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**Independent Project:
Project Proposal ACCA6020**

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October 21st, 20[REDACTED].

Contents

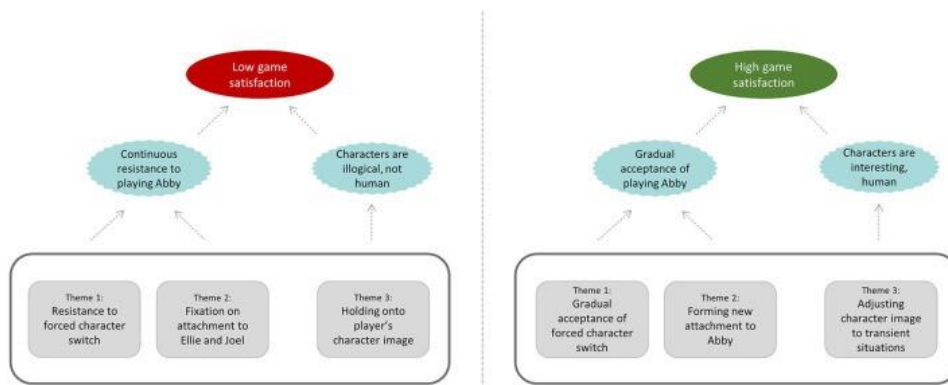
1. Project Title	1
2. Identifying The Problem	1
3. Aims & Objectives	2
4. SMART Objectives.....	2
5. Why is this project worth doing?	2
6. Project Success Criteria	2
7. Deliverables.....	3
8. How does this project relate to the written work?	3
9. Ethical concerns raised by the Project.....	3
10. What has already been done in the field?.....	4
11. Topic Familiarity	6
12. Brief Literature Review	6
13. Selection of Models & Concepts.....	8
14. References.....	8
15. Bibliography	12

1. To What Extent Does Character Design Influence Emotional Engagement and Player Immersion in Video Games?

2. Identifying the problem:

In modern video games, character design is crucial for storytelling, player immersion, and emotional engagement. Even with advanced graphics, some characters fail to evoke emotions, leading to player disconnection from the narrative. Poor character design is often cited in game reviews as a reason for disengagement, and studies show that a strong emotional connection with characters enhances both immersion and satisfaction.

For example, as supported by a report by *Frontiers in Psychology*, “*Player-Character Relationship and Game Satisfaction in Narrative Game: Focus on Player Experience of Character Switch in The Last of Us Part II*” [1]. Their findings showed how the video game ‘*The Last of Us Part II*’[2] managed to have polarising reviews whilst achieving the most Game of the Year awards in history (in 2022)[3]. The negative feedback from players was not due to flaws in the game itself but because the main character from the first game, Joel, whom players had emotionally invested in, is brutally killed off early on. Later in the game, players are forced to take on the role of Joel's killer, which further contributes to their dissatisfaction.[4].



(Image 1: Relationship of themes to high and low game satisfaction [5]).

This paper highlights that a lack of emotional connection with characters weakens storytelling, reducing immersion and engagement in games. Research emphasizes the importance of understanding how character design affects player emotions, as it can lead to more impactful gaming experiences and greater commercial success.

3. Aims and Objectives:

The primary aim of this project is to explore how character design impacts emotional engagement and immersion for players. This will be achieved by designing and creating a realistic game character portfolio/cinematic/level demo, followed by analysing player responses to these designs in a game environment.

4. SMART Objectives:

1. Develop a character portfolio with narratives. While also creating a cinematic or interactive experience in *Unreal Engine*.
2. Measure player emotional engagement and immersion through at least 30 completed surveys after interacting with the characters.
3. Within the given time frame, create a character portfolio with narrative details. If time permits, use *Unreal Engine* to create a cinematic or interactive experience featuring the characters.
4. Conduct a literature review on player emotional engagement and immersion in video games, focusing on key theories and studies related to character design and realism. This will aid in developing player questionnaires and evaluating character design.
5. Complete all project stages—research, character design, game world development, player testing, and documentation—within eight months. Establish milestones for each phase and assess character design's impact on emotional engagement and player immersion.

5. Why is this project worth doing?

Understanding how character design affects emotional connection is crucial for game designers as video games evolve. This project aims to enhance player engagement and immersion within video games through character designs.

6. Project success criteria:

Explore the connection between character design and player emotional engagement through primary research, including surveys and feedback, to gather qualitative data on immersion. Secondary research will support these theories and guide the creation of detailed 3D models of human and creature characters in a functional game world.

7. Deliverables:

This project aims to deliver the following content:

1. Character Portfolio: A collection of character and creature designs and assets integrated into a game environment.
2. Player Engagement Report: A report analysing the significance of character design: its influence on emotional engagement and impact on player immersion in video games.
3. Project Documentation: Documentation detailing research, design process, character creation and cinematic/demo creation.
4. Presentation and Final Product: A presentation summarising research findings, demonstrating the impact of character design on player immersion and emotional engagement, and showcasing the character portfolio with an optional playable sequence or cinematic.

8. How does the project relate to the written work?

The research investigates how character design affects players' emotional engagement and immersion, leveraging relevant theories. The practical project will involve designing game characters and assessing their impact on player experience. Insights from the literature review will guide design choices regarding aesthetics, narrative roles, and overall style. Data from questionnaires and player feedback will support or challenge the theoretical claims.

9. Ethical Concerns Raised by the Project:

Ensure individuals involved in photogrammetry provide written consent for their likeness and understand the project's scope. Follow GDPR data protection guidelines. Be mindful of context and tone in rendered shots to avoid negative representations. All participants in surveys, gameplay, or cinematics must be of appropriate age.

