms of gender distribution, the majority of respondents are female, accounting for 73.7% (n=14), while male respondents make up 15.8% (n=3), and 10.5% (n=2) of respondents preferred not to disclose their gender.

For education level, most respondents are currently pursuing or have completed a Bachelor's Degree, making up 68.4% (n=13) of the sample. This is followed by SPM at 10.5% (n=2), while Diploma/STPM, Diploma, Foundation, and Degree each account for 5.3% (n=1) respectively. No respondents were recorded for Master or PhD levels.

The gaming habits of respondents show variation in weekly playtime. The majority of respondents spend 15–20 hours per week playing video games, accounting for 31.6% (n=6). This is followed by respondents who play less than 5 hours and 10–15 hours, both at 26.3% (n=5) respectively. A smaller portion of respondents spend 20+ hours gaming at 15.8% (n=3), while no respondents reported playing 5–10 hours per week.

In terms of game genre preference, Role-Playing Games (RPG) are the most popular among respondents, accounting for 73.7% (n=14). Other genres such as Horror (10.5%, n=2), MOBA (5.3%, n=1), Simulation (5.3%, n=1), and Casual (5.3%, n=1) have significantly lower representation, while no respondents selected FPS or Adventure as their preferred genre.

3.6 Expected Data Interpretation

The data collection method used in this study is purely quantitative. The research utilizes a questionnaire to gather data from respondents regarding their preferences and perceptions towards different game art styles. The responses are collected using a Likert scale, allowing the data to be organized and analyzed in a structured and easily interpretable form.

The questionnaire focuses on key factors such as visual impact, character design, environment design, memorability, emotional connection, and immersion. The collected data will be analyzed using descriptive statistics, including frequency and percentage distribution, to identify patterns and trends in player preferences.

The following section presents the data analysis based on the questionnaire responses collected from participants.

Quantitative Data Collection Method

Questions were developed based on the research hypotheses to analyze the relationship between game art style, player preference, and immersion. A total of 10 Likert scale questions were presented, and 19 valid responses were collected and examined. Each question uses a scale from 1 to 5, where 1 represents strongly disagree and 5 represents strongly agree.

The first question examined whether stylized art styles are more visually impactful than realistic art styles. The results indicate that 36.8% (n=7) of respondents selected neutral, while 21.1% (n=4) agreed and 15.8% (n=3) strongly agreed. In contrast, 21.1% (n=4) disagreed and 5.3% (n=1) strongly disagreed. This suggests that perceptions of visual impact are mixed, with a large proportion of respondents remaining neutral.

The next question focused on character design preference. The results show that 36.8% (n=7) strongly agreed and 15.8% (n=3) agreed that stylized character designs are preferred. Meanwhile, 31.6% (n=6) remained neutral and 15.8% (n=3) disagreed. This indicates a general preference toward stylized character design.

For environment design, 36.8% (n=7) of respondents disagreed with preferring stylized environments, while 21.1% (n=4) remained neutral. However, 15.8% (n=3) agreed and 21.1% (n=4) strongly agreed. This suggests that preferences for environment design are more divided compared to character design.

In terms of memorability, 31.6% (n=6) agreed and 31.6% (n=6) strongly agreed that stylized visuals are easier to remember. A smaller proportion, 21.1% (n=4), disagreed and 15.8% (n=3) remained neutral. This indicates that stylized art styles are generally perceived as more distinctive.

For emotional connection, responses are evenly distributed. 26.3% (n=5) remained neutral, 26.3% (n=5) agreed, and 21.1% (n=4) strongly agreed, while 26.3% (n=5) disagreed. This suggests that stylized characters may enhance emotional connection for some players but not universally.

Regarding immersion, 31.6% (n=6) of respondents remained neutral, while 26.3% (n=5) agreed and 21.1% (n=4) strongly agreed that stylized art styles increase immersion. A smaller portion, 21.1% (n=4), disagreed. This indicates a moderate positive influence of stylized visuals on immersion.

For engagement, 31.6% (n=6) agreed and 31.6% (n=6) strongly agreed that stylized visuals enhance engagement. Only 15.8% (n=3) disagreed and 21.1% (n=4) remained neutral. This suggests that stylized art styles contribute positively to engagement.

In terms of escape from reality, 47.4% (n=9) strongly agreed and 10.5% (n=2) agreed that stylized art styles facilitate detachment from reality. Meanwhile, 26.3% (n=5) disagreed and 15.8% (n=3) remained neutral. This indicates a strong tendency for stylized visuals to support immersion through escapism.

For focus during gameplay, 36.8% (n=7) agreed and 26.3% (n=5) strongly agreed that stylized visuals improve focus. A smaller proportion, 15.8% (n=3), disagreed and 15.8% (n=3) remained neutral. This suggests that stylized art styles may enhance gameplay clarity.

Lastly, for overall atmosphere, 42.1% (n=8) remained neutral, while 21.1% (n=4) strongly agreed and 15.8% (n=3) agreed that stylized art styles enhance the atmosphere of a game. A smaller portion, 21.1% (n=4), disagreed or strongly disagreed. This indicates that perceptions of atmosphere vary among respondents.

