ChatBot: Personalized Virtual Friend

with Chat-gpt 3 NLP Model and Prompt Engineering

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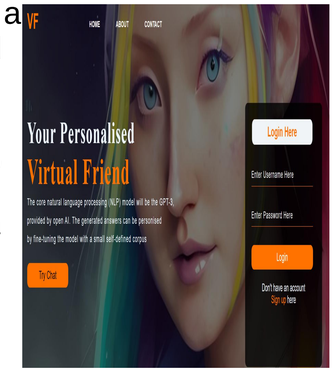
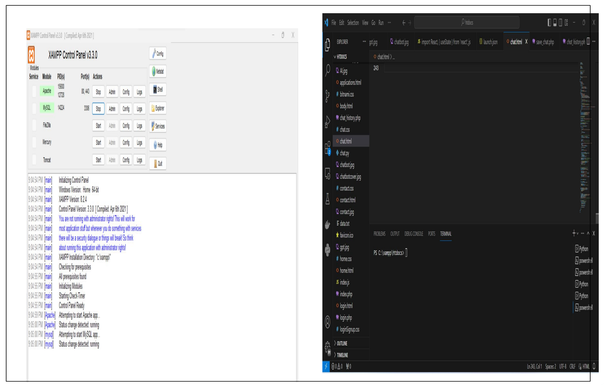
Virtual Friend Chatbot

Virtual Friend chatbot is a computer or AI-powered system designed to stimulate human-like conversation with users, providing companion-ship and assistance in a personalized manner.



Materials Used

Visual studio Code and Xampp are the two tools we used in this project. Visual studio code is used or coding, debugging and editing source code across various programming languages whereas Xampp is used to create a local web server in a computer and here in this project mysql is our database.



Prompt Engineering and Prompt Data

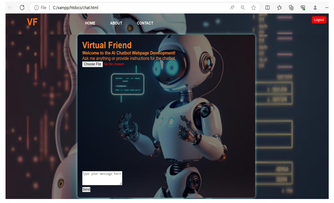
What is Prompt Engineering?

Prompt Engineering refers to the process of carefully crafting or designing input prompts or queries to interact with natural language models language(NLP) models such as gpt-3 or similar AI systems to obtain desired outputs or responses. This involves formulating prompts in a way that effectively communicates the user 's intent and can produce accurate and relevant information.

Purpose of Prompt Engineering?

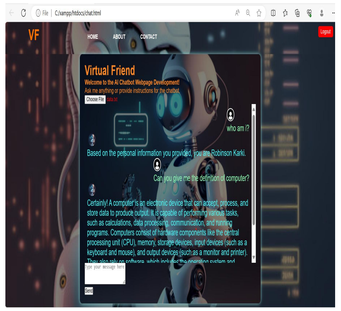
Enhancing User Experience: The primary goal of a virtual friend chatbot is to provide a positive and enjoyable user experience. Well-crafted prompts can make interactions with the chatbot more engaging, fun, and relatable, enhancing the user' s overall experience.

Establishing a Conversational Tone: Prompt engineering helps set the tone and personality of the virtual friend chatbot. You can design prompts to reflect the chatbot's character, whether it's friendly, empathetic, humorous, or professional, ensuring consistency in the conversation's style.



Results

Here in this project we have add one function where user can choose their prompt filefile or trained data and chat with chatbot. Also user can get reponse according to their given trained data and if user ask other questions or want to chat about something else then it recall chatgpt-3 NLP model and response accordingly.



Functional Requirements

Functional requirements are certain attributes and abilities that a software programme or system must have in order to accomplish its objectives and offer consumers the functionality they desire. In response to specific inputs or events, these requirements specify what the system should do or how it should behave. They specify the system's operation, demeanour, and interactions with users, other systems, and extraneous elements.

Non-Functional Requirements

Non-functional requirements, commonly referred to as quality requirements, lay out standards and limitations for the overall functionality, traits, and qualities of a system . Non-functional requirements specify how the system should perform or act in various ways, in contrast to functional requirements, which concentrate on what the system should do.

Project Design

Methodology

Hybrid Agile and Waterfall approach:
Our project followed a hybrid approach that combined both Agile and Waterfall methodologies. This approach allowed for flexibility and adaptability while ensuring continuous development.
Agile:
Agile methodologies emphasize iterative development, collaboration, and customer feedback. Agile principles helped your project adapt to changes such as moving from Python to Java to PHP when compatibility issues arose.
Waterfall:
Waterfall methodologies involve a structured sequential approach to development where each stage must be completed before moving on to the next. This structure ensured that critical project milestones were achieved in a logical sequence.

How Data Flows

Data flows in a chatbot refer to the movement of information and messages between different components of the chatbot system, as well as between the chatbot and external entities such as users and databases. Understanding these data flows is essential for building and maintaining an effective chatbot. Here's an overview of the typical data flows in our chatbot: