Anime Bot

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Abstract—With the recent rise.

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I. ABSTRACT

In recent years, the popularity of eastern cartoons, better known as anime has opened a new market possibility in western society, because of this, business interested in taking part of this market should be able to identify what are the current trendings, and for regular watchers, it's of their interest to find more content that suits their preferences, the present project aimed to create a knowledge management system in the form of a chat bot that allows its users to either find what are the most popular productions currently, or in general find different series and receive a general idea of their thematic. This objectives were successfully completed, with only a dew difficulties in the final build, mainly related to performance and long-term upgrades

II. INTRODUCTION

The Knowledge System Management (KSM) is the process of storing, managing and sharing information, it is defined as an IT. The main purpose of KSM is to retain information that's useful for a company in the future (eGain, s.f). The purpose of this project is to implement the KSM in the area of anime/manga due to its increase in popularity during recent years, which in consequence has exponentially increased the size of its community, as we see on the web. For example, there are streaming platforms that report millions of users like crunchyRoll(CrunchyRoll, 2021) or illegal platforms like animeflv, and because of this some companies like Panini and FunkoPop have taken interest in this community and now need to know what is trending in those circles in order to create profit. Information about anime exists on every social media, there are even wiki fandoms that focus exclusively around specific series. Even entreprenuerships have take interest on this community, producing a variety of products like clothes or figures. When viewing anime as a system it becomes clear that this is a complex system due to all the entities that exist making relations within itself such as consumers, products, events, social media, even more. There are many relations between them, and inside those entities exist other subsystems more complex like the logistics to organize an event or send a container full of mangas to another country.

For this chatbot focused on anime we took information from a free database avaliable on the internet, the database is in .csv format, which was necessary to clean, because some information was corrupt due to the apparition of signs in Japanese. We cleaned those rows and created another csv with clearer data, then in a python file we made the paragraphs for the pdfs, we put 5 animes in each pdf, we analized more than 1000 animes, and the chat bot answers every question in a range around 10-6 minutes. The database also includes urls that redirect to images, but due to copyright ñimitations the chatbot is unable to display these pictures, which constitutes a sensibility point.

On the other hand, with that information it was possible recopilate more conclusions, through business intelligence tools, we used power BI to make a graphic about the top 10 most popular animes from this database. With these dashboars that are easy to understand, the companies may be able to know about what animes should they make more merchadising of. But it is important to note that this chatbot is not 100 percent complete, because there are a lot animes that release every day and updating the bot for every release is a difficult task in the long term. As for the memory consumption, where the laptop has to process 206 pdfs the performance turns really slow

III. INITIAL QUESTIONS

1) What kind of content already exists?
Information on this topic is very extensive as it can be found in forums, fandom wikis, social media, data from streaming services and even dedicated databases made specifically for this type of projects. These sources include releasing dates, public sentiment, teams involved in production and summaries and plots with varying depth.

2.What information or documentation needs to be mixed or updated?
There is extensive information about each anime, but it's not that easy to find in a single source, for this reason this knowledge management system aims to unify this knowledge, for this particular project we focused specifically in plots,

themes and genres

What type of information would be the hardest to produce or gather?
The information that would be the hardest to gather would be accurate and concise summaries of shows as this topic is particularly extensive, and the usefulness of this system depends on having a large amount of data about as many shows as possible. In addition, in order to keep this system useful it should regularly update info on recent releases and this regular inclusion of new data may impose a challenge in the long run.
4.What is a knowledge management system?
A system with the purpose of storing knowledge and making it easily available for whoever requires it, this is done with the purpose of supporting decision-making, problem solving and strategic planning. A knowledge management system contains a repository in which the information is stored, the knowledge can be stored in the form of documents, files or databases. There has to be tools for capturing this knowledge from various sources, for this purpose techniques like web scraping and text analysis are useful. This knowledge should be easily accessible for users and there should be tools that allow for easy retrieval, in this case, a chat bot.
What are the best knowledge management free tools?
/For this project the most useful sources of information are already existing databases as their content is already standardized and contain information about thousands of shows.
6. What are the best success stories of companies that are using knowledge management systems on that area?

In this area knowledge management systems are used mostly as a means to enhance related, examples of this include Crunchyroll, MyAnimeList and AniList.