3.7 Data Analysis and Discussion

Question		Frequency	Percentage (%)
Stylized art styles are more visually impactful than realistic art styles	1 Strongly Disagree	1	5.3%
	2 Disagree	4	21.1%
	3 Neutral	7	36.8%
	4 Agree	4	21.1%
	5 Strongly Agree	3	15.8%
I prefer stylized character designs over realistic character designs	1 Strongly Disagree	0	0%
	2 Disagree	3	15.8%
	3 Neutral	6	31.6%
	4 Agree	3	15.8%
	5 Strongly Agree	7	36.8%
I prefer stylized environments over realistic environments	1 Strongly Disagree	1	5.3%
	2 Disagree	7	36.8%
	3 Neutral	4	21.1%
	4 Agree	3	15.8%
	5 Strongly Agree	4	21.1%
I prefer stylized character designs over realistic character designs	1 Strongly Disagree	0	0%
	2 Disagree	3	15.8%
	3 Neutral	6	31.6%
	4 Agree	3	15.8%
	5 Strongly Agree	7	36.8%
I find it easier to remember games with stylized visuals than realistic visuals.	1 Strongly Disagree	0	0%
	2 Disagree	4	21.1%
	3 Neutral	3	15.8%
	4 Agree	6	31.6%
	5 Strongly Agree	6	31.6%

Table 3.7.1 Player Preference

Question		Frequency	Percentage (%)
Stylized art styles help me feel more immersed in the game world.	1 Strongly Disagree	1	5.3%
	2 Disagree	3	15.8%
	3 Neutral	6	31.6%
	4 Agree	5	26.3%
	5 Strongly Agree	4	21.1%
I feel more engaged when playing games with stylized visuals.	1 Strongly Disagree	0	0%
	2 Disagree	3	15.8%
	3 Neutral	4	21.1%
	4 Agree	6	31.6%
	5 Strongly Agree	6	31.6%
Stylized art styles allow me to escape from reality more easily.	1 Strongly Disagree	0	0%
	2 Disagree	5	26.3%
	3 Neutral	3	15.8%
	4 Agree	2	10.5%
	5 Strongly Agree	9	47.4%
Stylized visuals make it easier for me to focus on the game experience.	1 Strongly Disagree	1	5.3%
	2 Disagree	3	15.8%
	3 Neutral	3	15.8%
	4 Agree	7	36.8%
	5 Strongly Agree	5	26.3%
Stylized art styles enhance the overall atmosphere of a game.	1 Strongly Disagree	1	5.3%
	2 Disagree	3	15.8%
	3 Neutral	8	42.1%
	4 Agree	3	15.8%
	5 Strongly Agree	4	21.1%

Table 3.7.2 Player Immersion

From the findings of the questionnaires, a number of trends within player preference and immersion with regard to art style are evident. The results indicate that in general, stylized art style is judged to be more aesthetically pleasing, more unique and more emotionally evocative than realistic art style.

A large part of this is due to the unique and visual effect of stylized art. A higher level of agreement was found in the statements concerning visual attractiveness and memorability, by many respondents. This can be attributed to the utilization of exaggerated shapes, strong colors and simplified forms in the stylized design, which are easier to recognize and stand out. Based on current studies, stylized graphics can help to establish a more memorable and engaging visual identity, and lastly, to make a lasting impression on players (Suranov, 2025).

As for the preference of character design, the respondents tend to prefer stylized characters. Perhaps it's because the characters are more stylized and therefore, are easier to get emotional about. The exaggerated facial features and proportions make emotions more evident and enable players to understand characters better and to build emotional connections. Previous studies also suggest that simplified or stylized characters can enhance emotional readability and engagement (Garver , 2018).

Stylized art styles are also preferred with environment and world design. This could be because of the lesser visual complexity and visual hierarchy. Stylized environments tend to be devoid of unnecessary clutter and can emphasize key aspects, which can help the player to move around and concentrate on the action. Conversely, realistic environments might have too much information to process which could lead to a higher cognitive load and also compromise the clarity of the story during play (Busselle & Bilandzic, 2008).

In terms of immersion, the results indicate that stylised art styles can deliver a high level of engagement including emotional immersion and being detached from reality. Stylized graphics enable players to immerse themselves in a more imaginative environment and help them break away from the real world's expectations to fully enjoy the game. Realistic art styles, while similar to real life, can also be used to improve spatial immersion, but at the same time can cause discomfort by not being perfectly realistic, such as the uncanny valley effect.

Another significant discovery is that of player expectation and genre of games. Participants reported that various genres of art work are appropriate for various games. Stylized art is generally used in creative, fantasy or casual games, and realistic art is better used in simulation or serious story games. This helps to prove that there is no absolute preference, but rather it is dependent on if the art style would better suit the game's theme and purpose.

The results overall indicate that there is a preference for stylized art styles, as they are more visually identifiable, expressive and easier to process. These attributes help to increase the engagement and immersion of players. But, there are still some situations where realism and authenticity are demanded and realistic art style is important.

3.7.1 Conclusion

The aim of this study was to investigate the effect of various styles of video game art, mainly by comparing realistic and stylised images on player preference and immersion. The results of the questionnaire, in general, support the proposed hypotheses.

The output shows that stylized art style is more visually powerful and eye-catching. Many of the respondents agreed that visuals with stylized graphics are more noticeable,

meaning that bright colors, distorted shapes and art style are significant for the player's interest.

If it were a question of character design, the data clearly indicates favouring of stylized characters. The notion of more expressive and easily emotionally interpreted character designs is supported by the tendency of respondents to show preference to them compared to realistic designs.

The same can be seen in environment and world design. Stylized environments tend to be more attractive and interesting. Perhaps that's because of their simpler visual design that allows players to concentrate on the game without sacrificing a visually stunning experience.

