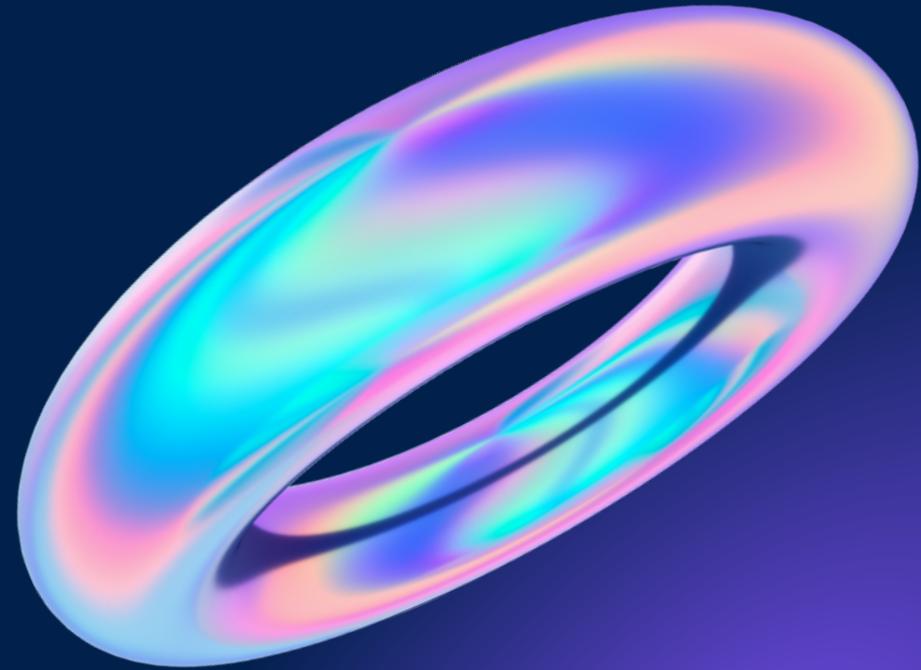




CineMaestro



Team



Sahil Nagaralu
Developer



Sanskar Jadhav
Developer

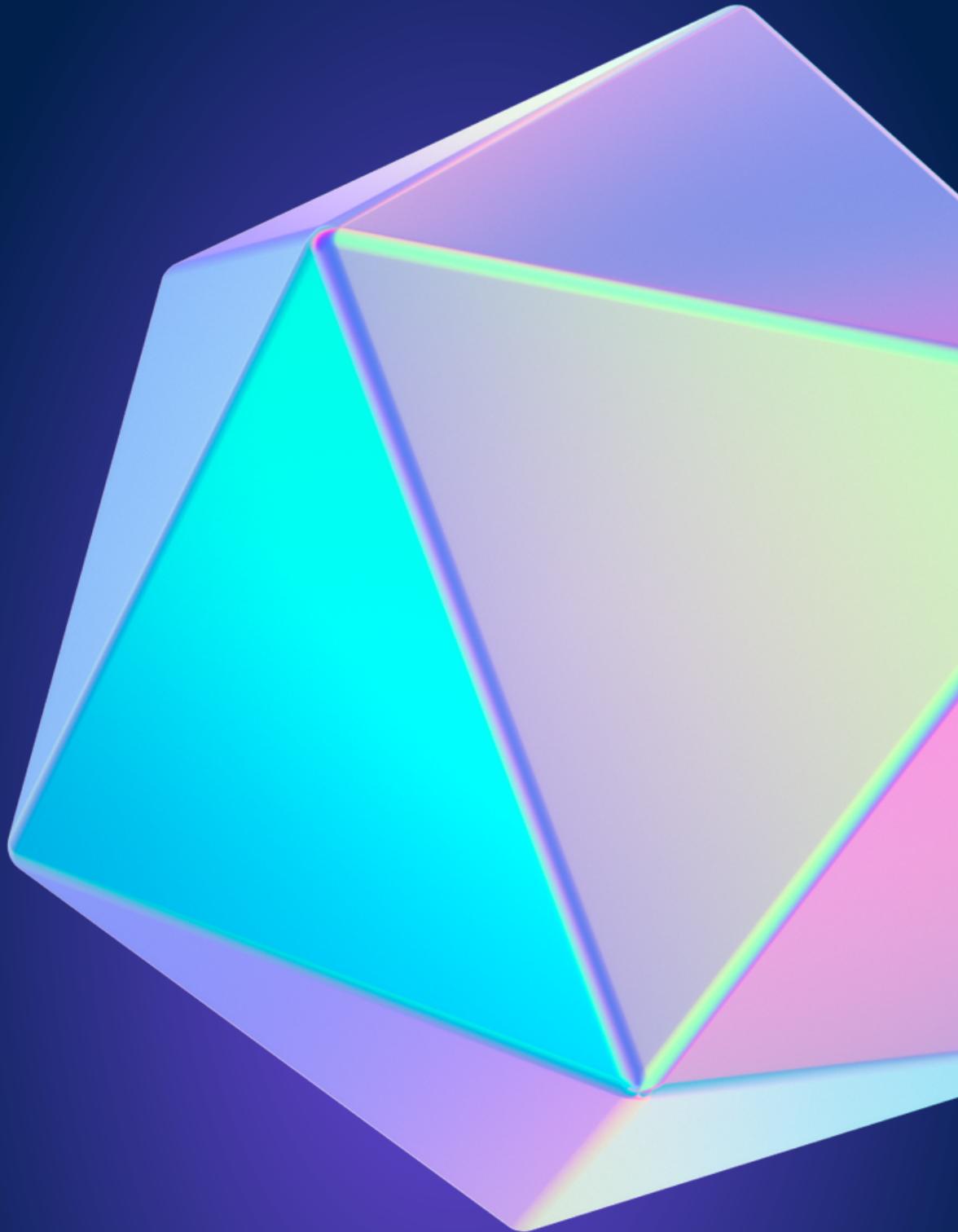


Roshan Yadav
Developer



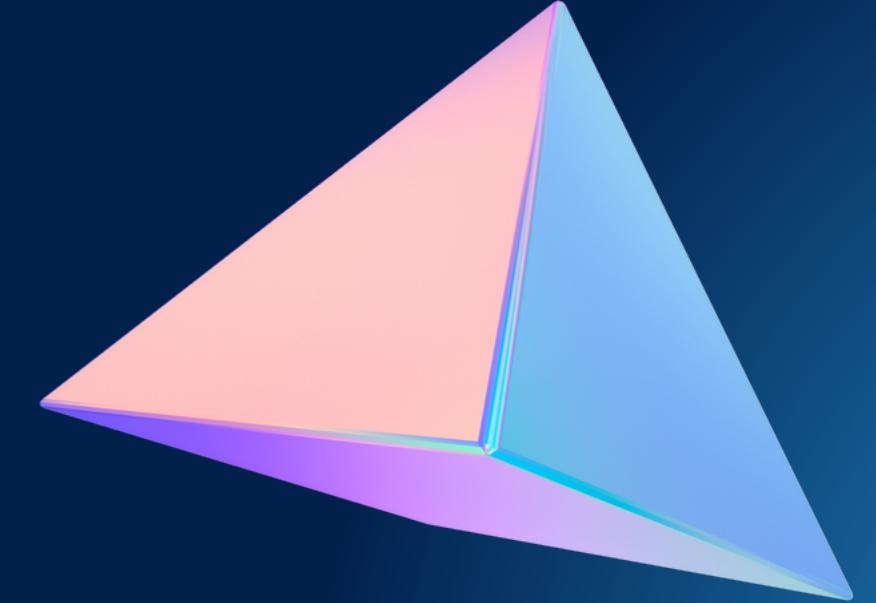
Introduction

Welcome to CineMaestro, an innovative venture at the intersection of technology and creativity. In the domain of filmmaking, where ideas and imagination converge, CineMaestro stands as a pioneering solution. We live in an era where content creation is key, and our project takes center stage by offering a revolutionary tool for filmmakers, writers, and enthusiasts alike!



