# Exploratory Data Analysis on Ghibli-Style Image Generation Trends 2025

ANALYSIS BY VIVEK CHAUHAN

15-04-2025

Insights Covered:-

- Platform-wise Performance

- Prompt Popularity,Word Frequency in Prompts & Comments Insights

- Date, Time & Day-wise Trends

- Technical Metrics Insights (GPU Usage, File Size, Accuracy Score)

- Hand Edited vs Non-Edited Image Analysis

- Ethical Concern Flag Analysis

- Key Observations & Insights

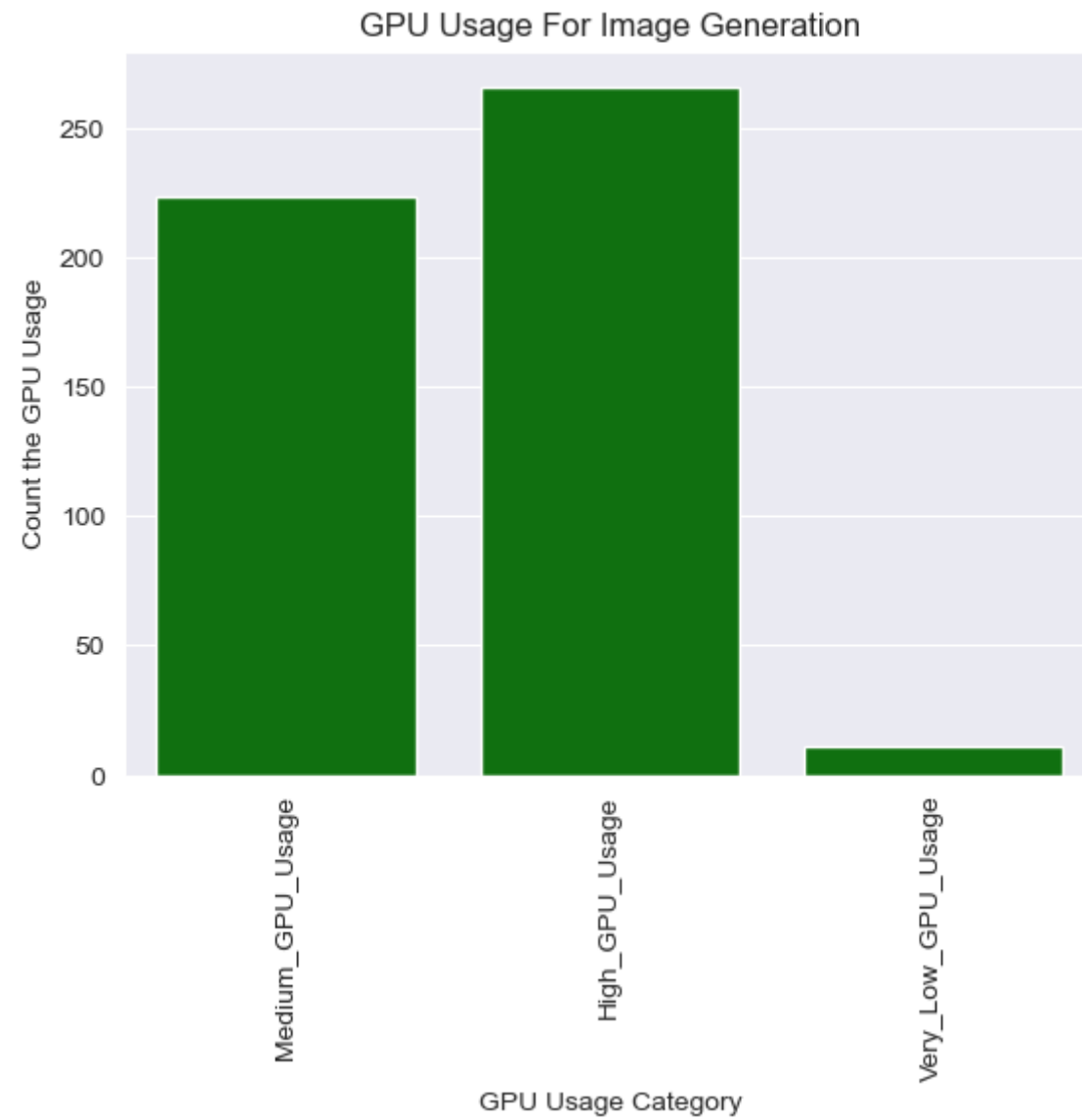Platform Usage by User To Post The Image
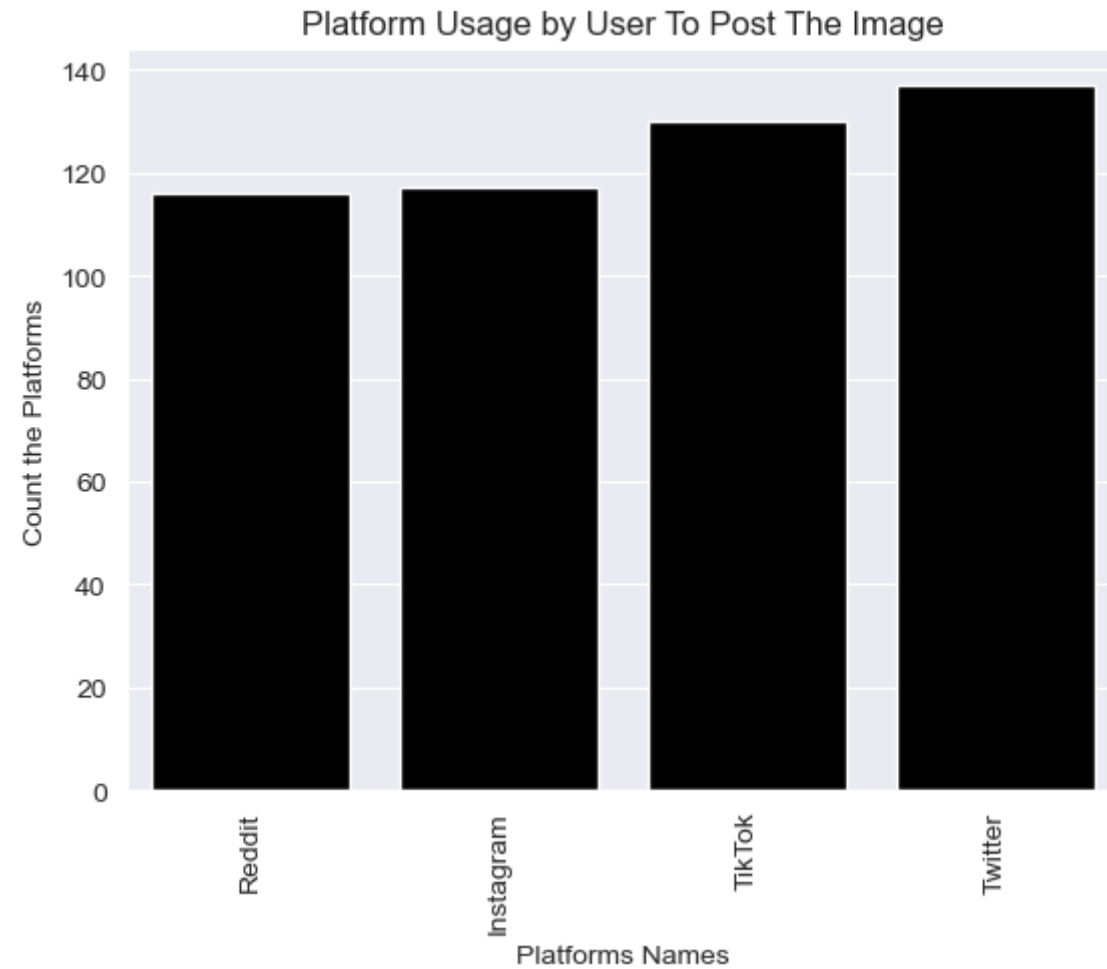
As per the Countplot the Twitter Platform Is most trending to post Ghibli Style Images.
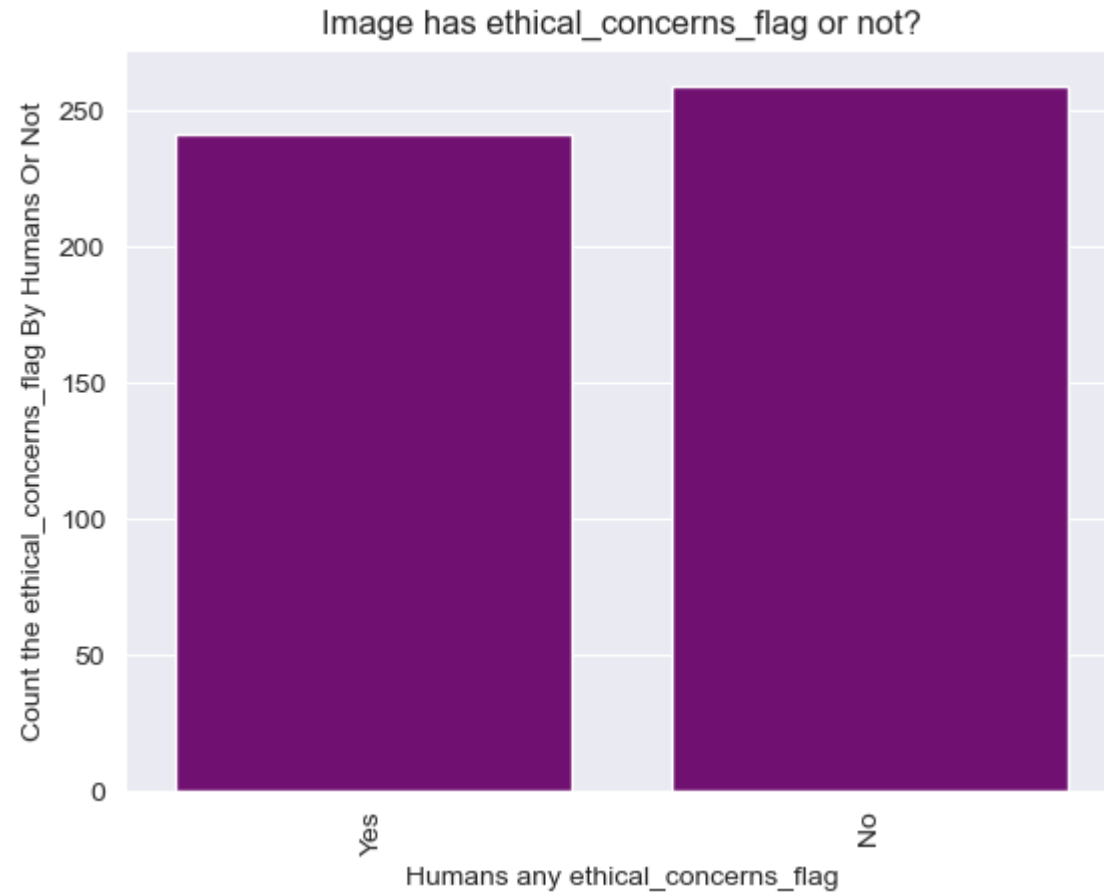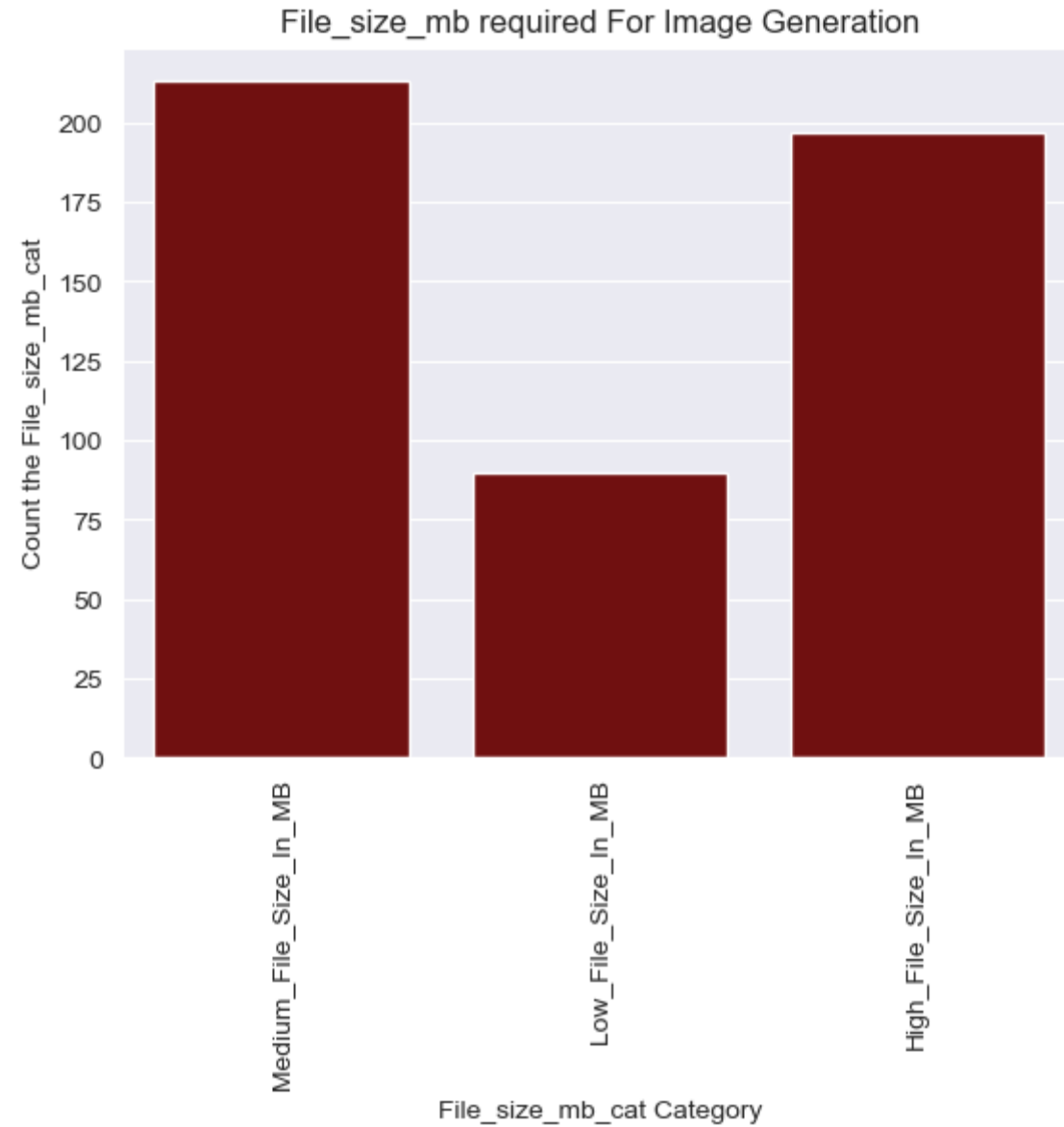
**Most of the users has no ethical_concerns_flag to create the Ghibli style image.**
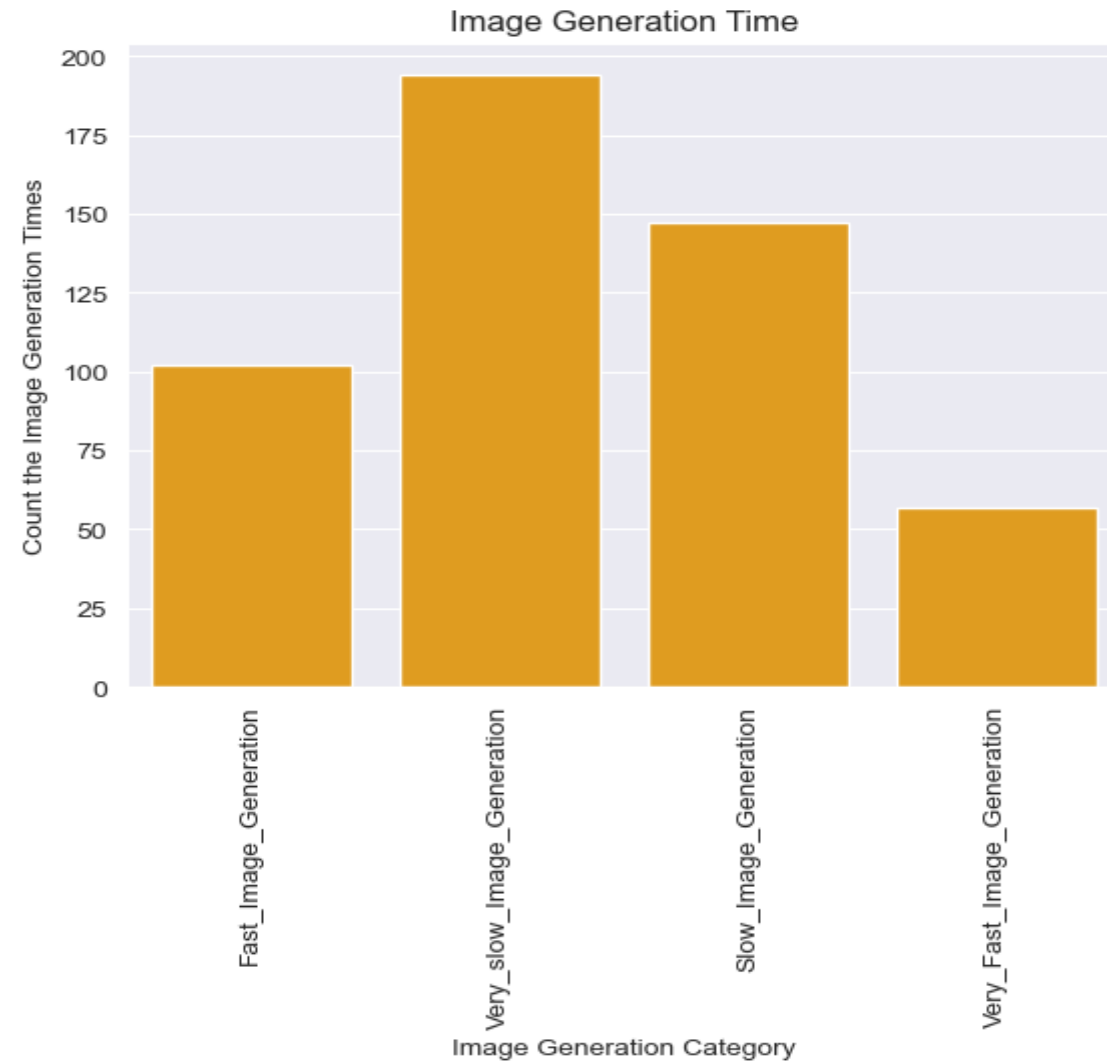
Most of the image is generated in a very slow image generation time.

