

Knowledge management system

Initial questions:

1. What kind of content already exists?

A/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?

A/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

3. What type of information would be the hardest to produce or gather?

A/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/ 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.

5. What are the best knowledge management free tools? (Wikis for example)

A/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.

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, these goods are produced both by companies and entrepreneurs, 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 choose 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.

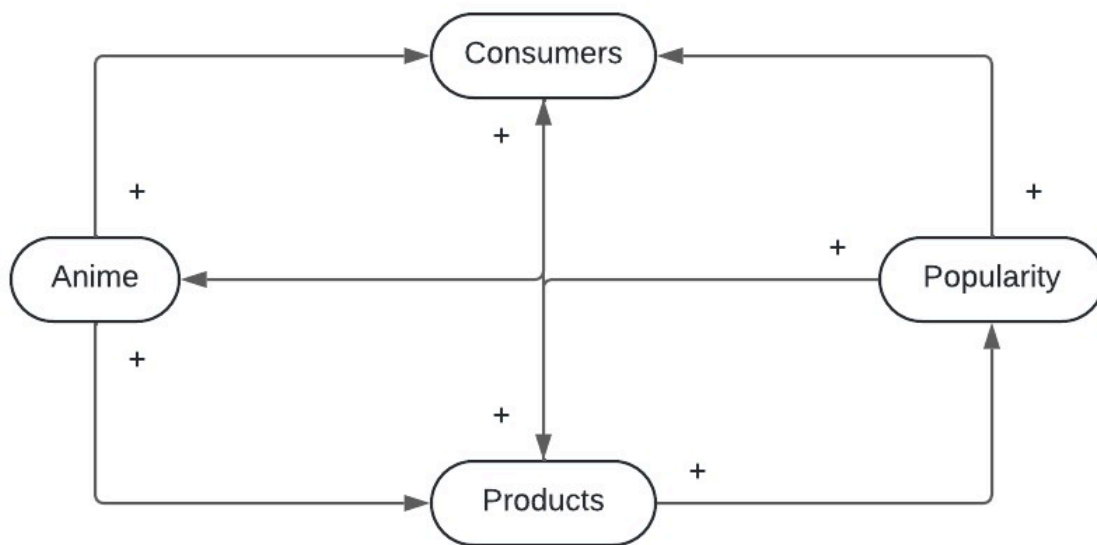
Another sensitivity point of this system is the inclusion of incomplete or inaccurate data, because the usefulness of this program relies on having an extensive amount of information about the largest amount of shows possible, it would be possible that some of the information used may not be as complete or as accurate as it should, additionally, some of the viewers rating may not be entirely accurate to the general sentiment about the series, but may be affected by pre-existing expectations, for this reason fake or inaccurate info represents a limitation for this problem. In addition to that, the pre-existing training data of the model could contribute to causing hallucinations to the LLM, the solution to these problems comes from injecting negative entropy to the system with more data about each show, focusing on the most popular and acclaimed in order to avoid making the model too big.

The following is a diagram representing the 10 most popular series currently based on the dataset used

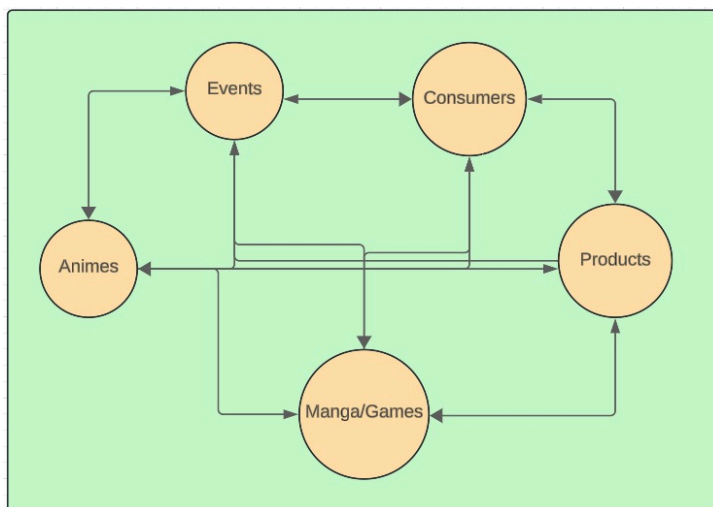
Anime with Popularity



The following is a causal loop diagram, which represents the emergent behaviors of the system.



The following represents the entities and relations of the anime system



The following represents the entities of the subsystem of products