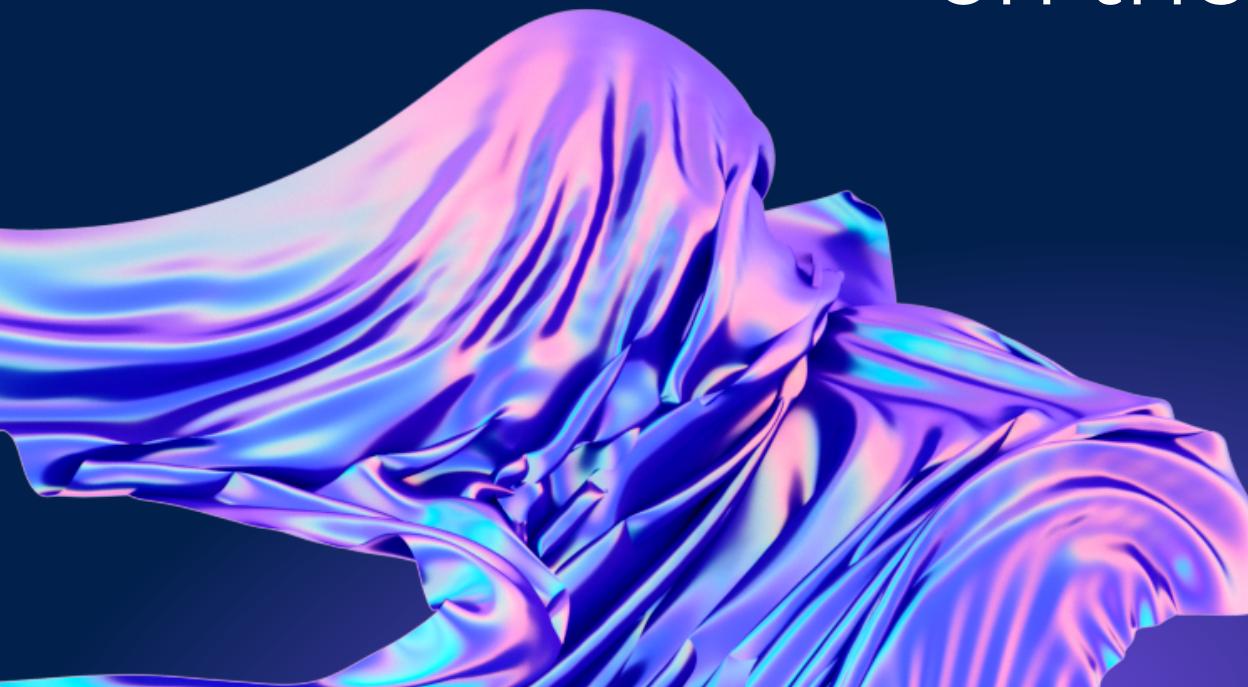
Motivation

Our motivation for undertaking this project stems from our collective experience of watching numerous films in recent times. While these films have often impressed us with their direction, music, and other cinematic aspects, we couldn't help but notice a consistent shortcoming in the quality of their storytelling and dialogue. This observation has ignited our passion to improve the core elements of a movie – its narrative and script.



Problem Statement

Generation of a movie script with all characters, dialogues and settings based on the movie title, director, writer, genre, plot and/or rating.



Objectives

- Create a dataset of all the required inputs and the movie scripts of different movies.
- Create a text generation model that takes in a prompt with the required inputs and which gives out a movie script.
- With the movie script created, use the movie script to generate sequential images like a storyboard (depending on the availability and cost of the API).

Methodology

1

To create our dataset:

- We scraped 531 movie scripts from sfy.ru.
- We used Wikipedia API to get the Wikipedia URLs of each movie based on their titles.
- We scraped the movie details from the Wikipedia pages and the IMDb URLs of each movie.
- We scraped the movie ratings and genres from the IMDb pages.

2

Our goal was to create a text generation model for movie scripts. We did the following steps:

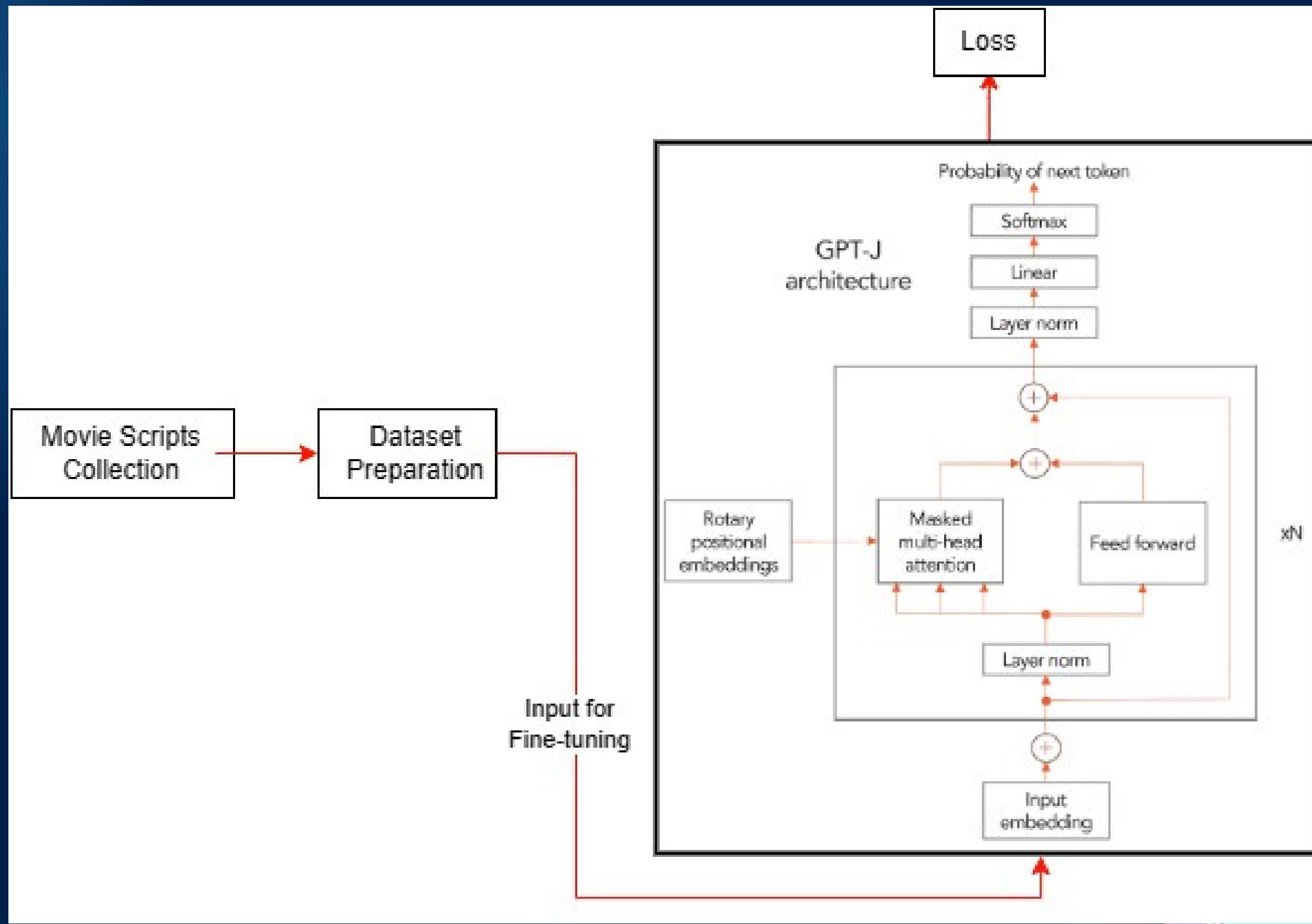
- We transformed the dataset into prompts that can be fed to the model.
- We used GPT4All v1.3-groovy, a pre-trained model by nomic ai.
- We fine-tuned the model on our dataset and saved it on hugging face.

3

We then aimed our focus on developing an Android app for the same using Kotlin in Android Studio.

- We created a basic template UI design with a homepage, from which the user can navigate to the model demo page and an about us page
- If an image generation API is available, then it can be integrated within our app (future prospect)

Model Architecture



Results and Discussion

We have obtained good results after running the model and these were the results:

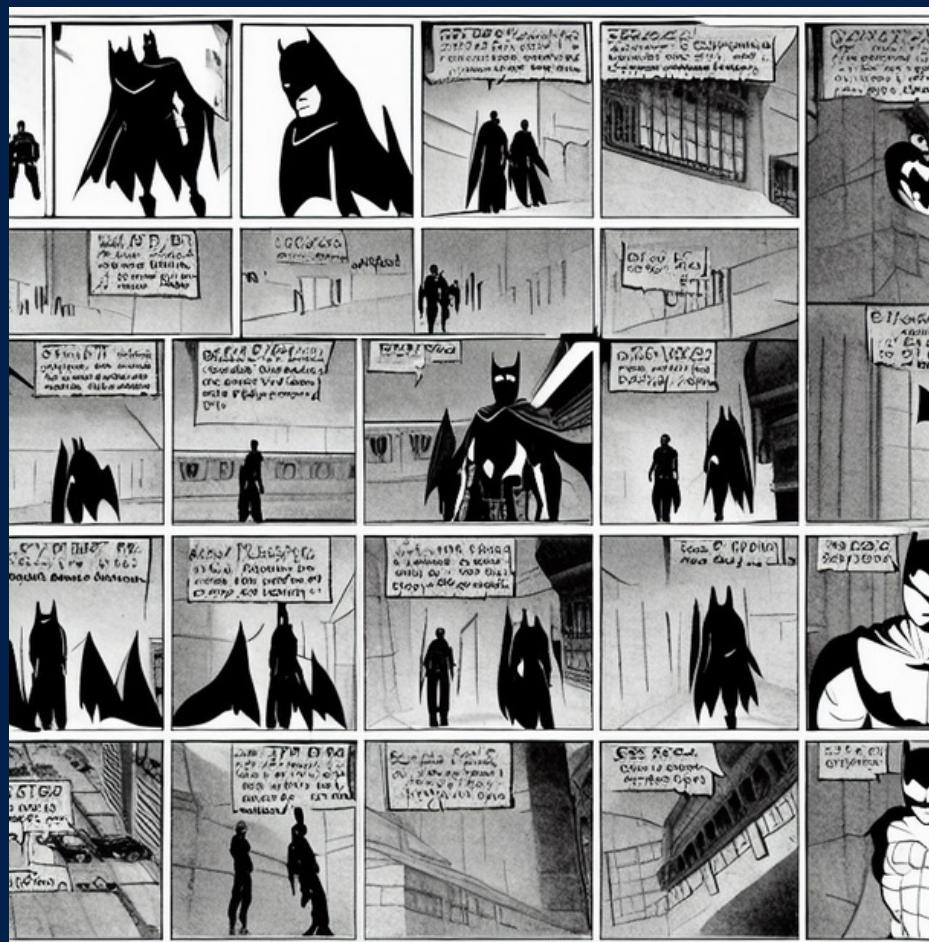
Training Loss	Epoch	Step	Validation Loss
No log	1.0	47	3.6236
No log	2.0	94	3.5828
No log	3.0	141	3.5741

Results and Discussion

Example for script generation is:

Results and Discussion

After obtaining the script we breakdown the script into small parts which are then used to generate storyboards through the Simple Diffusion Model.



Deployment



Website



Android App

Limitations

This project has several inherent limitations:

1. Creative Output: While the model is highly capable, it does not generate flawless movie scripts. Instead, it crafts original stories based on the provided prompts.
2. Computational Requirements: The effective utilization of the model demands substantial computational resources. Adequate processing power and memory are essential for loading and utilizing the model efficiently.
3. Language and Scope: Currently, the model is tailored for English movies and their storylines. It does not encompass the richness of regional narratives, limiting its applicability in the context of diverse cultural stories.