GPU Usage For Image Generation

Most of the image Gpu usage in a high gpu usage category.

File_size_mb required For Image Generation

Most of the images is generated in the medium file size in mb means majority of the images are generated in the category of 1 to 3 mb.

Style_accuracy_score_cat For Image Generation
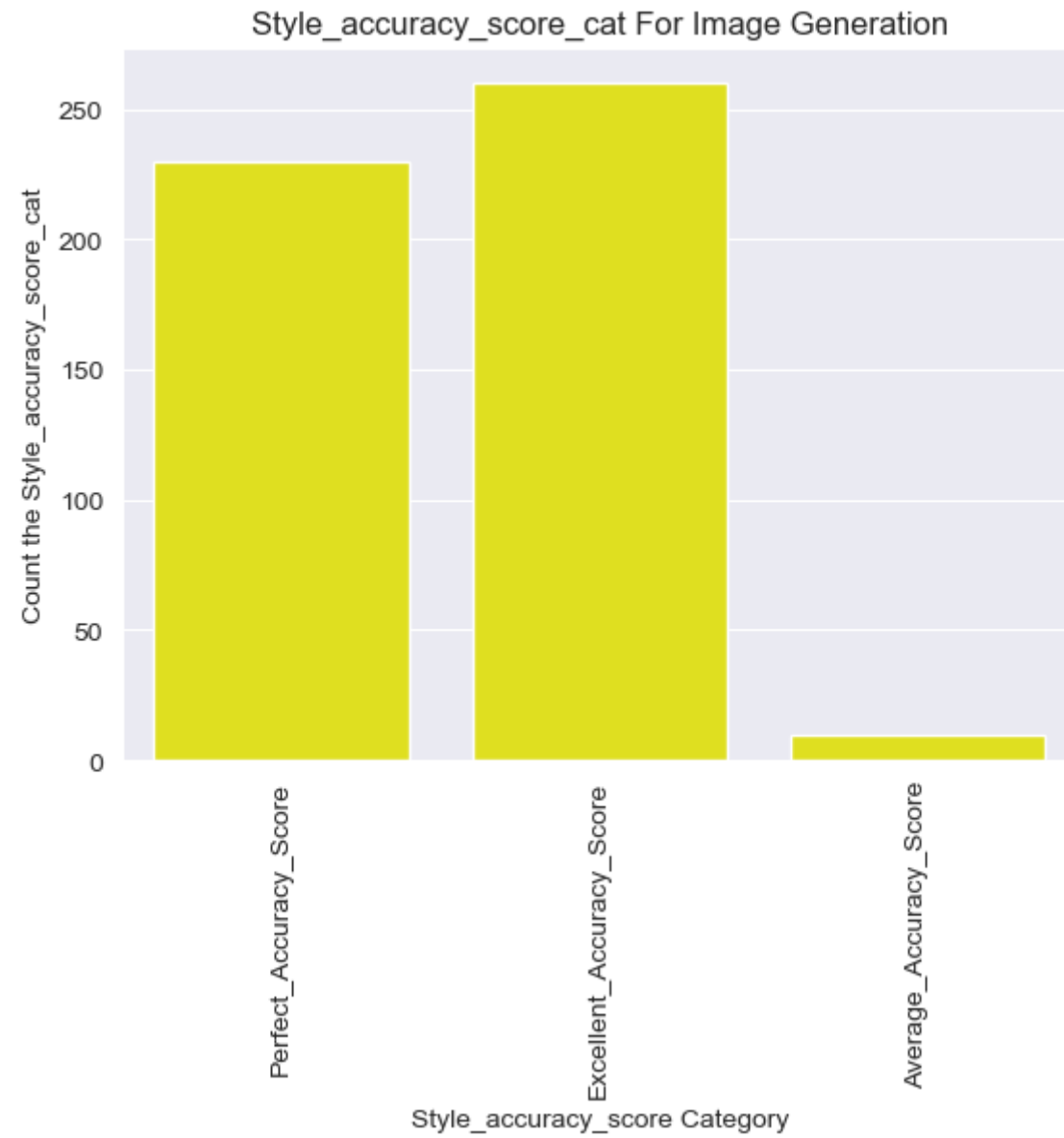
Most of the image is generated and user gives Excellent Accuracy Score.

Count day wise Image Generation
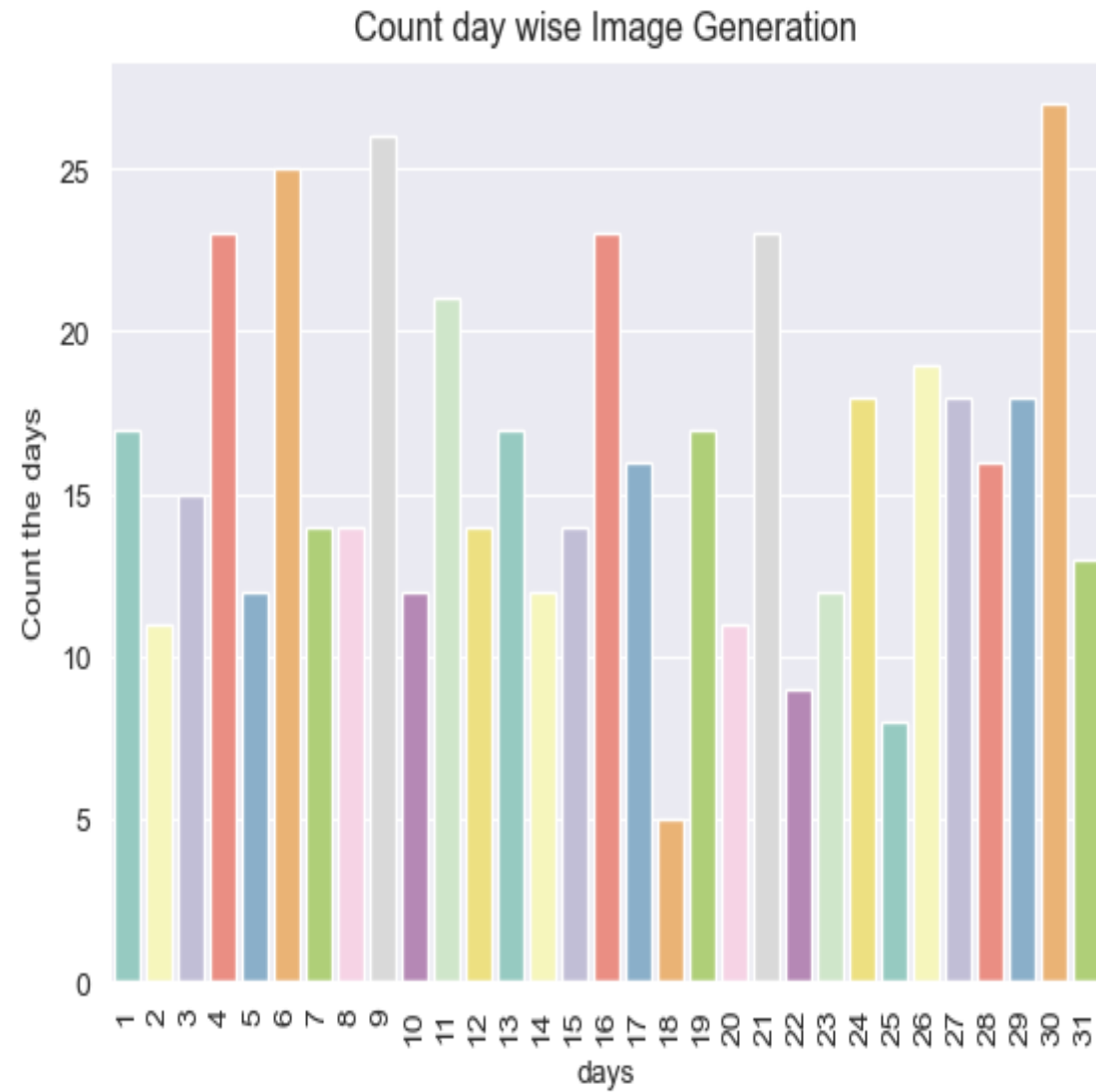
Most of the images are generated on 3rd & 30th March.

```python
[50]:  from collections import Counter
       import nltk
       from nltk.corpus import stopwords

       # Download stopwords (only needed once)
       nltk.download('stopwords')

       # Get English stopwords
       stop_words = set(stopwords.words('english'))

       # Create an empty list to store words
       all_words = []

       # Extend all words from the prompt column into one list
       for prompt_text in data['prompt']:  # Loop through each entry in the prompt column
           all_words.extend(prompt_text.split())  # Split the text into words and extend the list

       # Filter out stopwords and single-character words
       filtered_words = [word for word in all_words if word.lower() not in stop_words and len(word) > 1]

       # Count the frequency of each word
       word_freq = Counter(filtered_words)

       # Print the 5 most common words
       print(word_freq.most_common(5))
```

```
[('Ghibli-style', 174), ('Mysterious', 87), ('floating', 82), ('Ghibli', 78), ('forest', 72)]

[nltk_data] Downloading package stopwords to C:\Users\VIVEK
[nltk_data]     CHAUHAN\AppData\Roaming\nltk_data...
[nltk_data]   Package stopwords is already up-to-date!
```

You can see the 'Ghibli-style','Mysterious','with' is the most common words while prompting.

```python
[100]:    from collections import Counter
          import nltk
          from nltk.corpus import stopwords

          # Ensure stopwords are downloaded (only needed once)
          nltk.download('stopwords')

          # Get English stopwords
          stop_words = set(stopwords.words('english'))

          # Create an empty list to store words
          all_comment_words = []

          # Loop through each entry in the top_comment column
          for comment_text in data['top_comment']:
              if isinstance(comment_text, str):  # Ensure it's a string
                  all_comment_words.extend(comment_text.split())  # Split into words

          # Filter out stopwords, single-character words, and numeric words
          filtered_comment_words = [word for word in all_comment_words
                                    if word.lower() not in stop_words
                                    and len(word) > 1
                                    and not word.isdigit()  # Exclude numeric words
                                    and word.isalpha()]  # Only alphabetic words

          # Count the frequency of each word
          comment_word_freq = Counter(filtered_comment_words)

          # Print the 5 most common words
          print(comment_word_freq.most_common(5))
```
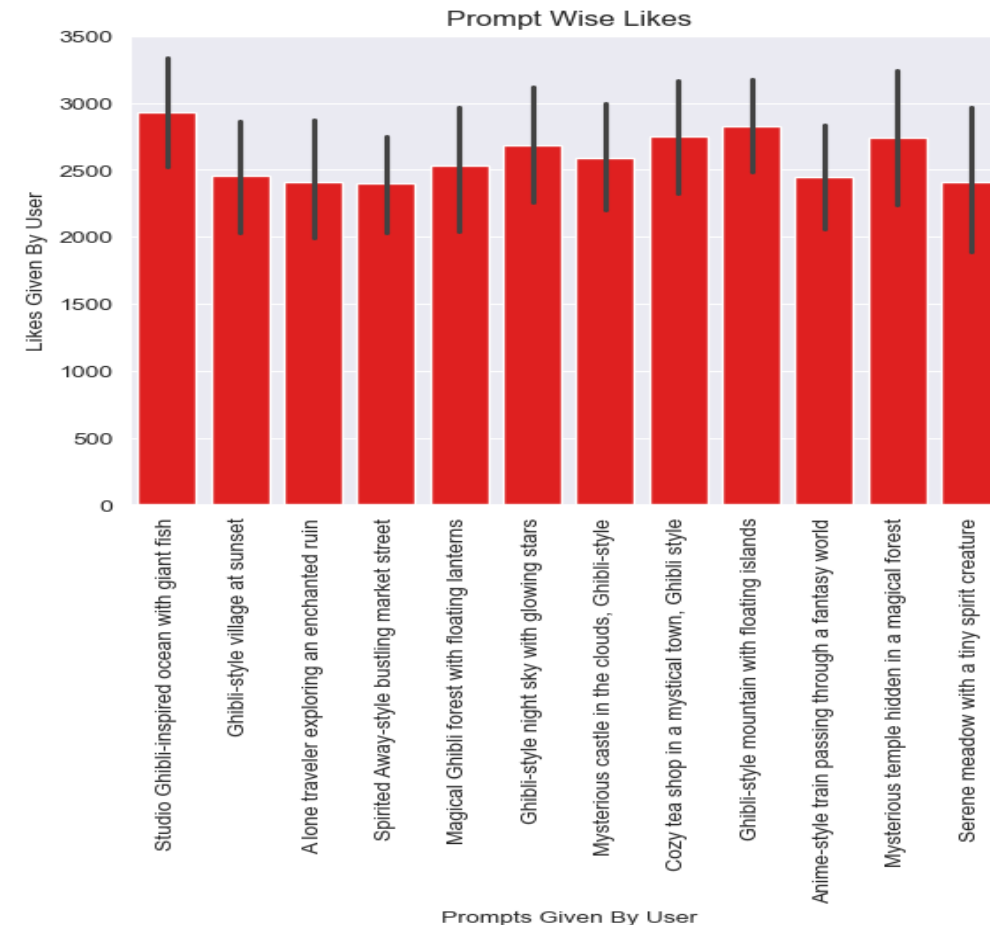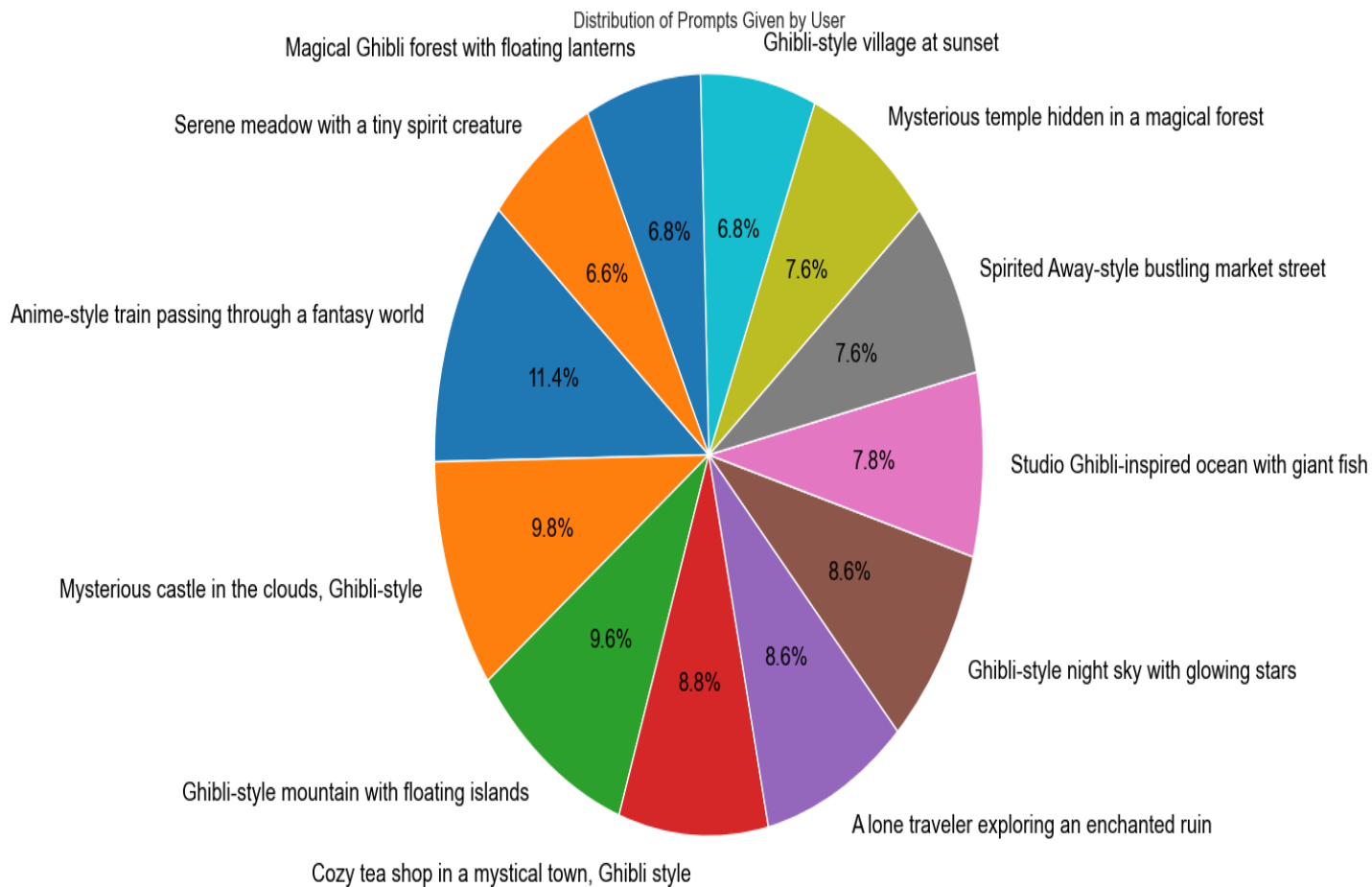
```
[('Ghibli', 95), ('AI', 76), ('believe', 54), ('lighting', 53), ('atmosphere', 53)]
[nltk_data] Downloading package stopwords to C:\Users\VIVEK
[nltk_data]     CHAUHAN\AppData\Roaming\nltk_data...
[nltk_data]   Package stopwords is already up-to-date!
```

Most common word in the top comments is 'Ghibli','AI','believe','lighting','atmosphere'.

Distribution of Prompts Given by User

Prompt Wise Likes

You can see the most using prompt by user is "Anime-Style train passing through a fantasy world"

In Above Bar-Chart you can see clearly the "Studio Ghibli-Inspired Ocean With giant fish" Prompt get the highest likes.

Count the prompts

Prompt Wise shares
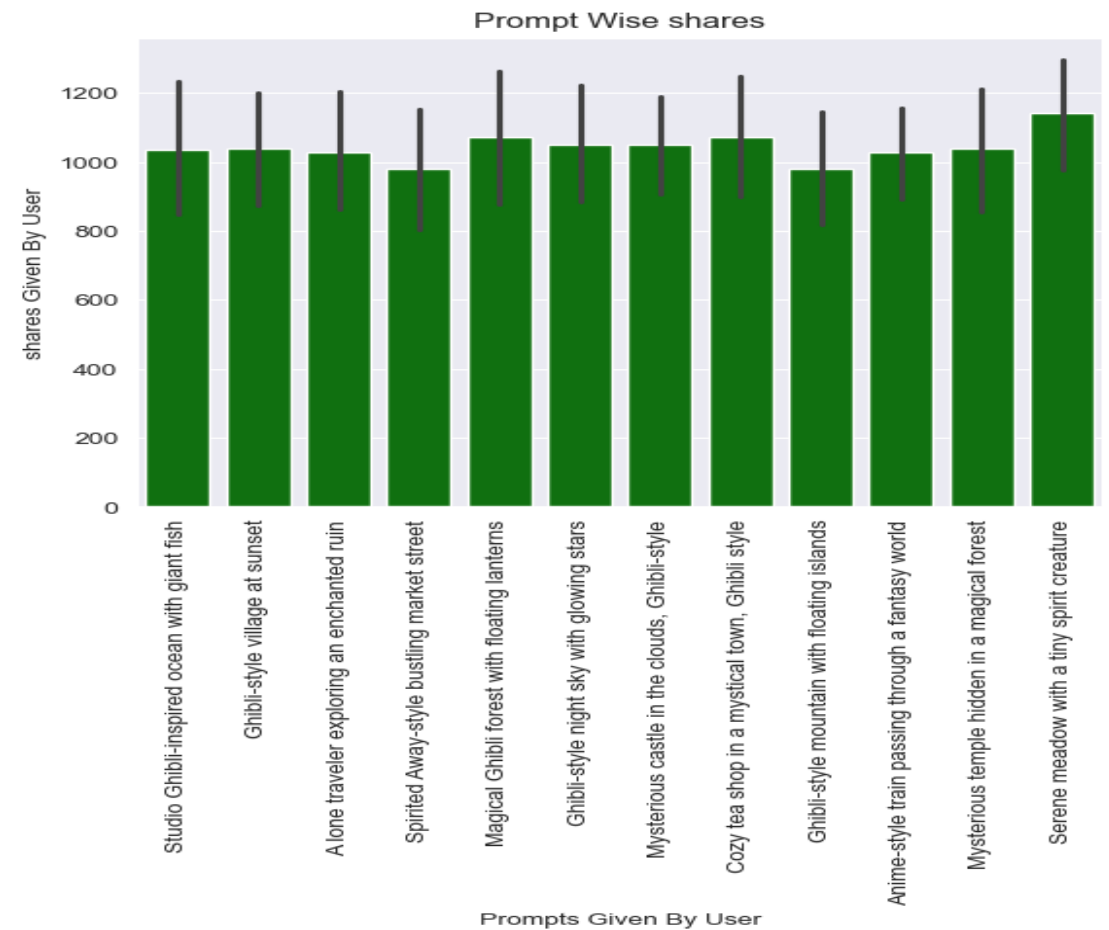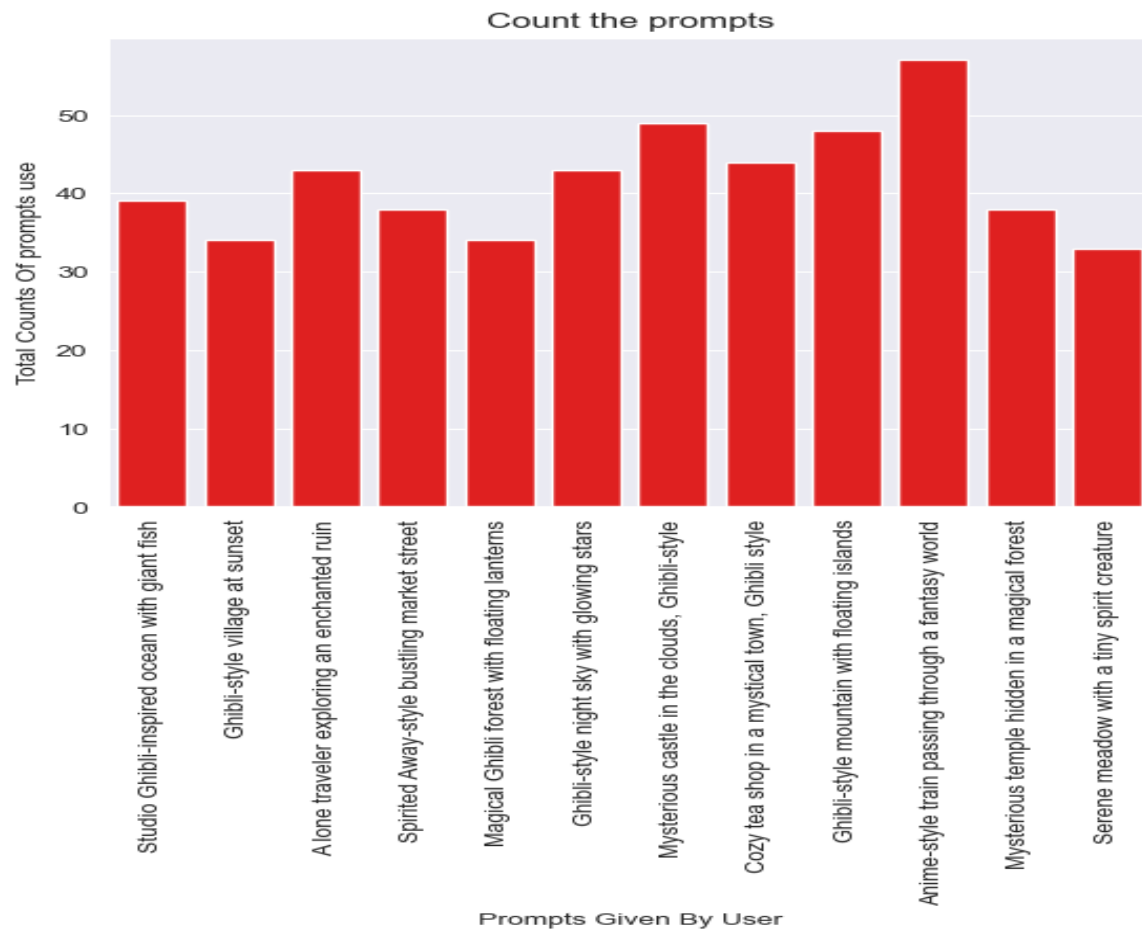
Totally Opposite Thing is "Serene medow with a tiny spirit creature" Prompt Generated Image is highes shares On social-Media.
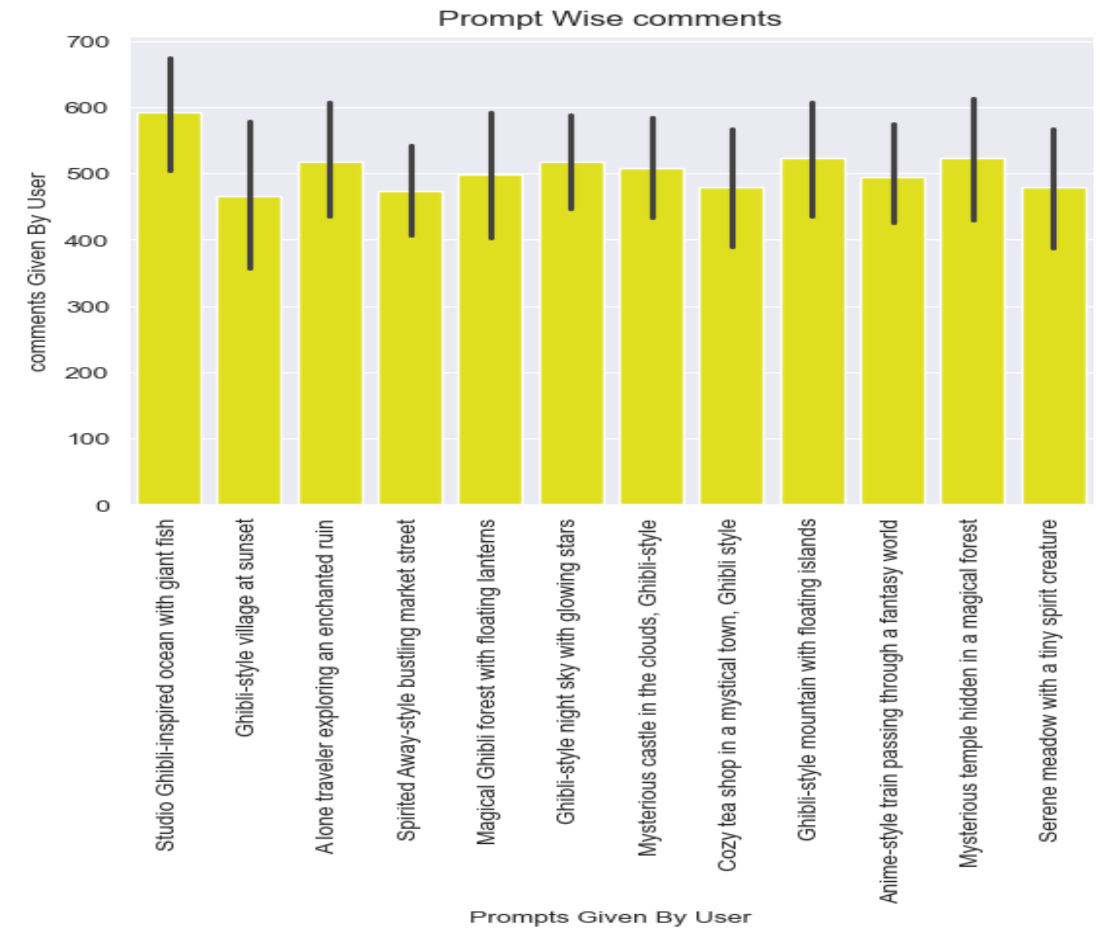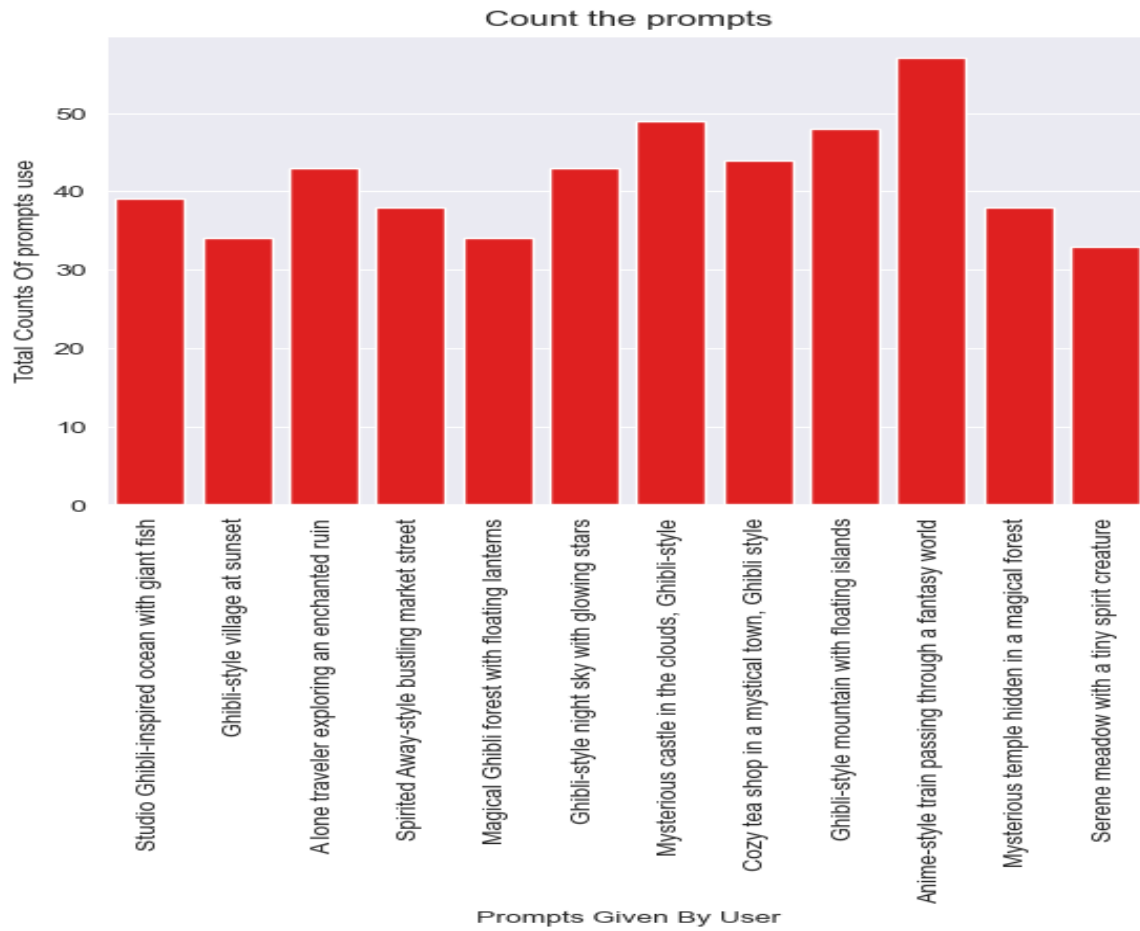
Count the prompts

Prompt Wise comments

In Above Bar-Chart you can see clearly the "Studio Ghibli-Inspired Ocean With giant fish" Prompt get the highest Comments.

