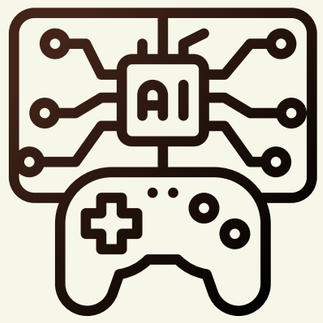
DESIGN PROJECT POSTER

"Innovating Player Choice with AI Empowerment in Story-Based Games" aims to revolutionize gaming by integrating advanced AI for dynamic decision-making. Follow Alduin on a journey shaped by your choices, guided by the AI-powered LLaMA3-8b model. This technology ensures contextually appropriate decisions and a personalized, immersive narrative. Experience the future of interactive storytelling, where every decision matters and each adventure is unique.



INTRODUCTION

Our project, "Innovating Player Choice with AI Empowerment in Story-Based Games," leverages advanced AI to transform the way players interact with game narratives. Using the powerful LLaMA3-8b model, our game creates a dynamic and personalized story experience. Players guide Alduin, a character on a quest sparked by his grandfather's mysterious journal. As Alduin explores a magical world, every decision made by the player shapes the narrative and character development. This innovative integration of AI ensures a unique and immersive adventure for each player, setting a new standard for interactive storytelling.

OBJECTIVE

Transform Story-Based Gaming: Utilize advanced AI to create dynamic, personalized narratives that enhance player engagement and immersion.

METHODOLOGY

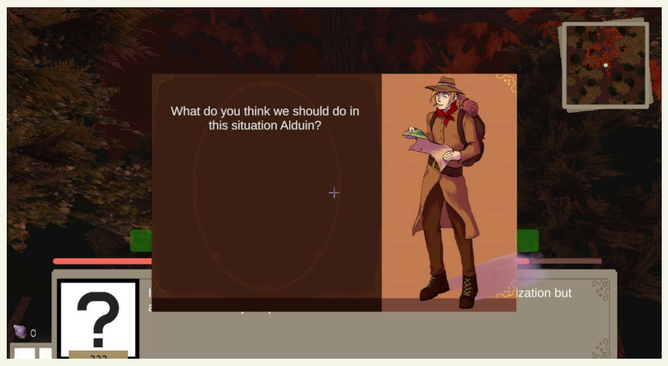
- Data Collection: Gathered player choice data from various story-based games.
- LLM Prompt Design: Designed prompts to call the LLM (Large Language Model) for dynamic decision-making.
- Integration: Integrated the LLM prompts into the game framework.
- Testing and Optimization: Tested and optimized the performance of the LLM prompts within the game environment.

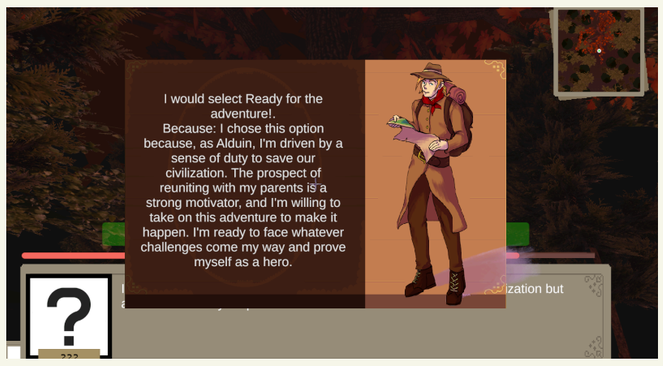
RESULTS

The integration of the LLaMA3-8b model significantly improved decision-making in the game, providing contextually appropriate choices that enhanced the narrative experience. The AI created dynamic and personalized storylines, ensuring each playthrough was unique. The model performed efficiently, with minimal latency and high accuracy in aligning choices with the character's profile.

ANALYSIS

- Player Decision Patterns: Analyzed player choices to inform AI design.
- Effectiveness of LLM Integration: Evaluated LLaMA3-8b impact on engagement.
- Narrative Variation: Examined AI-generated story diversity.
- Performance Metrics: Assessed LLM efficiency and accuracy.
- Future Directions: Refine AI, expand datasets, explore dynamic decision-making.





CONCLUSION

The project showcases the potential of AI-driven decision-making in enhancing player experiences in story-based games. Through analysis of player decision patterns and the effectiveness of LLaMA3-8b integration, along with examination of narrative variation and performance metrics, valuable insights have been gained. Moving forward, refining the AI model, expanding datasets, and exploring dynamic decision-making approaches will be pivotal. Overall, this project sets a foundation for future innovations in interactive storytelling, contributing to advancements in game development and artificial intelligence.

RELATED LITERATURE

Interactive storytelling research has explored methods to enhance player agency and narrative depth. Mateas and Stern (2003) introduced drama management, dynamically adjusting stories based on player actions, albeit with complex scripting. Thue et al. (2007) proposed player modeling to predict actions, focusing on adapting difficulty. El-Nasr et al. (2010) developed an experience management system, yet requiring significant manual input. Recent advancements in machine learning, like GPT-3 by OpenAI (Brown et al., 2020), offer promising avenues but require resource-intensive fine-tuning with domain-specific data.

SCAN ME

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