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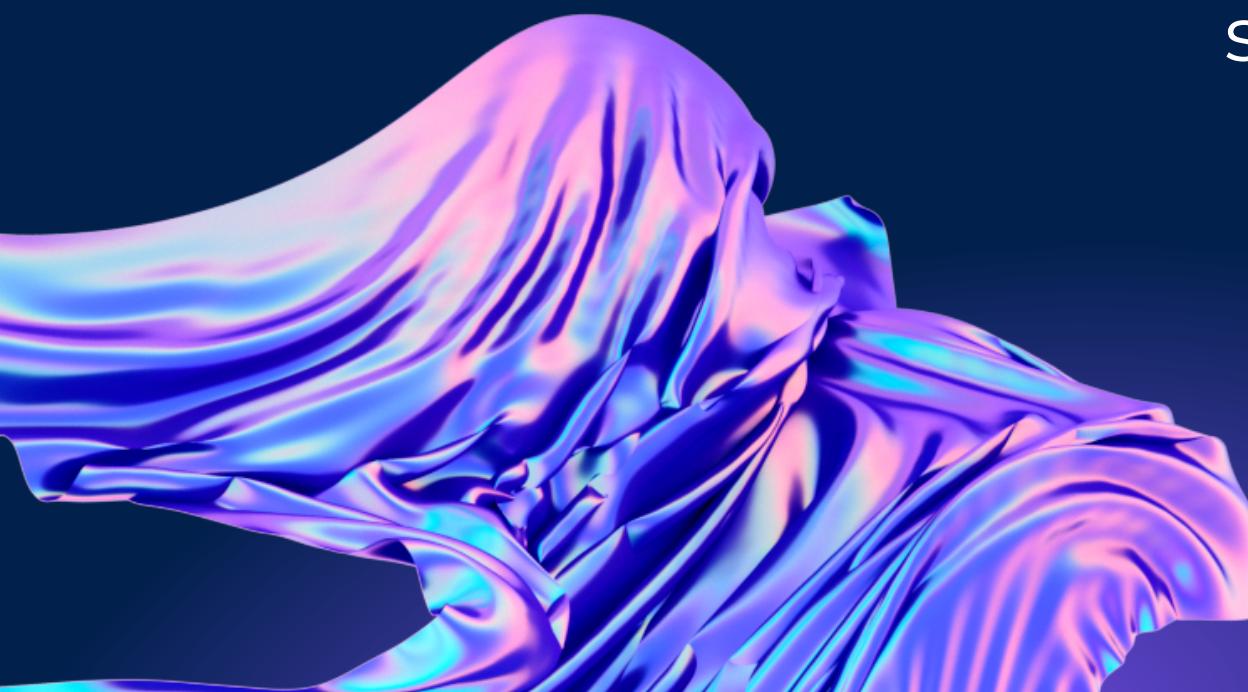
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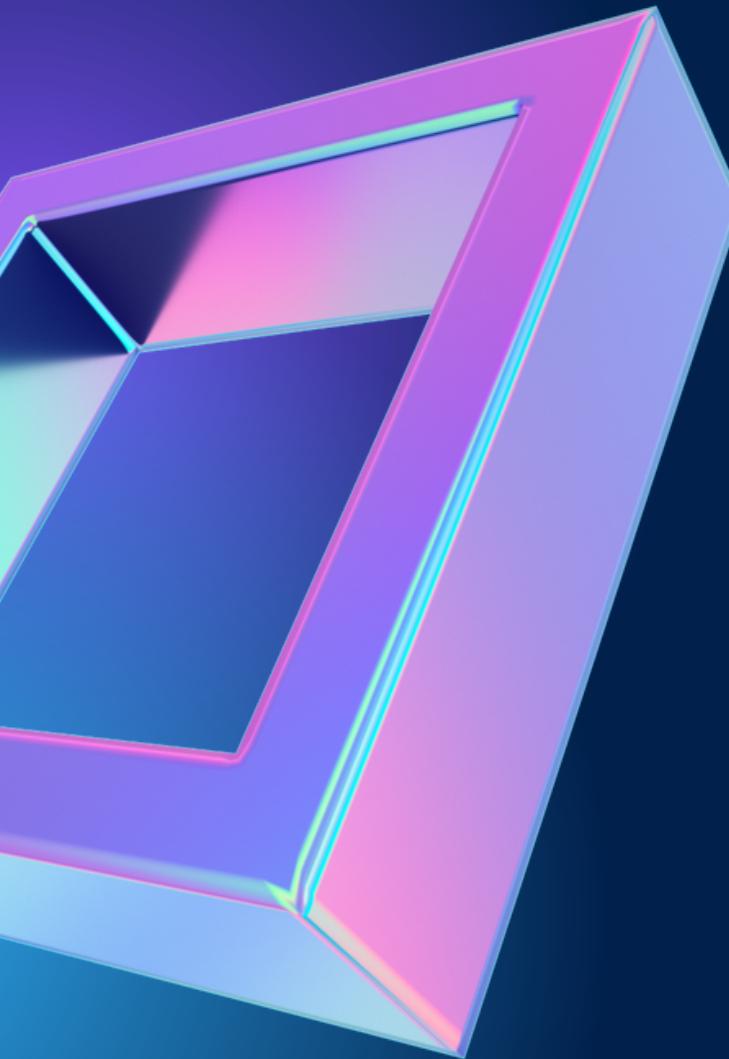
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Conclusion

We bring you the movie script generator which gives you a movie script and using the movie script, we can also create a storyboard which shows us how the script looks.





Thank You