Count the prompts

Prompt Wise generation_time
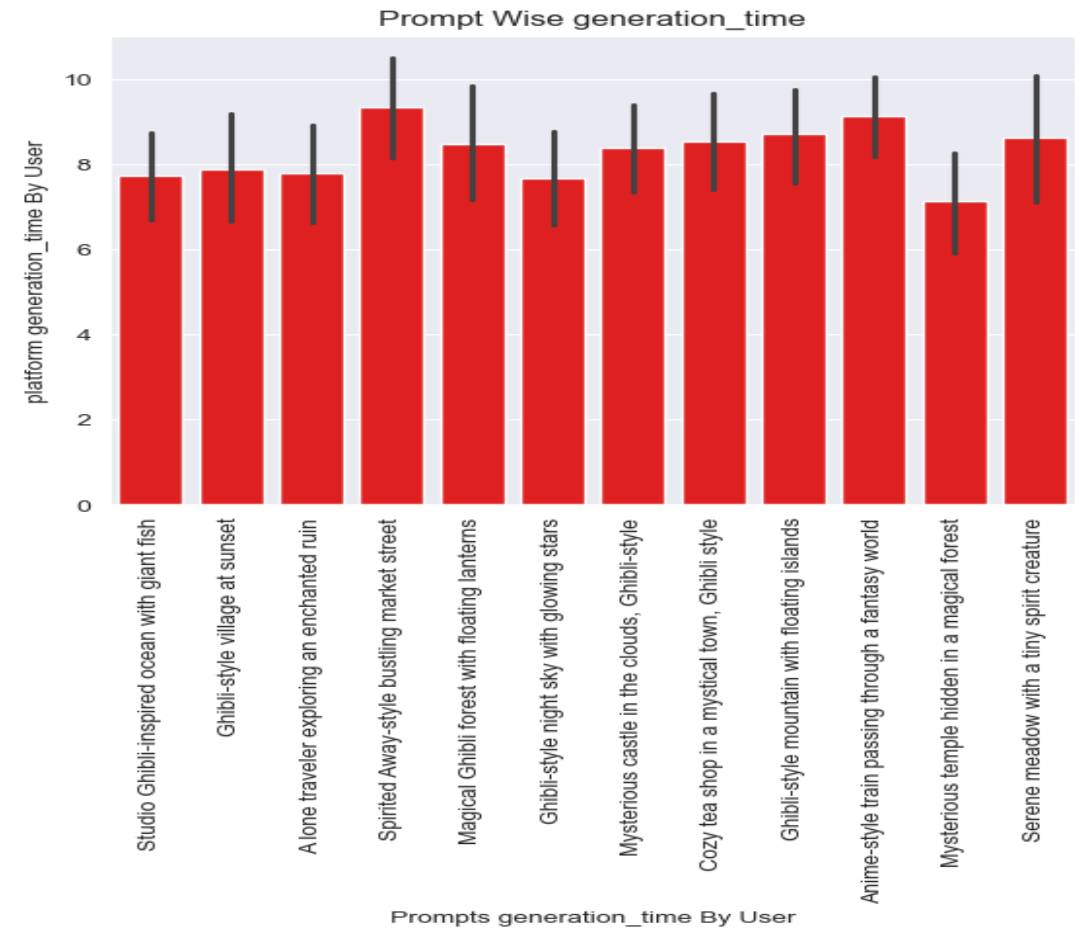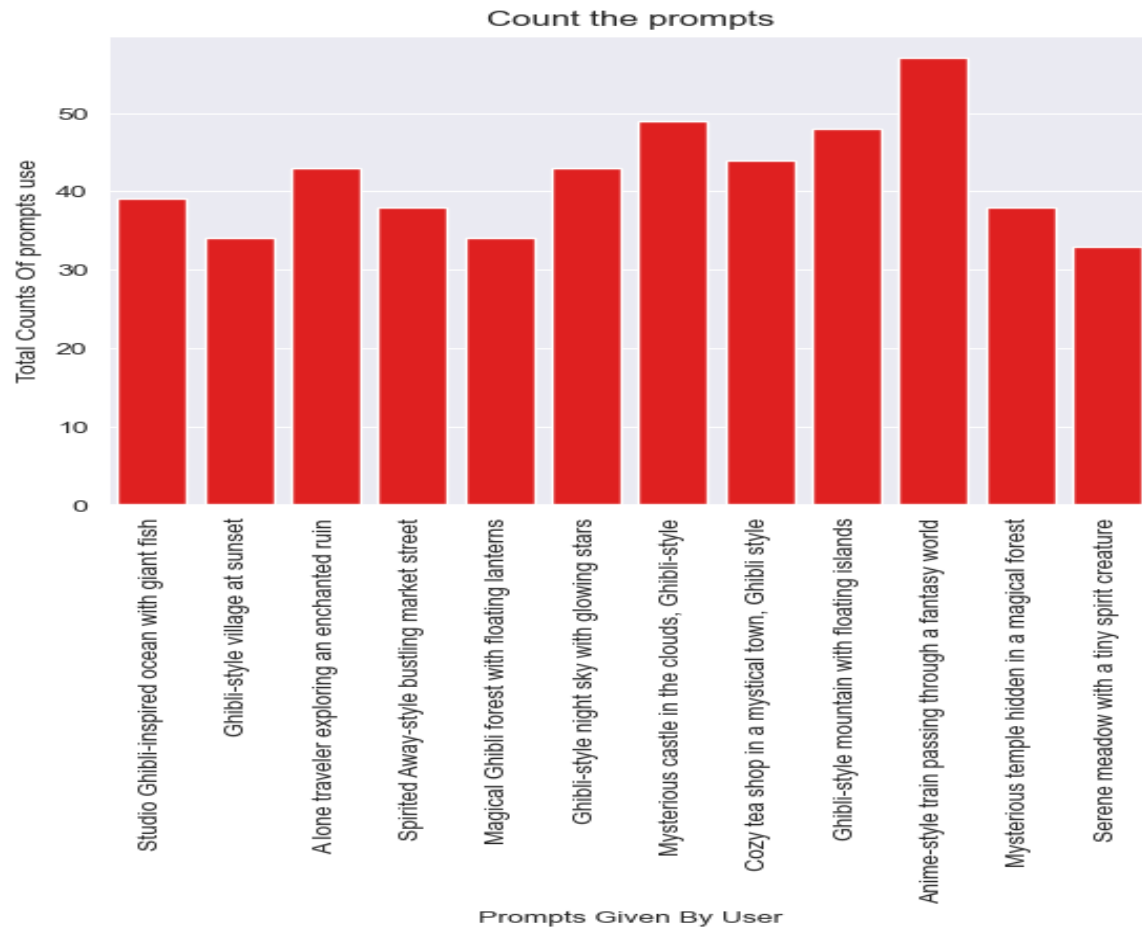
You can see clearly "Sprinted Away Style bustiing market street" prompt takes higher image generation time among the all the prompts.
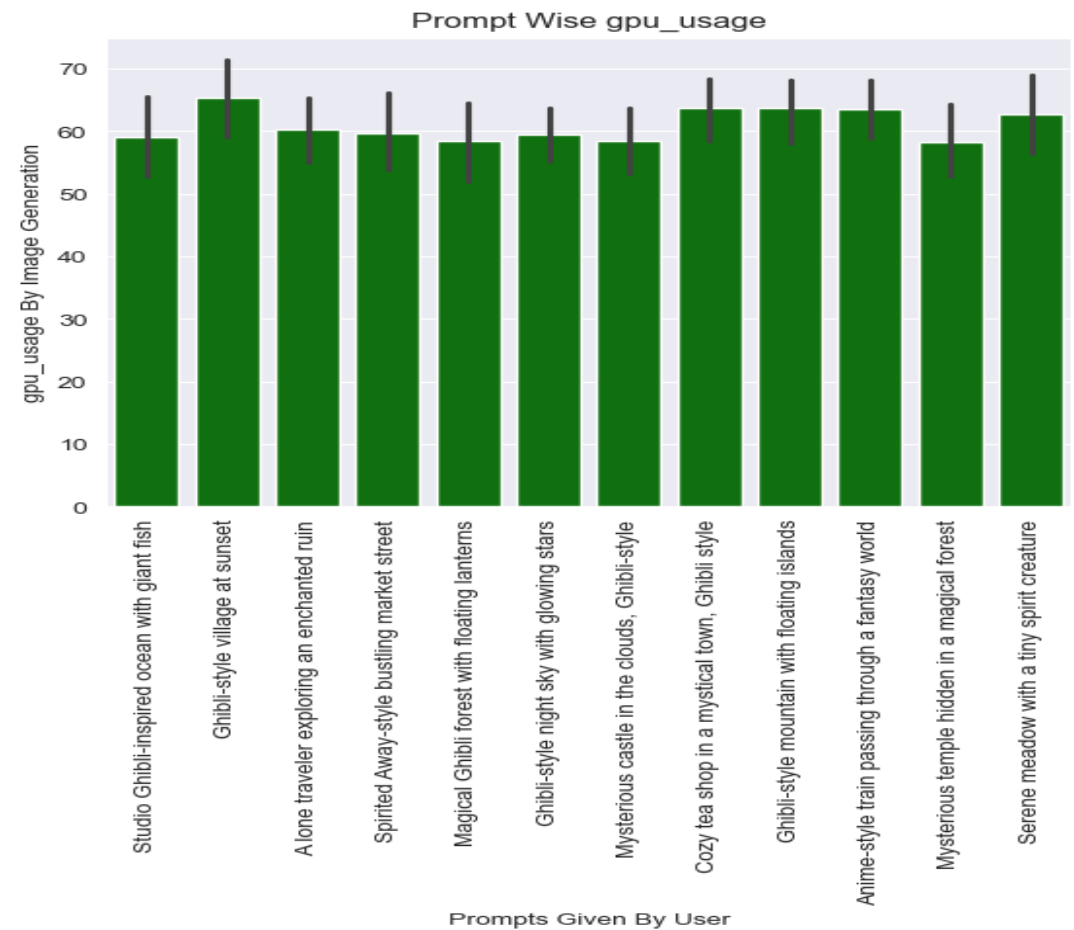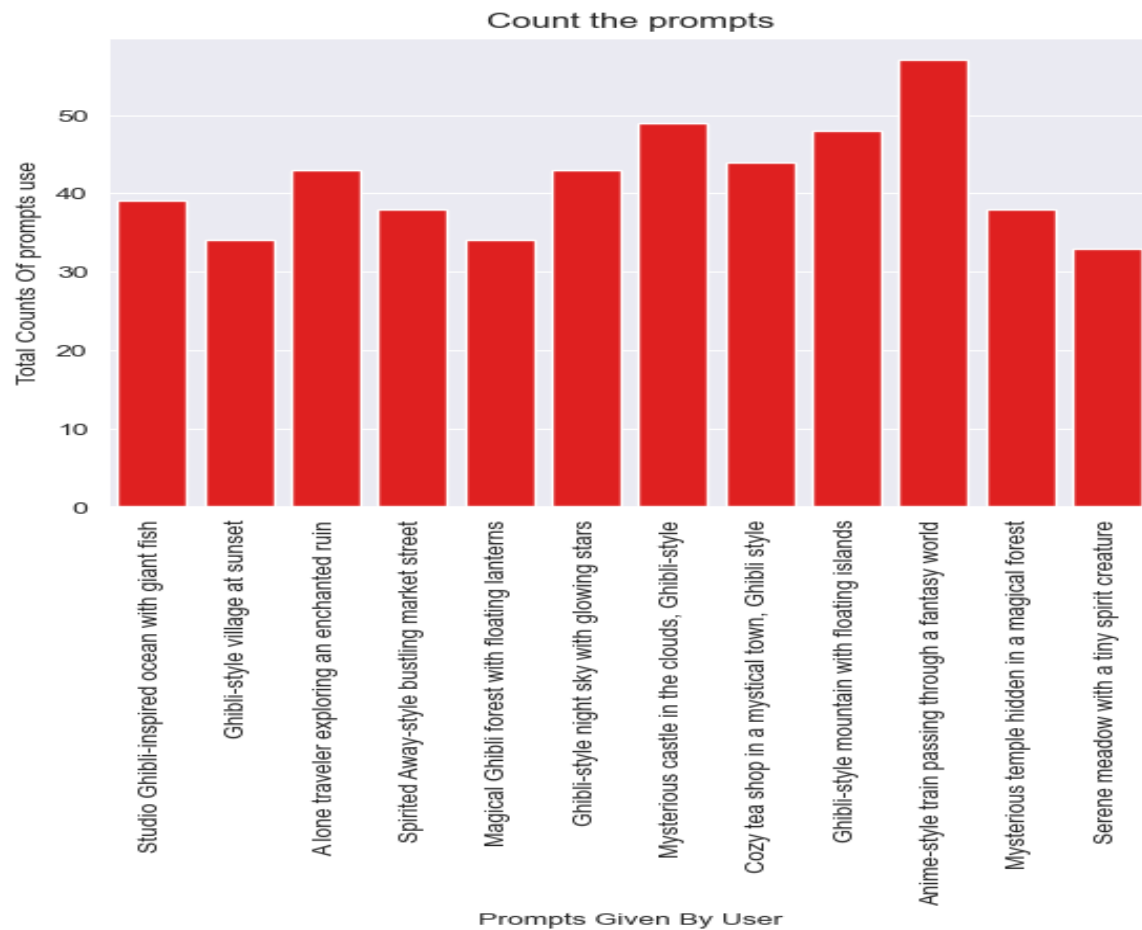
**Here the interesting thing is prompt "Ghibli-style village at sunset" take the higher gpu time create image.**

