Chatbot for a tickets seller system

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***Abstract*—That paper, give an explication about the method used for apply a chatbot in a tickets seller, making use of chatbots previously trained, through LLM's and a series of plain text about frecuent questions about the bought of tickects for some events.**

***Index Terms*—LLM, entropy, chatbot, synergy, holism, chaos theory**

I. Introduction

II. theoretical framework

Before explaning a complete plane of the problematic, its necessary see some concepts that it's used in the final product.

A. LLM

According to IMB "Large language models (LLMs) are a category of basic models trained on immense amounts of data, making them capable of understanding and generating natural language and other types of content to perform a wide variety of tasks"[2].

B. (Lenguaje de programacion usado)

LENGUAJE DE PROGRAMACACION USADO

C. Chaos theory

Chaos theory studies how minimal changes in the initial conditions of a system can make it unpredictable. A system that is very sensitive to such variations in initial conditions will be called a chaotic system. In the long term and despite having randomness and disorder, patterns will begin to emerge. [4]

D. Entropy

The entropy it´s a grade present of desorder and chaos in a system model that give to them a routing to wear.

"Originally the word entropy comes from the Greek em which means about, in and near; and sqopg which means turn, alternative, change and evolution. This term was first used in 1850 by the German physicist Rudolf Julius Emmanuel Clausius".[1]

this stablish how the possiblites are random and inherits in the universe, making a system desorder add complexity for the system.

E. Holism

A holistic system will be managed under an approach that considers the interactions of the parts as a whole, understanding that an impact in one part can affect the others due to their rela

F. Synergy

The systems, in a general form, are synergics, while him parts, isolated, can't explaining him behaviors, in such a way that, the synergy it's the result of interactions between the parts or components of a system,[3]

G.

III. Methodology

References

[1] Carmona Collado (Auth.) *Fractal attraction*. Accedido: 2 septiembre 2024. 2003. URL: https://catarina.udlap.mx/u_dl_a/tales/documentos/lap/carmona_c_dc/.

[2] IBM. *Large Lenguage Models*. Accedido: 30 agosto 2024. URL: https://www.ibm.com/mx-es/topics/large-language-models.

[3] Francisco Osorio (Auth.) Marcelo Arnold. *Introducción a los conceptos básicos de la teoría general de sistemas*. Accedido: 15 septiembre 2024. 1998. URL: https://www.moebio.uchile.cl/03/frprinci.html#:~:text=La%20sinergia%20es%2C%20en%20consecuencia,la%20suma%20de%20sus%20partes%22..

[4] Carlos Serrano. *Qué son la Teoría del caos y el Efecto mariposa (y cómo nos ayudan a entender mejor el universo)*. 2021. URL: https://www.bbc.com/mundo/noticias-59525600.