The results also indicate that art style designs are more distinctive and memorable when they are stylized. A number of the respondents pointed to uniqueness and recognizability in its stylized visuals as contributors to player preference, with many agreeing that the visuals of the game had a greater impact when they were stylized.

Moreover, results indicate that there is a positive relationship between stylized art styles and emotional bonding between game characters and players. Stylish graphics seem to be easier for players to interact with, so it could be beneficial for them.

However, for immersion, the data suggests that art that was somewhat more stylized enabled the players to feel more removed from real life and immersed in the game's world. Perhaps it's because stylized settings allow the imagination to run wild, and the real world's expectations are lessened.

Overall, the results indicate that the stylized art styles are generally more preferred, and more effective in immersing the player than the realistic art styles. But in some genres where authenticity and realism are paramount, realistic visuals might be preferable.

3.7.2 Future Work

However, there are a number of caveats to the findings. The relatively small sample size may limit the extent to which the results can be generalized. Future research should include more and a wider range of participants for greater reliability.

The study is also based on the data gathered by using questionnaires that are self-reported, meaning they might not accurately represent what players are doing in reality. Future studies might be conducted using experimental approaches, including gameplay tests, to provide more accurate measurements of immersion in real-time.

It may be worth investigating whether backgrounds, gaming experience, and preference of game genre can affect the perception of art style. Savoir is about these variables, and it might give us a better understanding of player behaviour.

Moreover, further studies could focus on the hybrid of art styles, for example stylized realism, to explore the impact of blending these styles in player preference and immersion.

Chapter 4: Design and Implementation

4.1 Art And Visual Direction

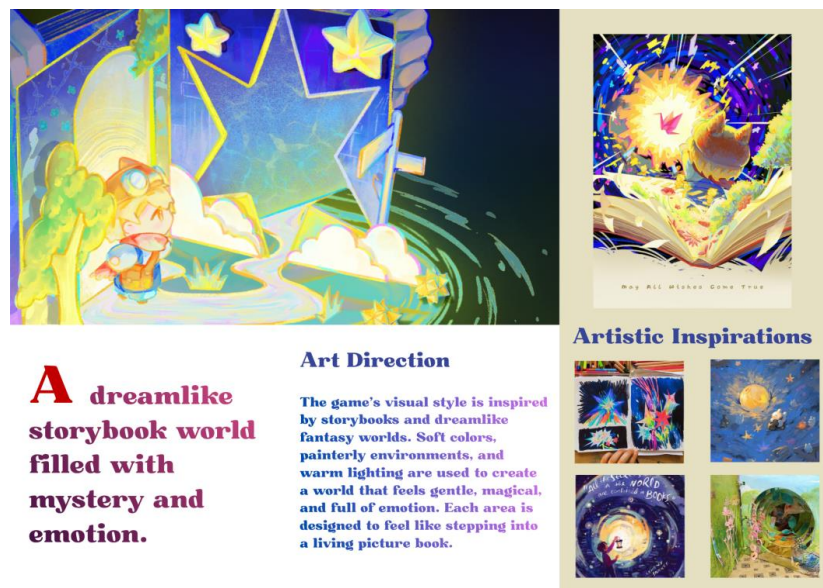


Figure 3.1.1 Design Board

Once Upon A Wish is a game that has as its visual direction a children's storybook style of art. The composition in general is inspired by illustrated pop-up books with a lot of saturated, warm colors to create a warm, imaginative and dreamlike atmosphere. Color-wise, the game is mostly blue, purple and yellow, which give the game a magical and fantasy feel, fitting for a game about wishes and story telling. This is significant because colour has been proven to have an impact on mood, perception and emotional response in the visual media (Lauer & Pentak, 2012).



Figure 3.1.2 Game Art Asset



Figure 3.1.3 Game Art Asset

Red is used to highlight key objects and elements of the gameplay, drawing players' attention and highlighting elements of the story. This intentional red usage provides a strong contrast to the more subdued, delicate and dreamy coloration. The combination of these elements creates a nice contrast to make them easy to notice, but it is well thought out to ensure that the color doesn't feel out-of-place in the overall palette. In design, the use of visual contrast and color hierarchy are often used to attract the user's attention and make the interactive elements easier to read (Ware, 2013). This contrast also, on a symbolic level, represents the reality of the story, and thus gives a subtle reference between gameplay and story.



Figure 3.1.4 Game Scene Reference



Figure 3.1.5 Game Art Asset

The game also tries to closely simulate the traditional hand drawn textures and art methods. Different brush types include pencil, crayon, oil painting and watercolor in the visual design. Such textures will provide the game with depth and richness, creating the impression that it is a real story book and not just a virtual one. Games frequently feature stylized and handmade graphics to establish a more memorable experience and remove the impression of computer-generated visuals, and to give the game a more artistic feel (Niedenthal, 2009). This makes players feel as if they're playing with a real, handmade environment.