**Count the prompts**

Prompt Wise file_size_kb
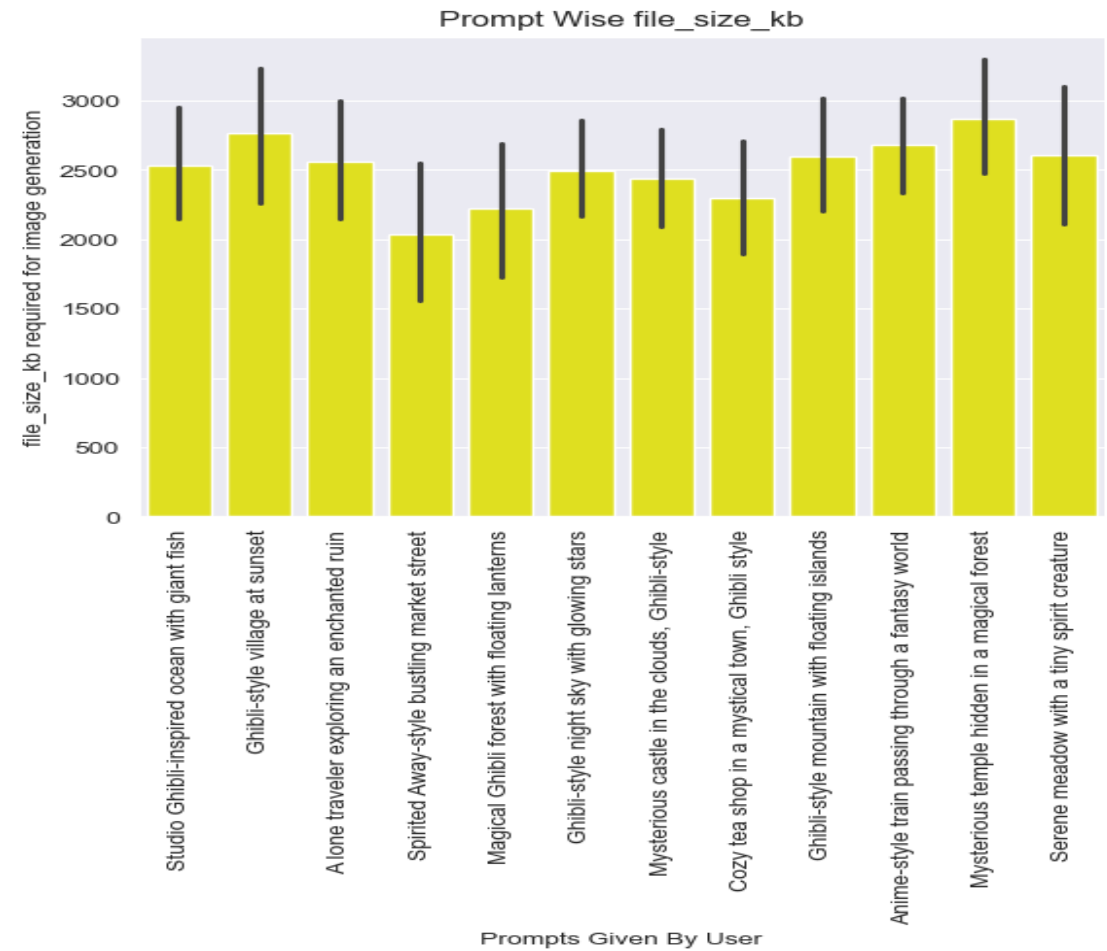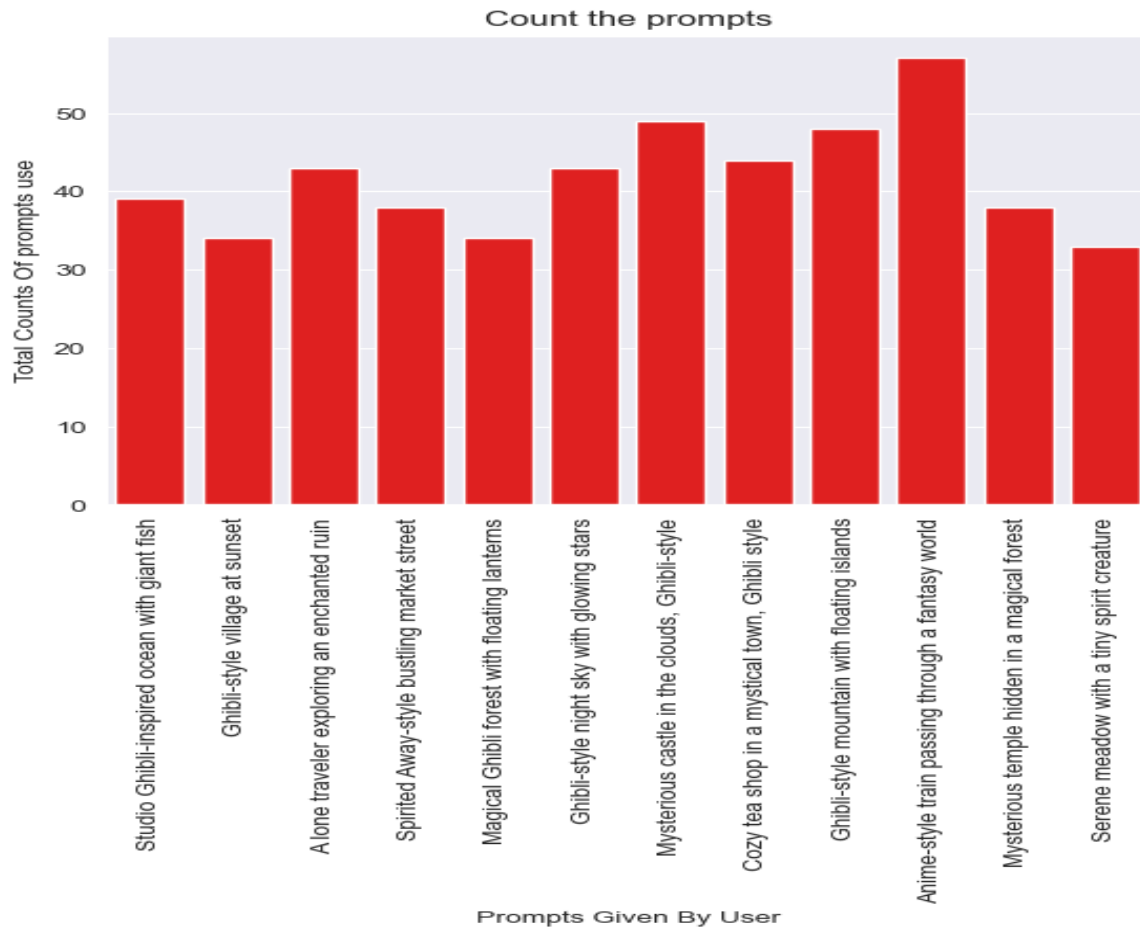
One Another interesting thing is prompt "Mysterious temple hidden in a magical forest" required high spaces to create that type of images.
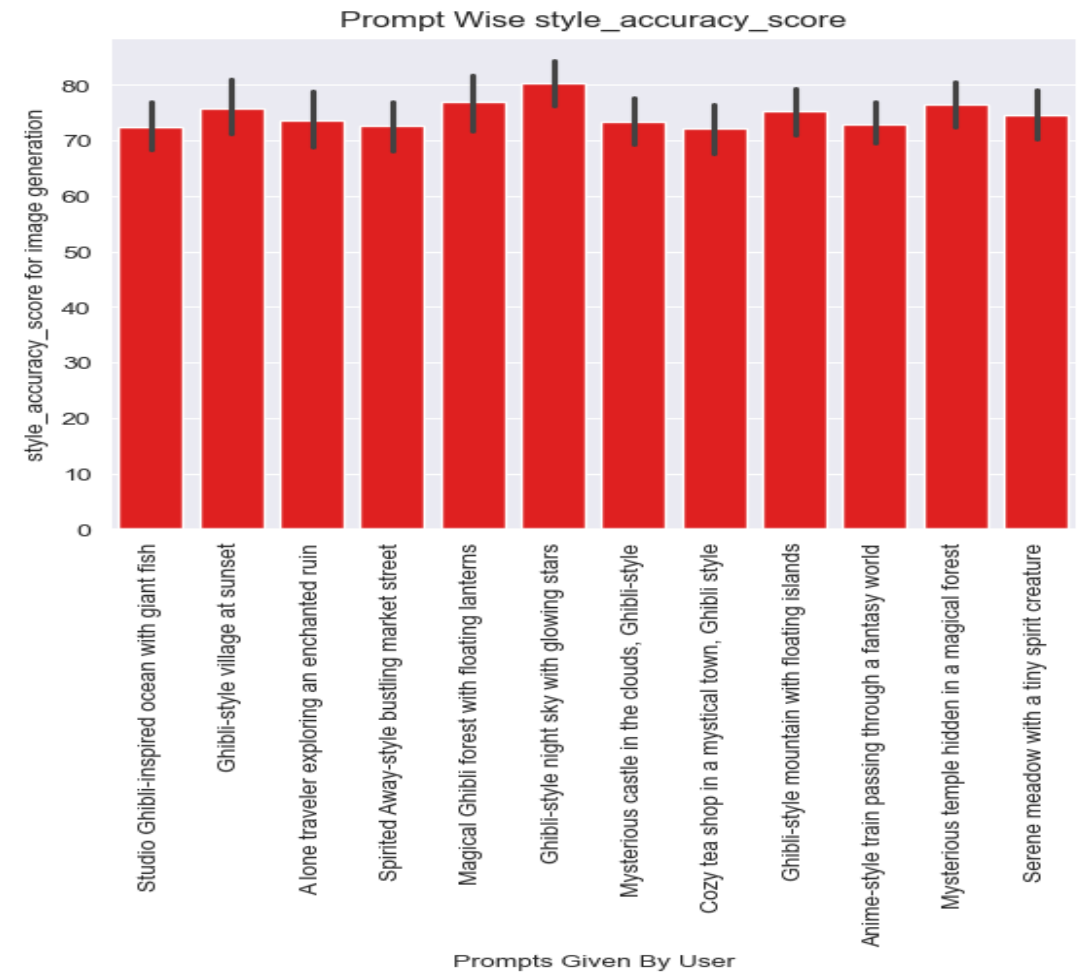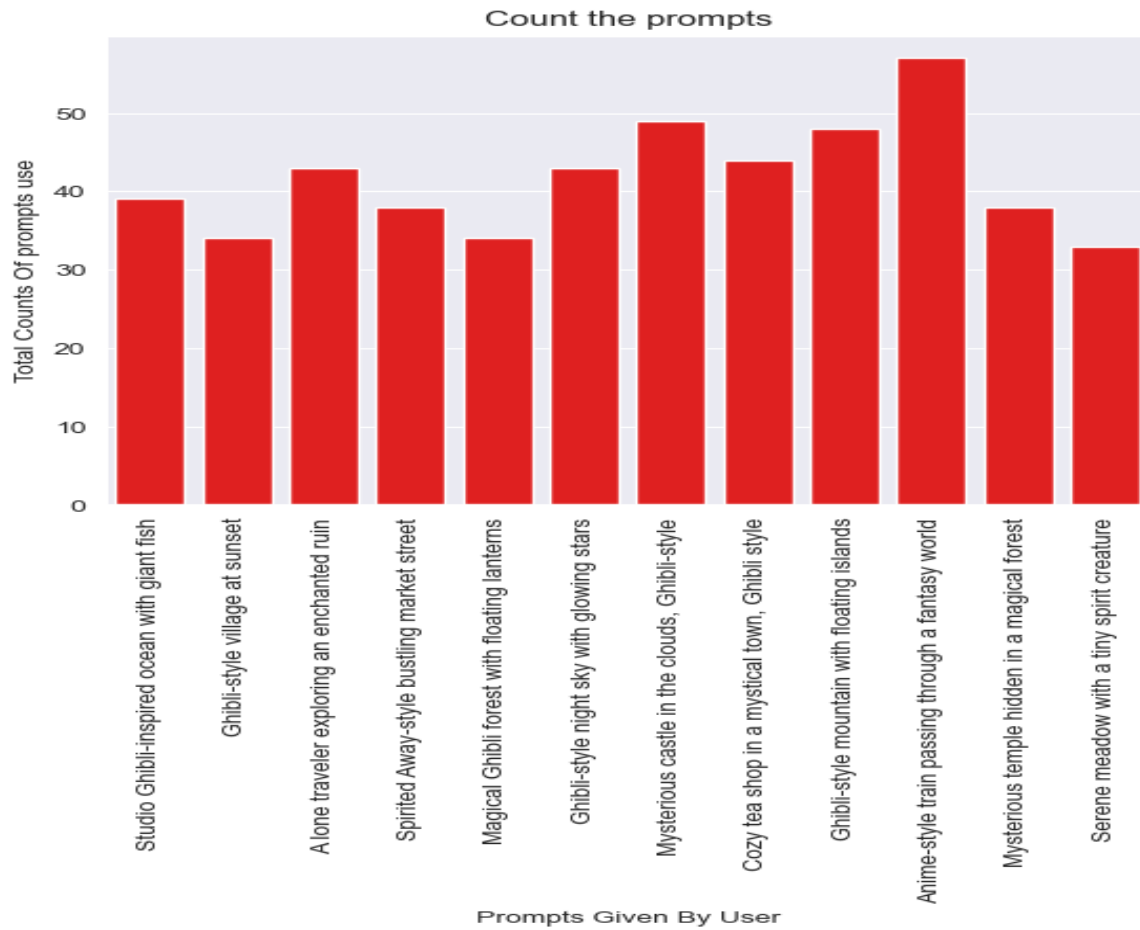
You can see clearly the prompt "Ghibli-style night sky with glowing stars" generates the images with high accuracy score.

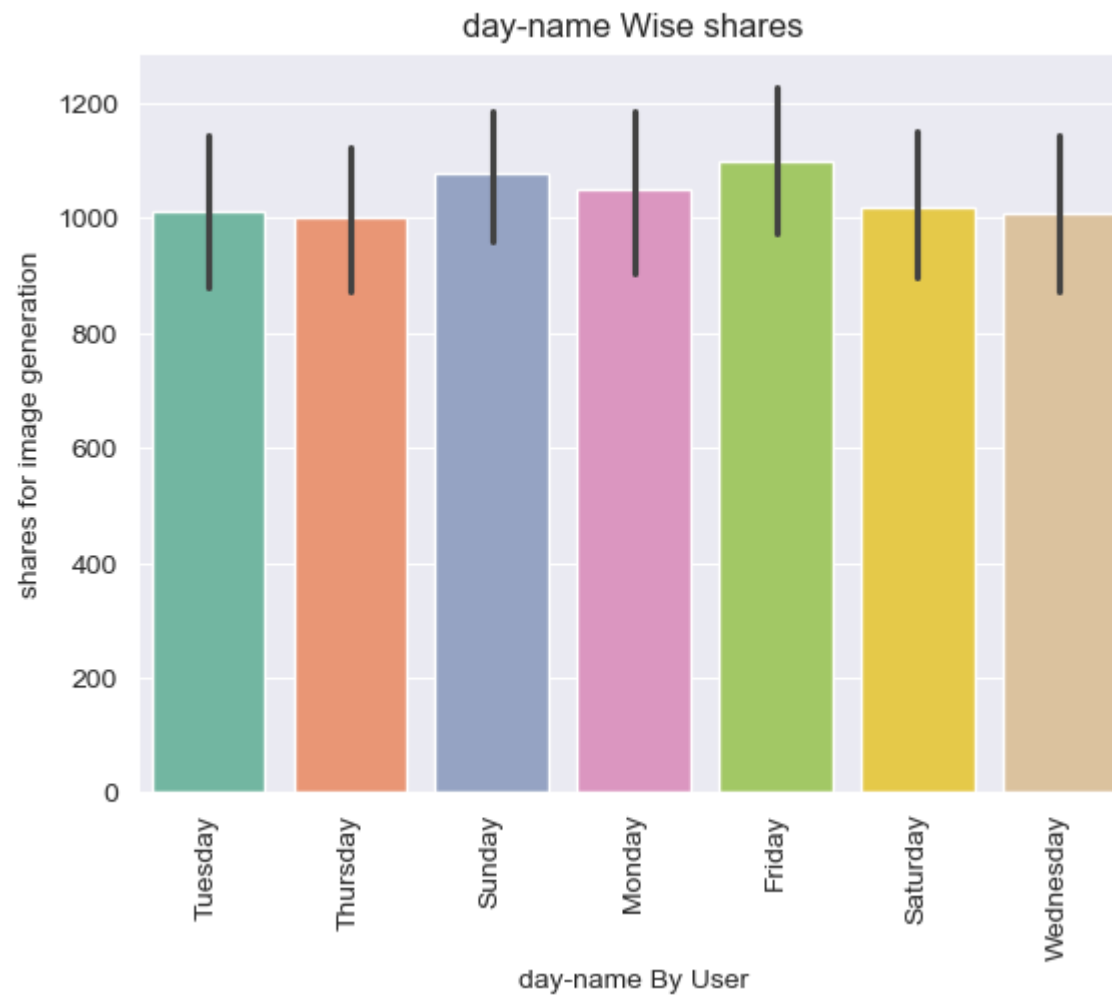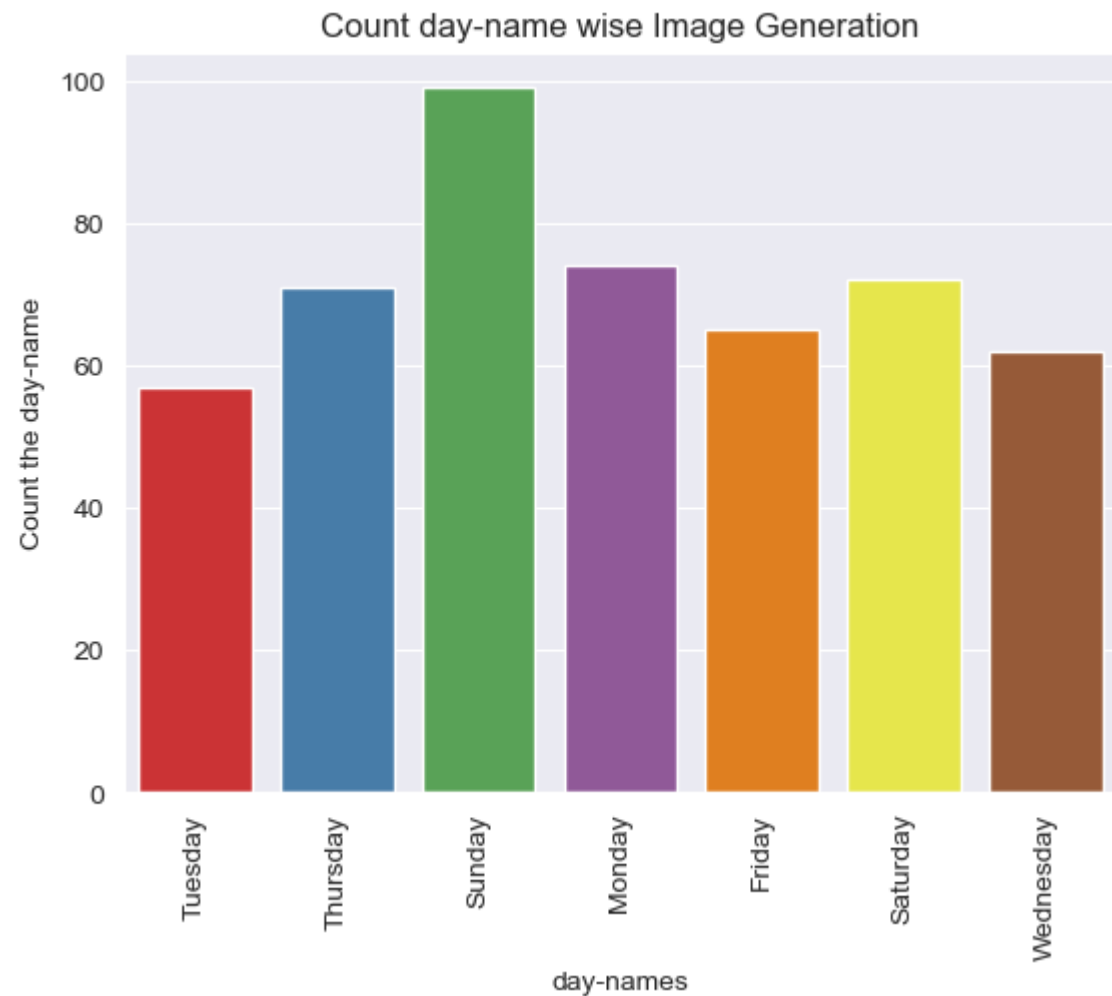**Prompt Wise height**