## IV. ANALYSIS

Anime as a system
The base components of this system are the contents themselves in the form of anime series, movies or TV specials. The existence of this content is often derived from other forms of media such as books, web comics or video games. This content is consumed by individuals which monetarily support this content and allow them to make viable productions. It's common that people who enjoy certain productions, or certain genres of production create their own communities around the media they enjoy, these communities create feedback loops that influence creators and generate trends within the industry as an emergent behavior. Another important component is merchandising, merchandising takes many forms, most popularly in physical goods including DVD's, figurines, key chains, among many others, this goods are produced both by companies and entrepreneurships, creating a whole subsystem, as the types of products most commonly produced are products related to the most popular series, and by itself, merchandising can be a way to promote particular series, creating a point of synergy. Then there's also conventions, which mostly work as spaces for people to purchase this merchandising and advertising

various productions working as ecosystems that financially support the industry.
This system is particularly sensitive to technological advances in the sense that changes of distribution methods such as the popularization of streaming services, social media and the internet as a whole change the way in which series are produced, marketed and consumed.

Project

The objective of this project is to make a knowledge management system centered around this context with the intention of helping merchandise producers identify popular and relevant series so that they could chose what should they create content about and increase profit based on the data provided and in general for a broader public it works as a tool to recommend series to users based in their interests, for both cases this would serve as an useful tool due to the immense amount of series released along this format's history. For this purpose, we made a chatbot. This chatbot is an ADI system and works as a black box, for its functioning this project implements an already existing Llama model, which was fine-tuned for this specific context, using publicly available information about a large amount of animes, which includes titles, genres, summaries, release dates, and viewers ratings. The biggest limitation of this system is that there are new series being released continuously and this project wouldn't have access to information of newly released series unless it's added to the training data of the model manually. Despite this, this system contains information of already established franchises that would remain relevant for a long time.

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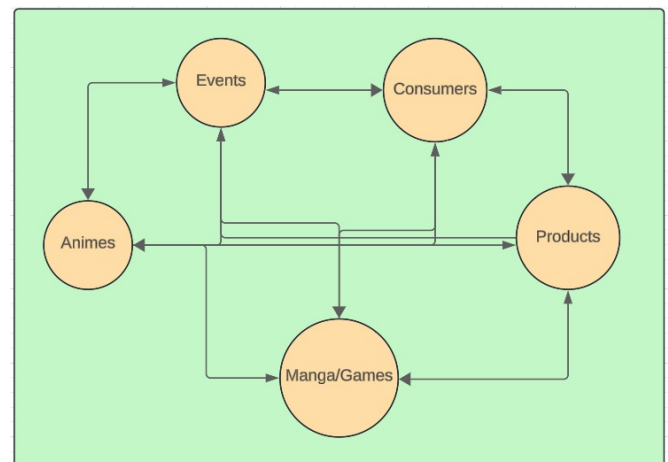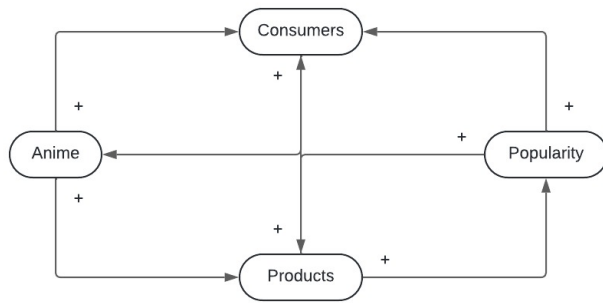
V. Results

A expected from a LLM, the chatbot gives very accurate answers when asked about series it contains large amounts of data, specifically franchises that contain multiple seasons or movies, and because the data training only contains plots and not specific details about characters it cannot give accurate information about specific characters, but it proves as a very useful system in terms of giving recommendations about series in general, which we consider is the most important feature of this project as it fulfills the original objective of the project.

The most notorious problem of this project is that receiving an answer from the chat bot takes a considerably long time of around 6 to 10 minutes, this is due to the amount of data it has to process and it's probably related to the machines where this program was tested in

VI. CONCLUSIONS

In general terms the software proposed fulfills the objective of giving a general introduction to specific series which may be of the users interest, either for companies and enterpreneurships to know what's the most popular productions at this moment, or for regular consumers who want help in picking what shows they could enjoy in the future. With the only limitations being how extensive the training data should be in order to make the software as complete an accurate as possible, and by extension, the processing power required to mantain a fast performance.

References

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