Figure 3.1.6 Game Art Asset

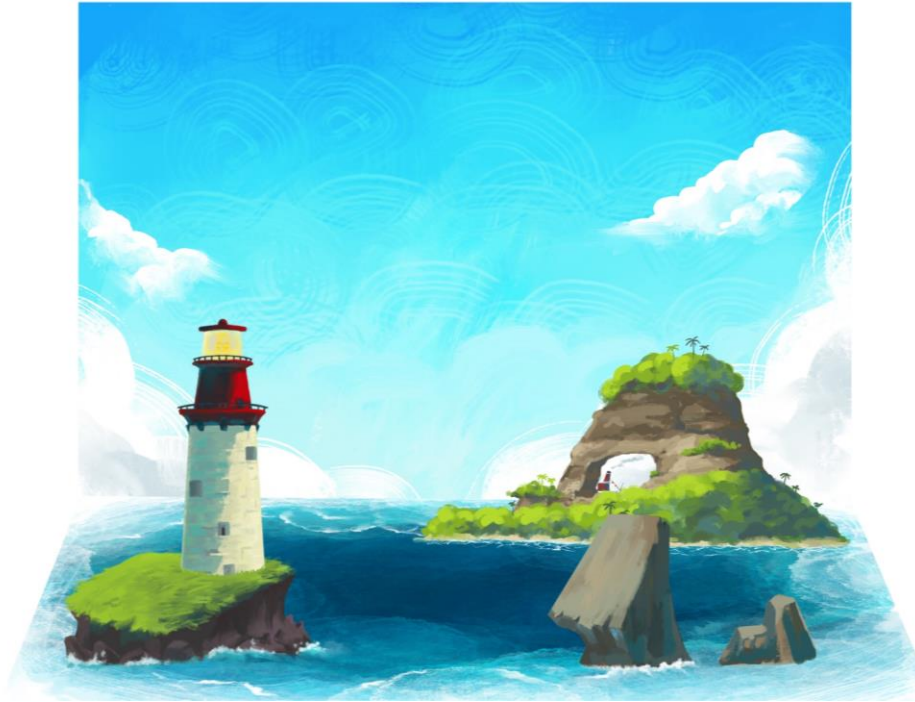


Figure 3.1.7 Game Scene Reference

The overall style of the art is meant to be both visually appealing and conducive to the game's story, gameplay, and player engagement, providing a cohesive visual experience that aligns with the game's theme and tone.

4.2 Character Designs

In the game, *Once Upon A Wish*, the character design is stylized and in a chibi art style typical of anime. This is both a utilitarian and aesthetic decision. Chibi characters are easier to draw and animate from a production point of view, thus speeding up development. Their large size and cute look also fits the game's fairy-tale and story book theme, making the look of the game more consistent (Tillman, 2011).

Character design has been thoughtfully created for each character, according to their purpose, background and story in the game. This will make sure that elements of the costume, color, and silhouette are all appropriate for expressing the character's identity and personality. The protagonist is a young boy on a journey all by himself. His attire is

designed to be functional, with a small shoulder bag and suspenders, indicating his ability to move about and be prepared for adventure.

The protagonist wears a hat with cat-ear elements, to support the game's cute and imaginative styling. This makes him much more appealing to the eye and it makes him fit in perfectly in the game's world, as there are cities and the world is created as animals. Furthermore, the red scarf the protagonist wears is a good visual cue, making it easy for the audience to see the character in a variety of settings. Color accents to accentuate characters' visibility is a common technique in character design (Bancroft, 2006).



Figure 3.2.1 Main Character

Non-playable characters (NPCs) are also crafted to mirror their environment and part in the story. NPCs in the game are also designed to fit their environment, for instance, in Chapter 1 which is set in the “City of Eternal Night,” you will find motifs of stars and

night sky in NPC designs. This visual consistency can help to further solidify the thematic identity of the level, and make the world feel more cohesive and immersive.



Figure 3.2.2 Detective



Figure 3.2.3 Observatory Curator

In conclusion, the character design aims to be clear, recognizable, and thematic, ensuring that the characters are more than just visually appealing but also serve the purpose of storytelling and immersing the player in the game's world.

4.3 Environment and Scene Design

Once Upon A Wish's environment design is based on a three dimensional pop up storybook. The scenes are created by layering paper-like pieces, which unroll to produce a layered visual effect, but still feel like handmade pieces. This is the method which can make the game world immersive and visually unique.

This game is based on 2.5D (foreground, midground, and background layers). This results not only in a spatial experience, but also in a flat illustrated look, which is reminiscent of the traditional storybook. Players engage with this within the layers, simulating a book come to life.



Figure 3.3.1 Game Scene Screen Shot

In addition, the environment is designed to be interactive. Players can interact with elements in the puzzle that are hidden in the scene and manipulate objects. This adds the idea that the environment itself is active and not passive, and not simply a background to the game.



Figure 3.3.2 Game Scene Screen Shot

Once Upon A Wish's cutscenes fit the same visual storytelling style as the rest of the game, which is inspired by a pop up book, and show narrative content. The game's tale is instead told through an interactive 3D book model that lets players explore the narrative in a tactile and more immersive manner , rather than conventional cutscenes.