10. What has already been done in the field?



(Image 2: The Proteus Effect in virtual education[6])

Academic studies and player psychology Studies:

The proteus effect suggests that the appearance of a player's character can influence their behaviour and emotional engagement within a game [7]. Character design aspects, like parasocial interaction and narrative transportation, help forge emotional connections between players and characters, enhancing player immersion.



(Image 3: Baldur's Gate 3 Character customization menu [8]).

Character design and customization:

Games like 'Cyberpunk 2077' [9] and 'Baldur's Gate 3' [10] offer extensive character creation tools, enabling players to define their characters' appearance, personality, and backstory. This customization fosters ownership and enhances emotional connection, increasing immersion in the game world.



(Image 4: In-game screenshot of *Until Dawn* by SuperMassive Games [11]).

Emotional impact through narrative-driven character design:

'*Until Dawn*' by Supermassive Games features photorealistic character designs and impactful storytelling, allowing players' choices to significantly influence relationships and outcomes, immersing them in the character's emotional journeys.



(Image 5: BTS footage of Christopher Judge using motion capture for Kratos in *God of War* [13])

The role of animation and motion capture:

Santa Monica Studios' use of motion capture in "*God of War*" [14] made characters' facial expressions and body language crucial for conveying emotional depth.

11. Topic Familiarity:

I have a solid foundation in character creation, game design, and animation from my academic studies and practical experience. My skills include modelling, texturing, rigging, and animating characters, all vital for this project.

I'm still developing skills in some areas, and this project will help me explore them further. I aim to deepen my understanding of the psychological connection between players and characters, which I've researched but not fully applied yet.

I have some experience with Unreal Engine, but I'm new to motion capture animation, photogrammetry, and Metahuman Creator [15]. I plan to integrate these techniques into my workflow and expand my knowledge in player psychology, motion capture, and world-building. This will enhance my expertise in studying emotional engagement and immersion in video games.

12. Brief Literature Review:

1. Sheldon, L. (2023) *Character development and storytelling for games*. "Chapter 3 - Respecting Characters", p.35-55. Boca Raton: CRC Press, Taylor & Francis Group. [16]

Discusses how characters are constructed with three dimensions: physical, sociological, and psychological.

2. Isbister, K. (2022) *Better game characters by design: A psychological approach*. "Chapter 8 - Player-Characters", p.41-46. Boca Raton: CRC Press. [17]

This chapter discusses player psychology and outlines four levels at which players experience a character, which designers should consider when creating player-characters.

3. Cooper, J. (2021) *Game Anim: Video game animation explained*. "Chapter 11 - Our Project: Motion Capture". P.183-207. Boca Raton, FL: CRC Press. [18]

A chapter on how video games have incorporated motion capture technology as a primary factor in creating animations, as well as the motion capture pipeline, while further breaking down how motion capture works.

4. Rogers, S. (2010) *Level up!: The guide to great video game design*. 1st Edition. "Chapter 5 - The three C's part 1 - Character". p.83-121 John Wiley & Sons. [19]

Emphasises the integral role of character design in creating a compelling gameplay experience and discusses strategies for developing characters that resonate with players.

5. Yee, N., Bailenson, J.N. and Ducheneaut, N. (2009) 'The proteus effect', *Communication Research*, 36(2), pp. 285–312.
doi:10.1177/0093650208330254. [20]

"The Proteus Effect" is a study on how virtual environments enable individuals to change their self-representation significantly. Studies have shown that players derive their expected behaviours and attitudes from their avatar's appearance, a phenomenon known as the Proteus effect.

6. Christoph, K., Dorothée, H. and Peter, V. (2009) 'The video game experience as "true" identification: A theory of enjoyable alterations of players' self-perception', *Communication Theory*, 19(4), pp. 351–373.
doi:10.1111/j.1468-2885.2009.01347.x. [21]

This article presents an explanation of how video game players identify with a game character or role, drawing on social-psychological models of self-perception.

7. Newman, R. (2017) *Cinematic game secrets for creative directors and producers inspired techniques from industry legends*. "Chapter 3 - Production in the game industry". p.37-51. New York: Focal Press. [22]

The chapter focuses on the production phase in the game industry, providing insights into the unique challenges faced and offering guidance on effective practices for a smooth workflow.

8. Orlady, G. (2023) *From concept art to cosplay: Creating iconic characters for god of war ragnarök*, *PlayStation.Blog*. Available at:
<https://blog.playstation.com/2023/01/26/from-concept-art-to-cosplay-creating-iconic-characters-for-god-of-war-ragnarok/>. [23]

Interview with Dela Longfish, the lead character artist for God of War: Ragnarok, discussing the designs of various main characters in the game.

13. Selection of Models & Concepts:

These are key concepts used within the intended research.

-The Proteus Effect [7]: A theory on how the appearance of a player's character can influence their behaviour and emotional engagement within a game.

-Immersion and Presence [24]: Visual realism, character design, and interactivity can influence presence in a game world. Immersion occurs when players lose awareness of the real world and become fully engaged within the game.

-Cognitive-emotional model of video game engagement [25]: This model suggests that game elements like character design, narrative and game mechanics interact to shape emotional engagement.

-Aesthetics of Play [26]: LeBlanc's model deconstructs how various elements in games, such as narrative, challenge-based fun, and aesthetic design, play a crucial role in cultivating different types of emotional experiences.

-Uncanny Valley [27]: A concept in robotics and 3D design that describes the feeling of unease or discomfort that people experience when encountering characters or objects that appear almost, but not quite, human.

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