PersonAI: Revolutionizing Personality Analysis in Psychology Education through AI-Driven Gamified Learning

Project Overview

PersonAI is an innovative web application designed to assist psychology students in improving their ability to identify patients' personality traits and Myers-Briggs Type Indicator (MBTI). The application employs a large language model, likely LLAMA2, to generate interactive character profiles for analysis. This project integrates generative AI and gamified learning to provide an engaging and practical training platform.

Project Idea

The PersonAI application generates detailed character profiles, simulating real-life patients for students to analyze. The students' task is to deduce and input the supposed MBTI type of the generated character. The application then compares the student's guess with the true, AI-generated MBTI type, providing immediate feedback and facilitating an iterative learning process.

Methodology

The application flow is as follows:

1. The application generates a character profile using a large language model for the student to read and attempt to identify the personality type.
2. The student inputs their guess, which is then compared with the true, AI-generated MBTI type of the character.
3. If the guess is correct, the exercise concludes. If the guess is incorrect, the student is given three opportunities to ask further questions about the character and revise their guess.

4. If the student fails to guess the correct MBTI type after three attempts, they lose the round.

Technology Stack and Software Needed

1. Large Language Models (LLAMA2): This advanced AI model plays a pivotal role in generating detailed character profiles and answering the student's follow-up questions.
2. Deep Learning Techniques: These techniques will be instrumental in determining each character's personality type, which will be used as the benchmark to validate the student's guess.
3. Programming Languages: Python will be utilized for backend development and sophisticated data analysis. Simultaneously, HTML, CSS, and JavaScript will be key in frontend development, enabling the creation of an interactive, intuitive, and user-friendly interface.

Dataset

We will utilize the publicly available dataset at Kaggle for this project.

Teamwork

The project will be executed by a dedicated team of three members:

1. Injy Islam ElSherbini
2. Mariam Ahmed Abdelhaleem
3. Maryam Sherief Sheta

Each team member will contribute to all aspects of the project, including methodology development, software development, dataset management, and operation of the technology stack.

Related Papers:

1. “A sentiment-aware deep learning approach for personality detection from text”, ScienceDirect, source.
2. “CharacterChat: Learning towards Conversational AI with Personalized Social Support”, arxiv, source.