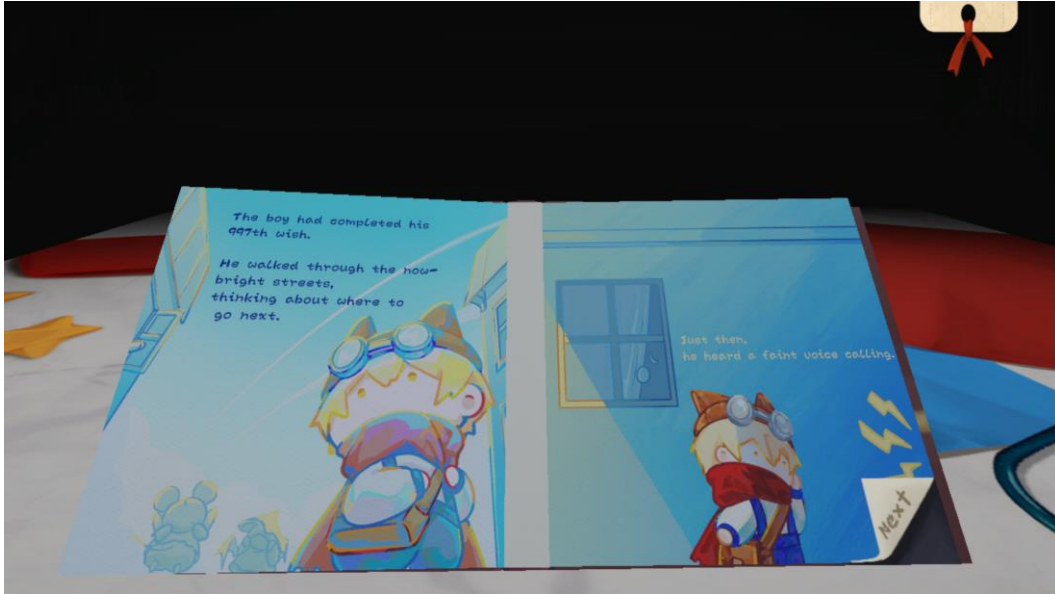


Figure 3.3.3 Cutscene

Players can zoom in and out of the storybook, and spin it around freely, just as they would do in real life. This interaction enriches the feeling of reality and familiarity and makes the reading experience more like real-life behaviour. This type of direct manipulation of the scene can enhance the engagement and sense of presence of the player, as interaction enhances the bond between the player and the content (Norman, 2013).

In addition to static storytelling, certain pages incorporate animated sequences within the illustrations. These animations are inspired by moving images seen in media such as the Harry Potter films, where photographs and newspapers come to life. By integrating subtle motion into otherwise static images, the cutscenes avoid becoming purely passive reading experiences. Instead, they introduce dynamic visual changes that help communicate narrative progression more effectively.

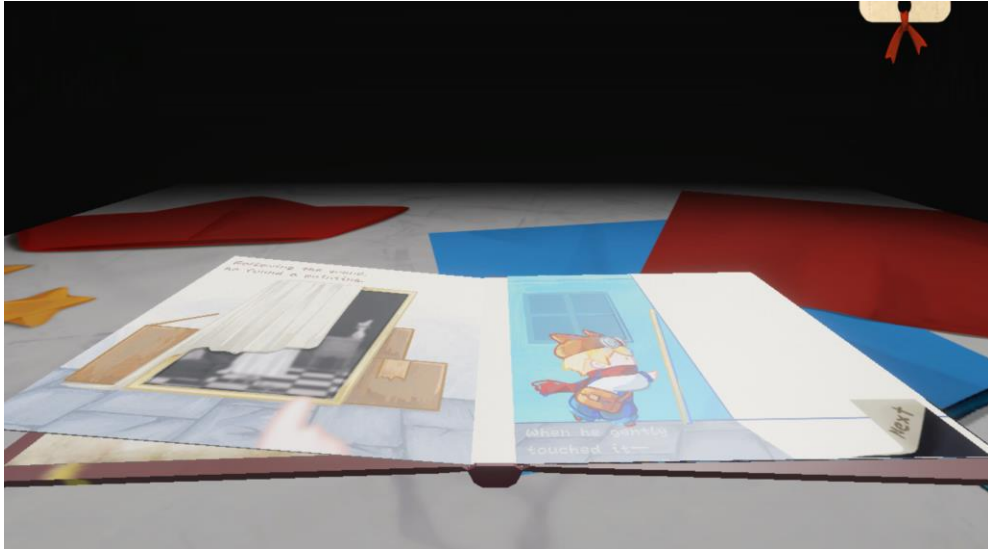


Figure 3.3.4 Animated Cutscene

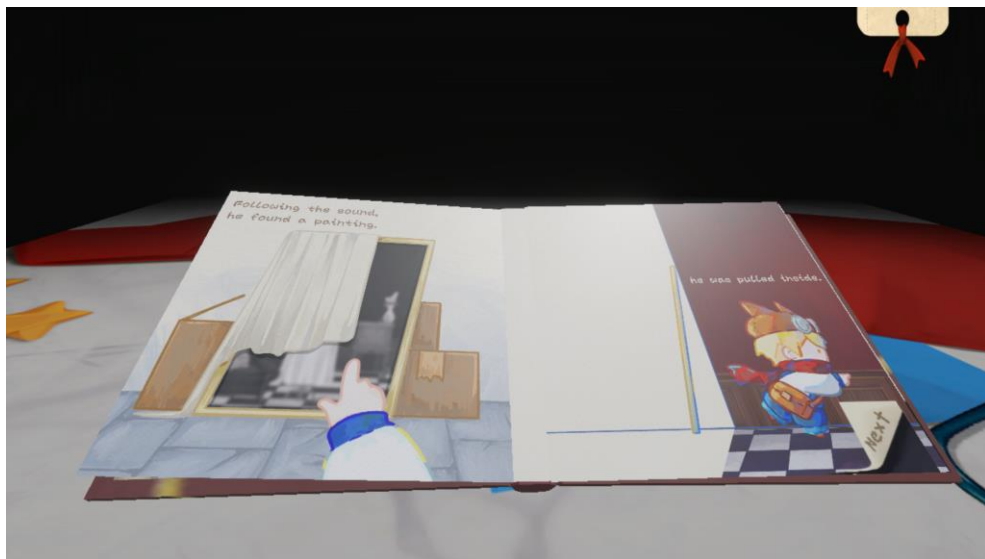


Figure 3.3.5 Animated Cutscene

The use of animated elements within the storybook also enhances emotional impact and player immersion. Movement naturally draws player attention and can emphasize important narrative moments, making the story more engaging and memorable (Bordwell & Thompson, 2016). Furthermore, the transition from still images to animated sequences creates a sense of surprise, which helps maintain player interest and prevents the storytelling from feeling repetitive.

