Heir of the Profane

An LLM-Based Dark Fantasy Text-Adventure Game by Tristan Galcik, Josh Joo, and Liam Mackinnon

Introduction

We created a Dark Fantasy game with a fully integrated graphical user interface along with two Large Language models – one operating as the parser, and the other filling the roles of the world's characters.

System Overview

Our system consists of a front-end built with Vue.Js and Electron.Js, which spawns a Python child process that acts as the game engine. Player input is passed from the front-end to the Python engine, where the input is parsed by GPT-40 and a predefined action is returned.

When the player enters into dialogue with the non-playable characters, a second LLM using GPT-40 is given a prompt with information describing the character it will be playing along with the end goal of the interaction, driving the dialogue to a certain outcome. This allows the player to have engaging conversations with NPCs while ensuring the dialogue aligns with our narrative's goals.

Takeaways

By using a large language model for parsing and mapping inputs to actions in the engine, the player has more input flexibility while still preserving the intended action space of the game.

Integrating LLMs for non-playable character dialogue enriches the game's world with greater variety and depth, and provides the player with an extra element of interactivity.



