



# ALGOSHOW

By: Akshara Shukla & Deyna Baeva

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01

Context

# Context

Do you want to discover your next favourite tv show personally curated for you, reducing the search time? AlgoShow will cut down the scrolling time by 80% and suggest your top 3 episodes just by a piece of text.

Here is a link to our [infographics](#).



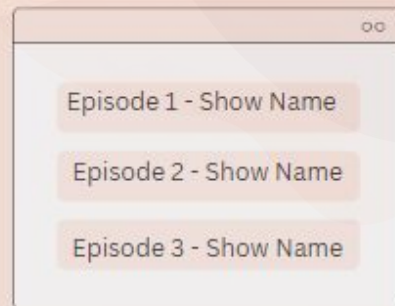
User enters a text on the search bar on our software.



The text gets processed through our classification model and it's sentiment is classified.



The top 3 episodes are recommended to the user based on the sentiment.



# Technologies



Python



TensorFlow

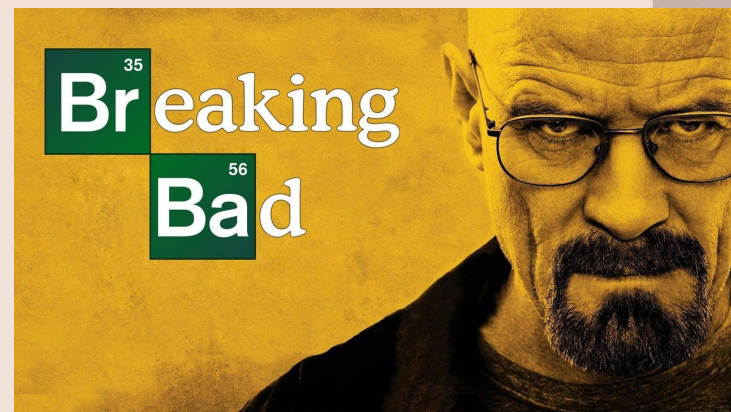
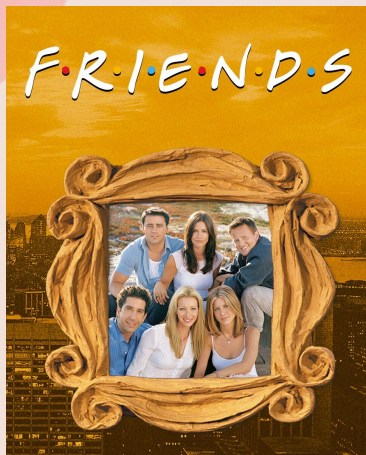


Hugging Face



Streamlit

# Our Personalized Dataset of TV Shows





O2

Current Progress



# Status

- Found suitable datasets.
- Applied sentiment analysis on the episode summary.
- Saved the sentiment in a CSV file.

1. anger 🤬
2. disgust 🤢
3. fear 😨
4. joy 😄
5. neutral 😐
6. sadness 😭
7. surprise 😲

	B	C
1	summary	label
2	Eddard Stark is torn between his fam	anger
3	While Bran recovers from his fall, Ne	neutral
4	Jon begins his training with the Night	fear
5	Eddard investigates Jon Arryn's murd	fear
6	Catelyn has captured Tyrion and plar	anger
7	While recovering from his battle with	anger
8	Robert has been injured while huntin	sadness
9	The Lannisters press their advantage	joy
10	Robb goes to war against the Lannist	sadness
11	Robb vows to get revenge on the Lar	anger
12	Tyrion arrives at King's Landing to tal	neutral



O3

Ethics



# Ethics

## Transparency

- Delivering a report and presentation for the usability of the software
- Link to the legal streaming websites

## Fairness

- Section explaining about inclusivity towards all individuals & not having a specific target person

## Robustness

- Easy to follow user interface for target audience

## Explainability

- GDPR compliant section explaining how we use the data entered by user
- Code accessible on github

**NAME:** Algoshow

**DATE:** December 13, 2022 2:19 PM

**DESCRIPTION OF TECHNOLOGY**

This software recommends episodes of different tv shows based on a single textual input from the user. It then suggests the user watch the episode on their most used streaming website.



**HUMAN VALUES**



Algoshow promotes human values by allowing all types of users. The target group of the application are students and millennials. All cultures, individuals with different background are welcome to use this application.

**TRANSPARENCY**



Algoshow promotes transparency by:

- Documenting the development of the product
- Giving the code to be slightly open source for education purpose.
- Mentioning in the application about the usage of data. Algoshow doesn't store, sell or use user data in any possible way and follows the GDPR regulations.

**IMPACT ON SOCIETY**



Algoshow positively impacts the society by:

- Reducing the search time.
- Introducing users to new shows which they wouldn't find otherwise.
- A "nice to have" experience for users who don't want to spend hours searching.

**STAKEHOLDERS**



The possible stakeholders of Algoshow are:

- The developers (Deyna and Akshara)
- AI mentors (Simona and Qin)
- The users (students and millennials)

**SUSTAINABILITY**



Algoshow promotes sustainability by:

- Reusing AI models that have been trained on large datasets in order to reduce energy and training time.
- Created our own custom dataset with values only needed.

**HATEFUL AND CRIMINAL ACTORS**



Possible hateful and criminal actors for Algoshow would be:

- If the model predicts the sentiment of the entered text input wrongly. In order to combat this, we are focusing on building a fine-tuned classification model with high accuracy. Based on the test results, the model can be upgraded in future versions.

**DATA**



The data used by Algoshow for recommending is:

- Developed with specific tv shows that have high watching rate for the first version of the application.
- The columns are also built using the state-of-the-art models.
- The data is stored on a safe local server.
- The data is taken from Kaggle.

**FUTURE**



The future uses of Algoshow would be:

- The people who want to reduce their search time and are looking for new shows by using a unique technology.
- In the scenario with multiple users active, I believe it would be necessary for ensuring user input and hosted server more security.

**PRIVACY**



Algoshow ensures privacy by:

- Doesn't save user data by any means.
- There's no account made so the application doesn't focus on individual rather on the context (text).

**INCLUSIVITY**



Algoshow doesn't filter down on its users. It's intent doesn't include or discriminate people in any way. Our dataset are diverse and have most watched tv shows with legal streaming website link.

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O4

Next Steps

## Next Steps



Implement Sentiment  
Classification Model

Building a personalized CNN model



Extracting similarity scores  
between episode titles and the  
input text

Using content - based embeddings  
& finding similarity score



Thank You!



Questions?



# Resources

1. [Data Preparation Script](#)
2. [Text Similarity Script](#)