The entire cutscene concept is one which turns storytelling into an interactive experience. The game's design, which uses both text and visuals to tell stories, provides a unique way of conveying the narrative, fosters immersion, and is appropriate for the overall artistic vision of the game.

4.4 Conclusion

The design decisions in *Once Upon A Wish* are closely aligned with the findings from the research conducted in Chapter 2. Based on the questionnaire results, stylized art styles were generally preferred by players and were found to enhance emotional engagement, memorability, and immersion. This supports previous research suggesting that stylized visuals can create stronger emotional responses and engagement compared to purely realistic representations.

The use of a children's storybook art style, vibrant color palette, and hand-drawn textures in this game reflects these findings. Stylized visuals were shown to help players focus better and feel more engaged, which is consistent with research indicating that simplified and stylized visual elements can reduce cognitive load and improve player experience (Busselle & Bilandzic, 2008).

In addition, the use of exaggerated chibi character design supports the research conclusion that stylized characters are more expressive and easier for players to emotionally connect with. Exaggeration and abstraction in character design allow emotions to be communicated more clearly, enhancing player identification and attachment .

Furthermore, the interactive storybook cutscene design reinforces the idea that immersion is not only created through realism, but also through meaningful interaction and emotional storytelling. The ability to manipulate the book and observe animated elements enhances player engagement and presence, as interaction plays a key role in shaping user experience.

Overall, the game's visual and design approach demonstrates how research findings on art style preference and immersion can be applied in practical game development. This highlights the importance of aligning visual design choices with player-centered research to enhance overall player experience.

Chapter 5: Result & Evaluation

This study integrates both game design development and research analysis to explore the influence of video game art styles on player preference and immersion. The project *Once Upon A Wish* serves as both a creative output and a practical application of the research findings, demonstrating how visual design decisions can be guided by player-centered data.

From the Game Design Document in Chapter 1, the game establishes a strong identity through its interactive pop-up storybook concept, combining narrative-driven gameplay with stylized visuals. The design focuses on creating an immersive and emotionally engaging experience through environment interaction, character design, and visual storytelling. The use of layered scenes, interactive mechanics, and narrative-based puzzles reflects an intention to immerse players not only through gameplay but also through visual and thematic consistency.

The research conducted in Chapter 2 further supports these design decisions. The findings from the questionnaire indicate that stylized art styles are generally more preferred by players, particularly in terms of character design, memorability, engagement, and emotional connection. For example, a majority of respondents agreed or strongly agreed that stylized visuals are more memorable (63.2%) and enhance engagement (63.2%). Additionally, a strong proportion of respondents (57.9%) indicated that stylized art styles allow for greater detachment from reality, contributing to immersion through imaginative engagement.

These findings partially support the research hypotheses. The hypothesis that stylized art styles are more visually distinctive and memorable is clearly supported by the data. Similarly, the preference for stylized character design is evident from the high agreement levels among respondents. The hypothesis regarding immersion is also supported to a moderate extent, as many respondents indicated that stylized visuals improve engagement, focus, and emotional

involvement, although some responses remain neutral, suggesting that immersion is influenced by multiple factors beyond visual style alone.

At the same time, the results also reveal that player preference is not absolute. Responses related to environment design and overall atmosphere show more variation, indicating that realistic art styles may still be preferred in certain contexts. This suggests that the effectiveness of an art style depends on how well it aligns with the game's theme, genre, and intended experience, rather than being inherently superior.

Chapter 3 demonstrates how these research findings are applied in practice. The choice of a stylized storybook art direction, chibi character design, and interactive cutscene system directly reflects the advantages identified in the research. The use of vibrant colors, exaggerated character features, and hand-drawn textures enhances visual clarity and emotional expression, while the interactive storybook mechanic strengthens immersion through player interaction rather than realism alone.

Overall, this study highlights that stylized art styles can be highly effective in enhancing player experience, particularly in terms of emotional engagement, clarity, and memorability. However, the findings also emphasize that there is no single “best” art style. Instead, successful game design depends on aligning visual style with gameplay mechanics, narrative goals, and player expectations.

By combining research analysis with practical implementation, this project demonstrates how data-driven design can improve both the creative and experiential aspects of game development. The integration of research findings into the design of *Once Upon A Wish* provides a clear example of how academic study can inform and enhance real-world game design decisions.

Chapter 6: Future work & Conclusion

Future development of *Once Upon A Wish* can further expand both its gameplay mechanics and narrative depth. One potential improvement is the introduction of a rotation-based mechanic, allowing the storybook itself to be rotated in 3D space. By enabling players to manipulate the orientation of the book, new puzzle possibilities can be created, such as perspective-based challenges, hidden pathways, and multi-layered interactions between different pages. This

would not only enhance gameplay variety but also strengthen the core concept of interacting with a living storybook.

In addition to mechanical expansion, the narrative can be further refined to make the hidden truth behind the story more explicit and impactful. While the current design emphasizes subtle storytelling, future iterations could provide clearer narrative cues, stronger foreshadowing, and more emotionally driven moments to improve player understanding and engagement.