Prompt Wise width
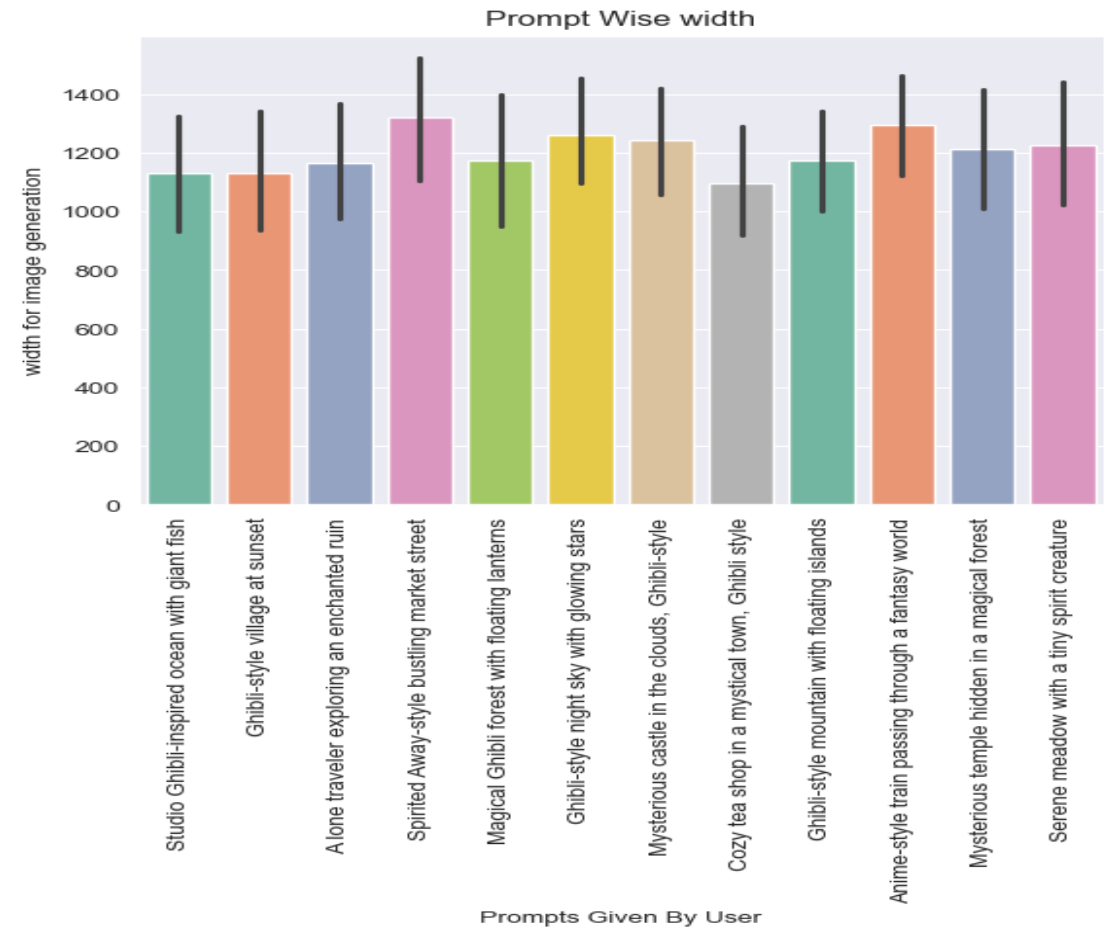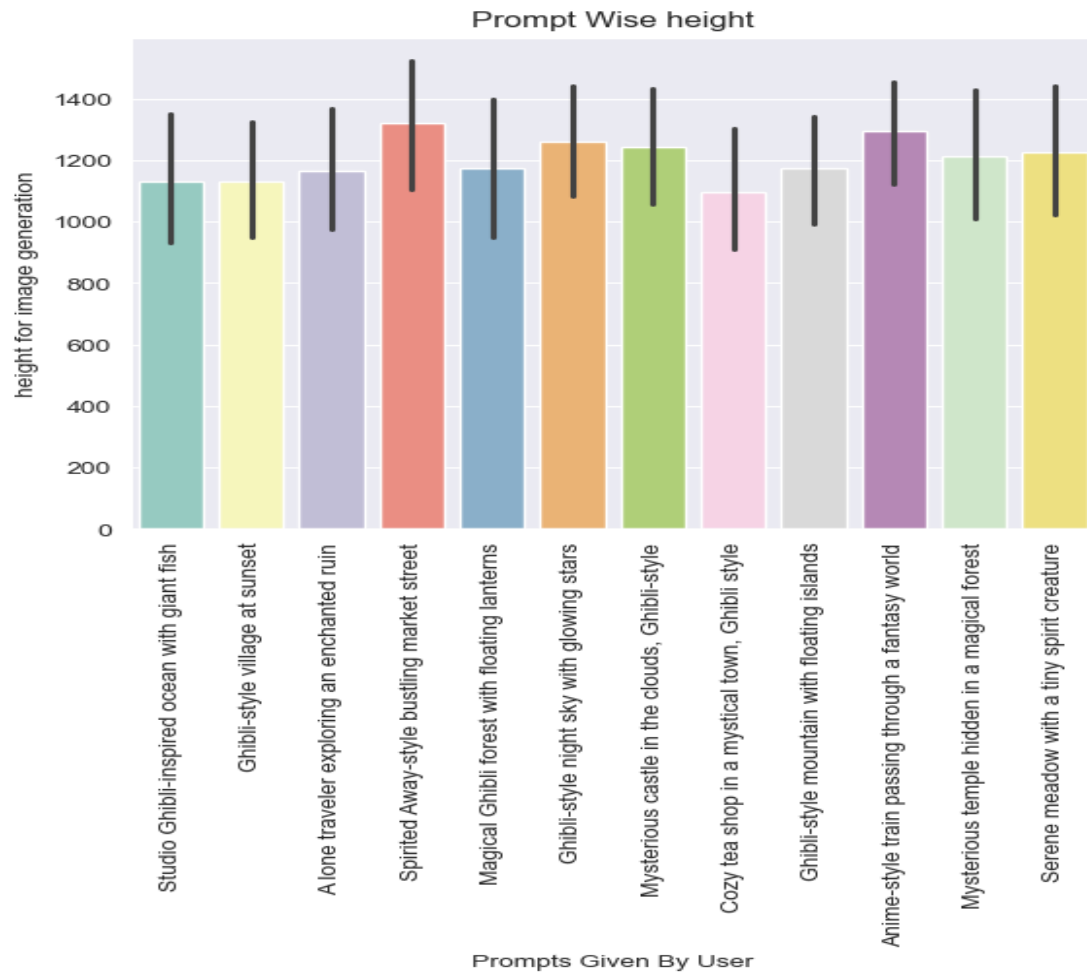
You can see Broader & Bigger images generated in the prompt of "Sprinted Away Style bustling market street".

