Title:

Levelling Up for Conservation: An Examination of Player Decision-Making in a 3D Adventure Game with Environmental Protection Objectives

Research Outline

Research outline for the given title is given as

1. Introduction

Background and Context

- 1. Overview of 3D adventure games with conservation themes
- 2. The significance of incorporating thematic environmental elements

Research Objectives

Assessing the learning outcomes and engagement factors related to the game and understanding the implications of thematic elements in games.

Importance of Research

This research will allow to explore the effectiveness of incorporating thematic environmental elements in 3D adventure games, shedding light on their impact on player engagement and learning outcomes. It offers the opportunity to contribute to the fields of game design, education, and environmental conservation through gaining valuable insights into how games can be used as educational and motivational tools. The research will provide gain a deeper understanding of the relationship between thematic elements and player behavior, which can inform future game development and educational strategies.

Research Questions

Possible research questions developed for this research are:

RQ1: How do in-game environmental transformations, such as the transition from a desert to an oasis, influence players' motivations and persistence in advancing through the game?

RQ 2: How does the integration of thematic environmental elements, such as rare animal-inspired outfits, impact player engagement in a 3D adventure game with a conservation theme?

RQ 3: What design elements of the game or rewards within the game are most effective in fostering player engagement and environmental awareness?

Methodology

Overview of user testing and evaluation for the research methodology will be included followed by participant selection, recruitment and data collection for the analysis.

2. Literature Review

The Role of Games in Education and Learning

The effectiveness of games in conveying educational content and raising awareness related to environmental protection.

Environmental Themes in Video Games

Past research papers on environmental themes in games to see the impact of in-game environmental transformations.

Player Engagement and Motivation

Research on factors contributing to player engagement and the role of thematic character customization in player motivation

3. Methodology

User Testing and Evaluation

- 1. Detailed description of the user testing process
- 2. Data collection methods

Game Design and Elements

Coding of the game

Elements involved in game coding

In-game environmental transformations

Thematic character customizations

Participants

Participant selection and recruitment process

Data Analysis

Quantitative data analysis methods

Assessment of engagement and learning outcomes

4. Results

Engagement Factors

- 1. Findings from user testing related to player engagement
- 2. Analysis of engagement factors influenced by environmental thematic elements

Learning Outcomes

- 1. Learning outcomes observed during user testing
- 2. Variations in learning outcomes based on player engagement levels

5. Discussion

Implications of the Research

- 1. Insights into the effectiveness of thematic environmental elements in games
- 2. Implications for game developers and educators

Limitations and Future Research

Implications of the Research:

The implications of this research are given for game developers, educators, and environmental organizations. Game developers can gain insights into the design elements that enhance player engagement and learning outcomes, leading to the creation of more effective educational games. Educators can utilize the findings to incorporate gaming as an educational tool, potentially enhancing environmental awareness and education in a more interactive and engaging manner. This research may encourage environmental organizations to collaborate with game developers to promote conservation and awareness through gamification process.

6. Conclusion

Summary of the research's contribution to the field

Final thoughts on the importance of using thematic environmental elements in educational games

References

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