Moreover, the game has strong potential for additional content such as downloadable content (DLC) or spin-off stories. These could explore events prior to the Traveler's journey toward fulfilling the 999 wishes, or provide deeper insight into the backstory of the protagonist's father. Expanding the narrative universe in this way would not only enrich the overall storytelling but also increase the game's longevity and replay value.

References

Argentics. (2021, December 21). *What is stylized art: Techniques and examples*. <https://www.argentics.io/what-is-stylized-art-techniques-examples>

Bancroft, T. (2006). *Creating characters with personality*. Watson-Guptill.

Birk, M. V., Atkins, C., Bowey, J. T., & Mandryk, R. L. (2016). Fostering intrinsic motivation through avatar identification in digital games. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 2982–2995.

Bopp, J. A., Mekler, E. D., & Opwis, K. (2018). Negative emotion, positive experience? Emotionally moving moments in digital games. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 1–12.

Bordwell, D., & Thompson, K. (2016). *Film art: An introduction* (11th ed.). McGraw-Hill Education.

Busselle, R., & Bilandzic, H. (2008). Fictionality and perceived realism in experiencing stories. *Media Psychology*, 11(2), 255–280.

Cunningham, D. W. (2013). *The effects of character style on the perception of facial emotion in computer animated characters* (Master's thesis). Purdue University.
<https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1029&context=cgttheses>

Garver, S., Adamo-Villani, N., & Dib, H. (2018). The impact of visual style on user experience in games. *EAI Endorsed Transactions on Serious Games*, 4(15), e2. <https://doi.org/10.4108/eai.5-1-2018.153535>

Hunicke, R., LeBlanc, M., & Zubek, R. (2004). MDA: A formal approach to game design and game research. *Proceedings of the AAAI Workshop on Challenges in Game AI*.

Isbister, K. (2016). *How games move us: Emotion by design*. MIT Press.

Lauer, D. A., & Pentak, S. (2012). *Design basics* (8th ed.). Cengage Learning.

Liubchuk, V. (2025, July 26). *Stylized art style vs. realism: The art of pixels in games*.
<https://vsquad.art/blog/stylized-art-style-vs-realism-the-art-of-pixels-in-games>

Maestri, G. (2006). *Digital character animation 3*. New Riders.

McMahan, A. (2003). Immersion, engagement, and presence. In M. J. P. Wolf & B. Perron (Eds.), *The video game theory reader* (pp. 67–86). Routledge.

Niedenthal, S. (2009). What we talk about when we talk about game aesthetics. *Proceedings of the Digital Games Research Association Conference*.

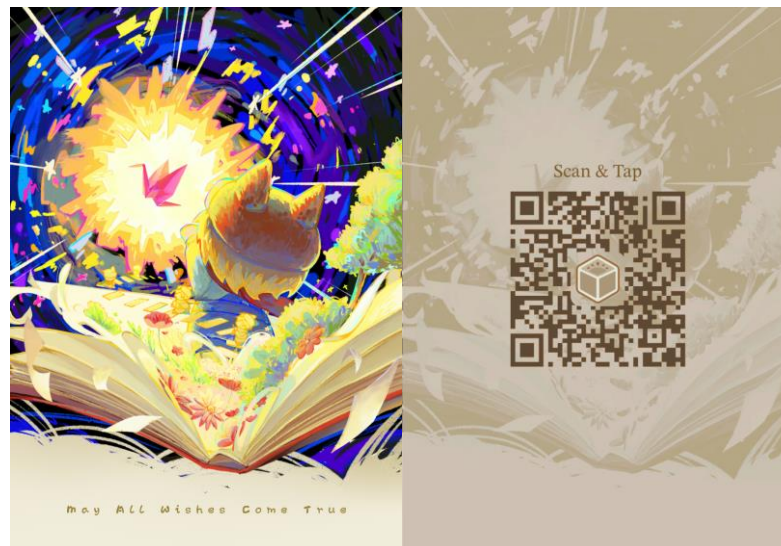
Norman, D. A. (2013). *The design of everyday things* (Revised and expanded ed.). Basic Books.

Skalski, P., & Tamborini, R. (2007). The role of social presence in interactive agent-based persuasion. *Media Psychology*, 10(3), 385–413.

- Suranov, A. (2024). *The impact of visual style on player experience in video games*. Preprints.
<https://www.preprints.org/manuscript/202511.2192>
- Tillman, B. (2011). *Creative character design*. Focal Press.
- Togelius, J., Yannakakis, G. N., Stanley, K. O., & Browne, C. (2011). Search-based procedural content generation. *IEEE Transactions on Computational Intelligence and AI in Games*, 3(3), 172–186.
- Trentini, Y. A. (2021, December 8). *The uncanny valley in game design*.
<https://towardsdatascience.com/the-uncanny-valley-in-game-design-6a6c38a36486>
- Ware, C. (2013). *Information visualization: Perception for design* (3rd ed.). Morgan Kaufmann.

Appendices

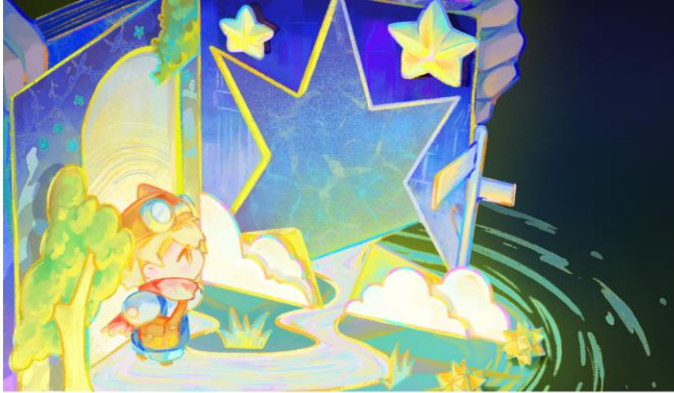
Promotional Materials



AR Postcard



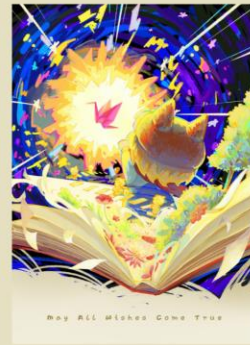
58 mm Badge



A dreamlike storybook world filled with mystery and emotion.

Art Direction

The game's visual style is inspired by storybooks and dreamlike fantasy worlds. Soft colors, painterly environments, and warm lighting are used to create a world that feels gentle, magical, and full of emotion. Each area is designed to feel like stepping into a living picture book.



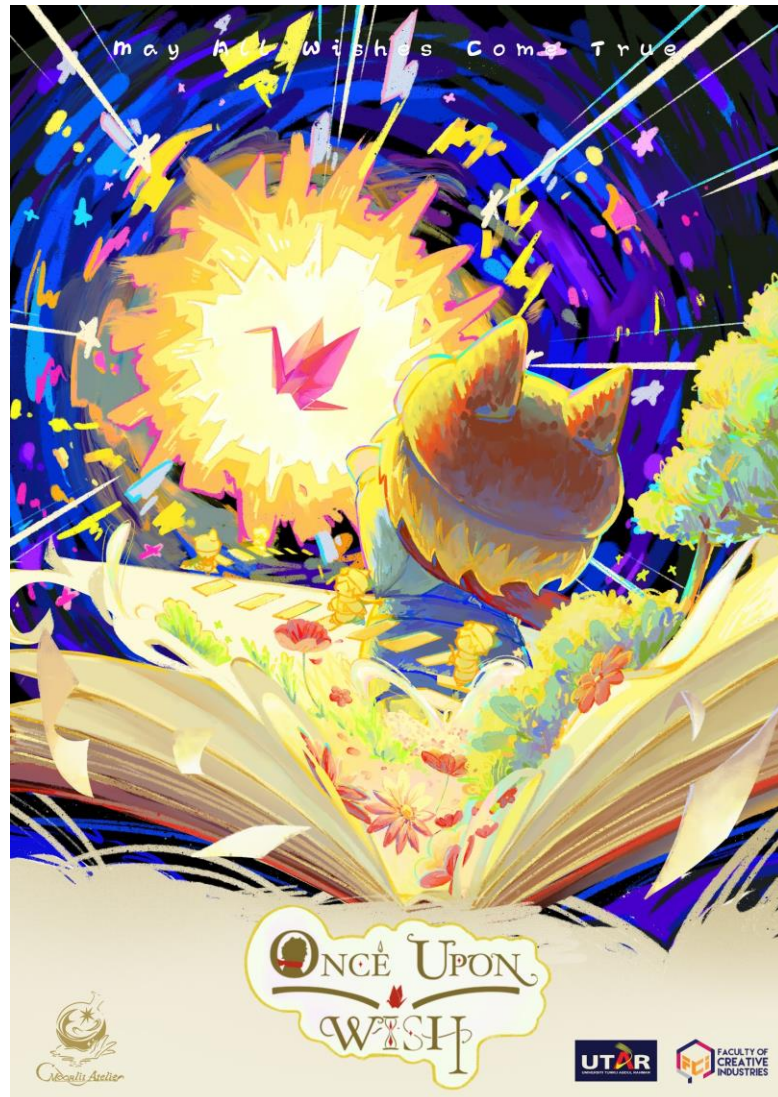
Artistic Inspirations



Design Board



Name Card



Poster

Appendix H

Final Project Title Form

Fill in the information below as detailed as you can after confirming project title.

Project Type:

- Product Based Project

Student ID	Student Name	Email & Contact no
23UJB04474	LIEW WAN RU	lwr1027@lutar.my 019-7233101
22UHF05600	FOO JIN XI	jinxifoo@lutar.my 016-5564482

Supervisor: **Ts Dr Ang Kok Yew**

Project Title: **Once Upon A Wish**

Project description:

Once Upon A Wish, is a 2.5D puzzle game that places players inside an interactive, living pop-up storybook.

Student name	Individual Project Scope
LIEW WAN RU	Game Artist, Animator, Level and Puzzle Designer
FOO JIN XI	Game Programmer, Mechanic and Gameplay Designer

Appendix J

FACULTY OF CREATIVE INDUSTRIES UNIVERSITI TUNKU ABDUL RAHMAN

Date: 22/5/2026

PERMISSION SHEET

It is hereby certified that **Liew Wan Ru** (ID No:2304474) has completed this thesis* entitled “The Influence of Realistic versus Stylized Art Styles on Player Preference and Immersion” under the supervision of **Ts Dr Ang Kok Yew** (Supervisor) from the Department of Game Studies, Faculty of Creative and Industries, **Ms Christie Chow Mee Mooi** (CoSupervisor) from the Department of Game Studies, Faculty of Creative and Industries, and **Puan Nik Norazira Binti Abdul Aziz** (Co-Supervisor) from the Department of Game Studies, Faculty of Creative