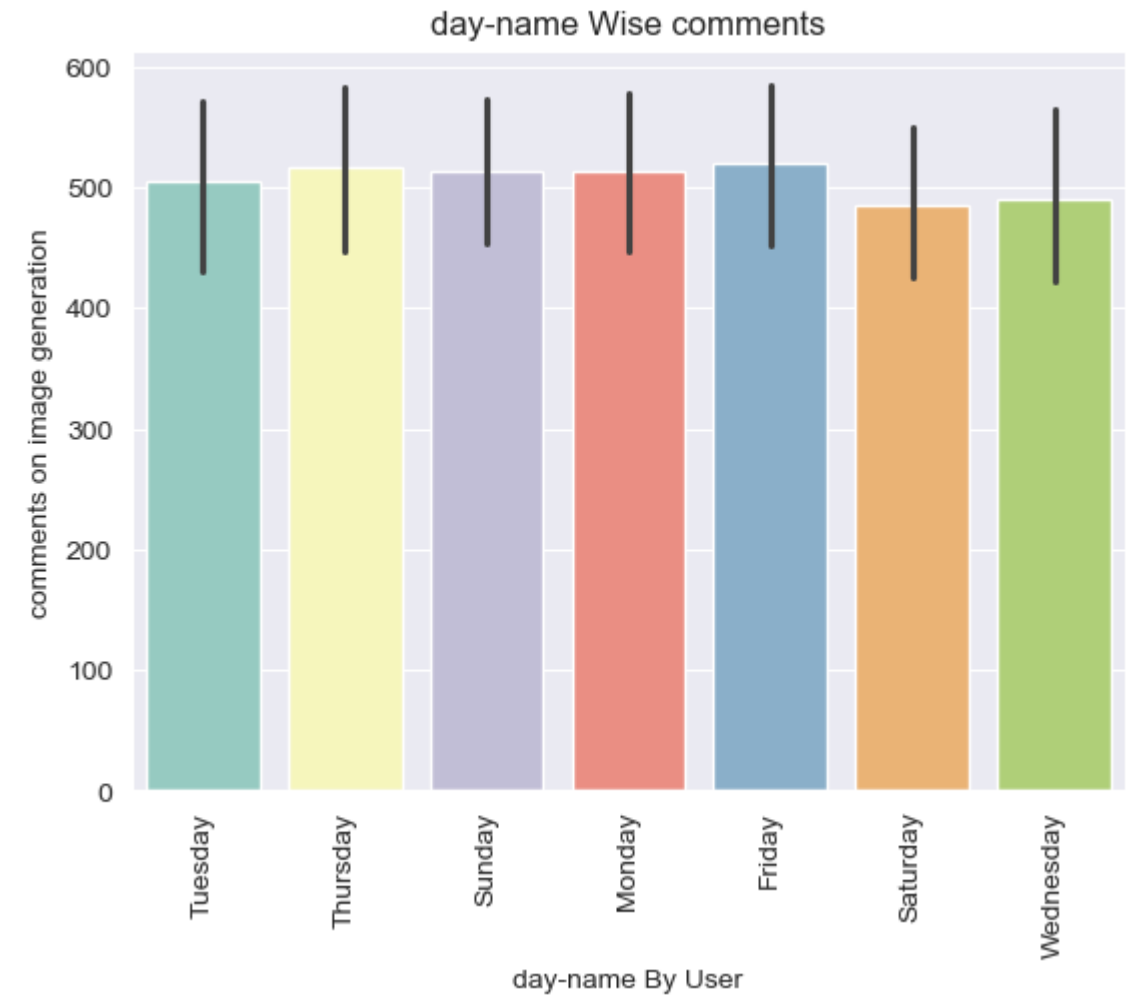Day-wise Image Generation Count

day-name Wise likes
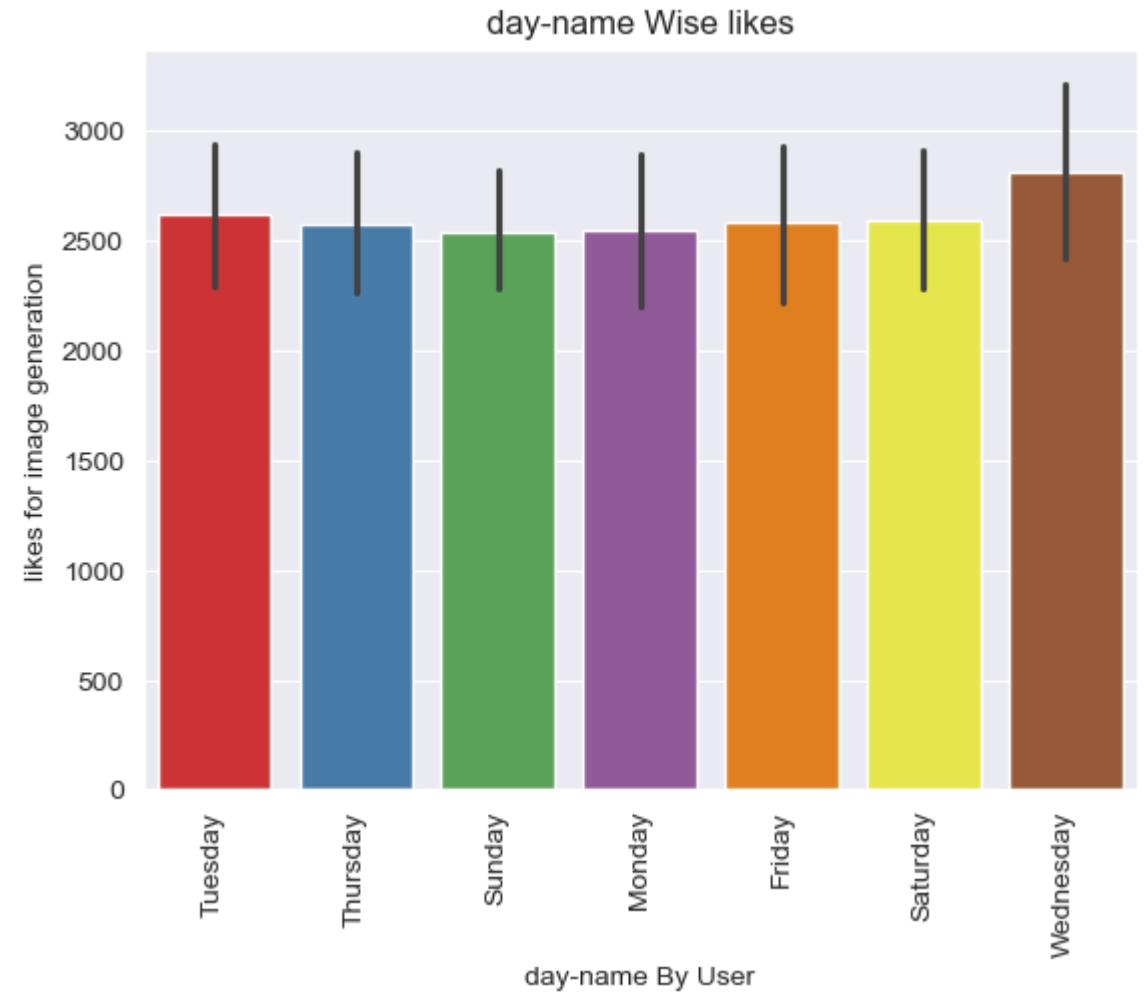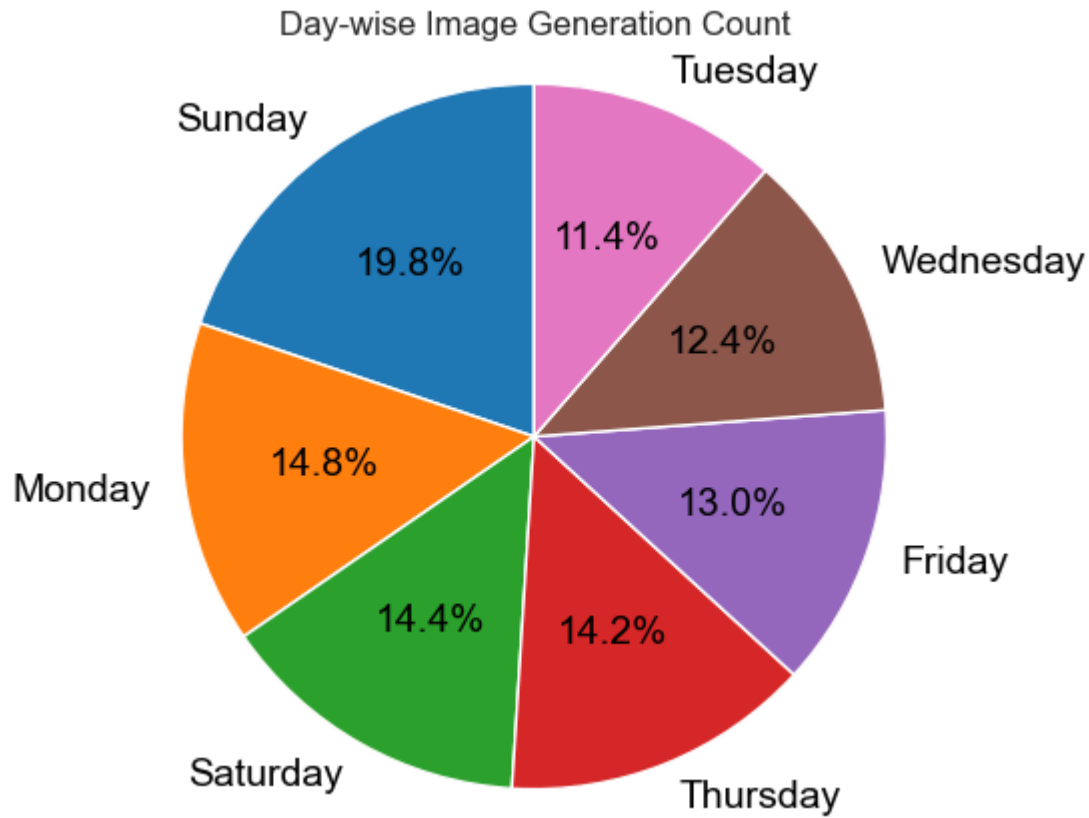
Most of the images are generated on Sunday.

Wednesday posted Ghibli Images getting the highes likes on platforms.

Friday posted images getting the highest shares on platforms.
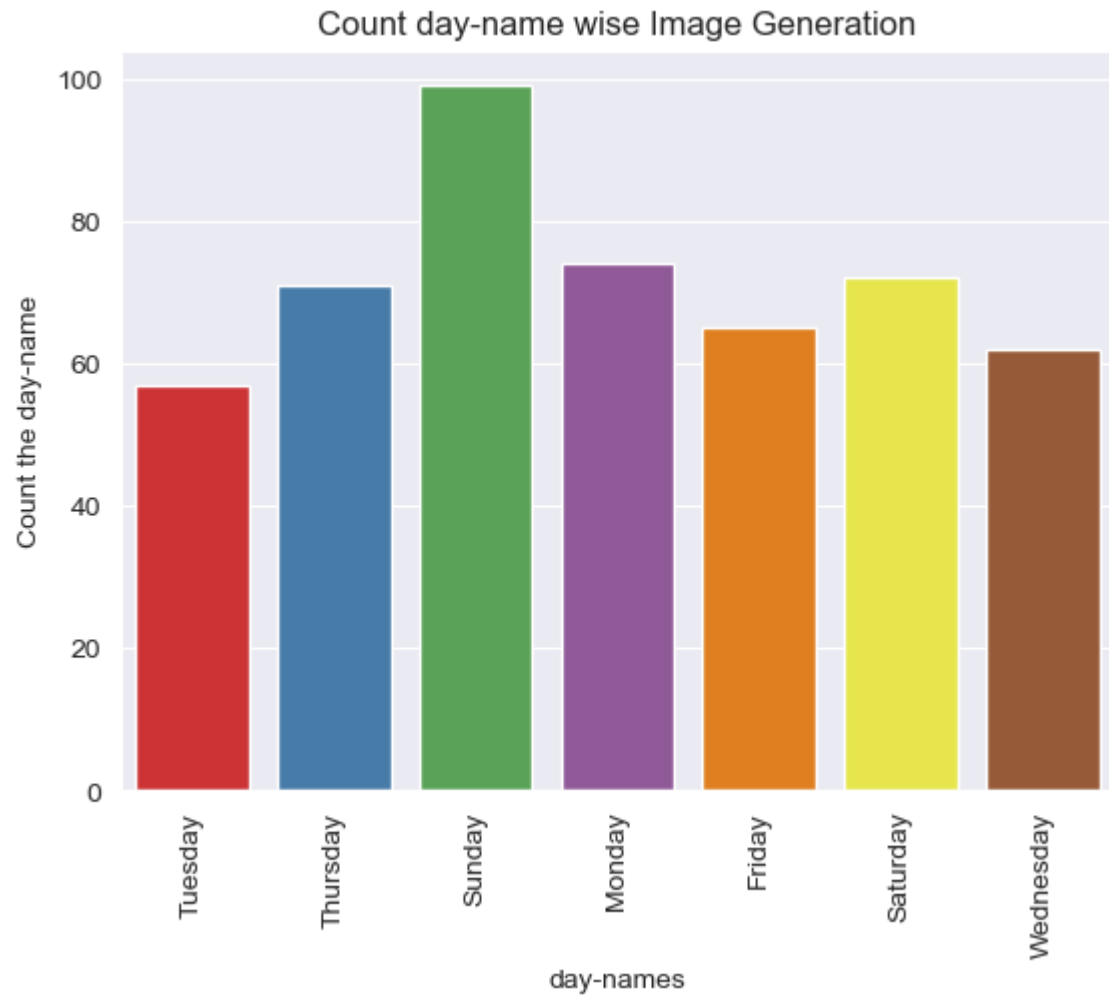
Again the winner is Friday getting the highest comments on posts.
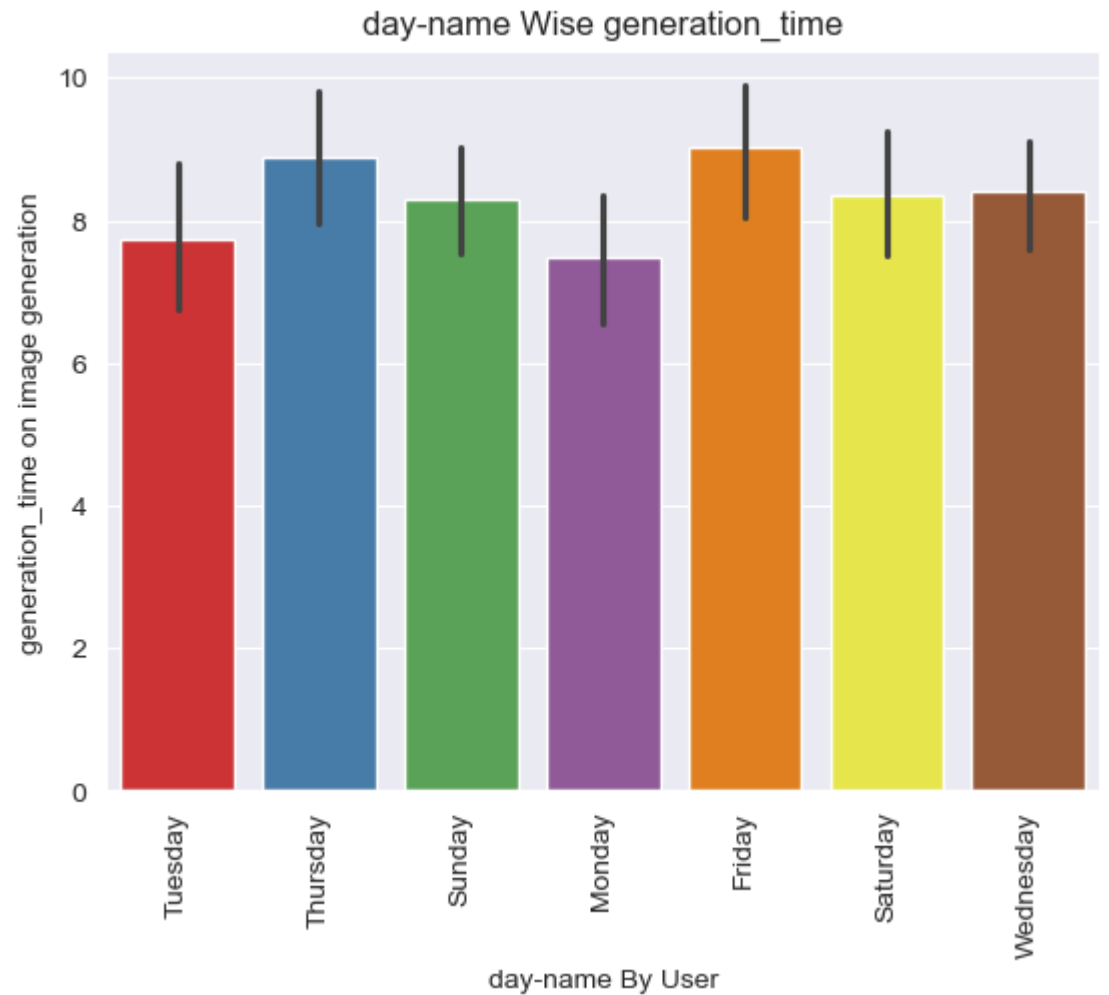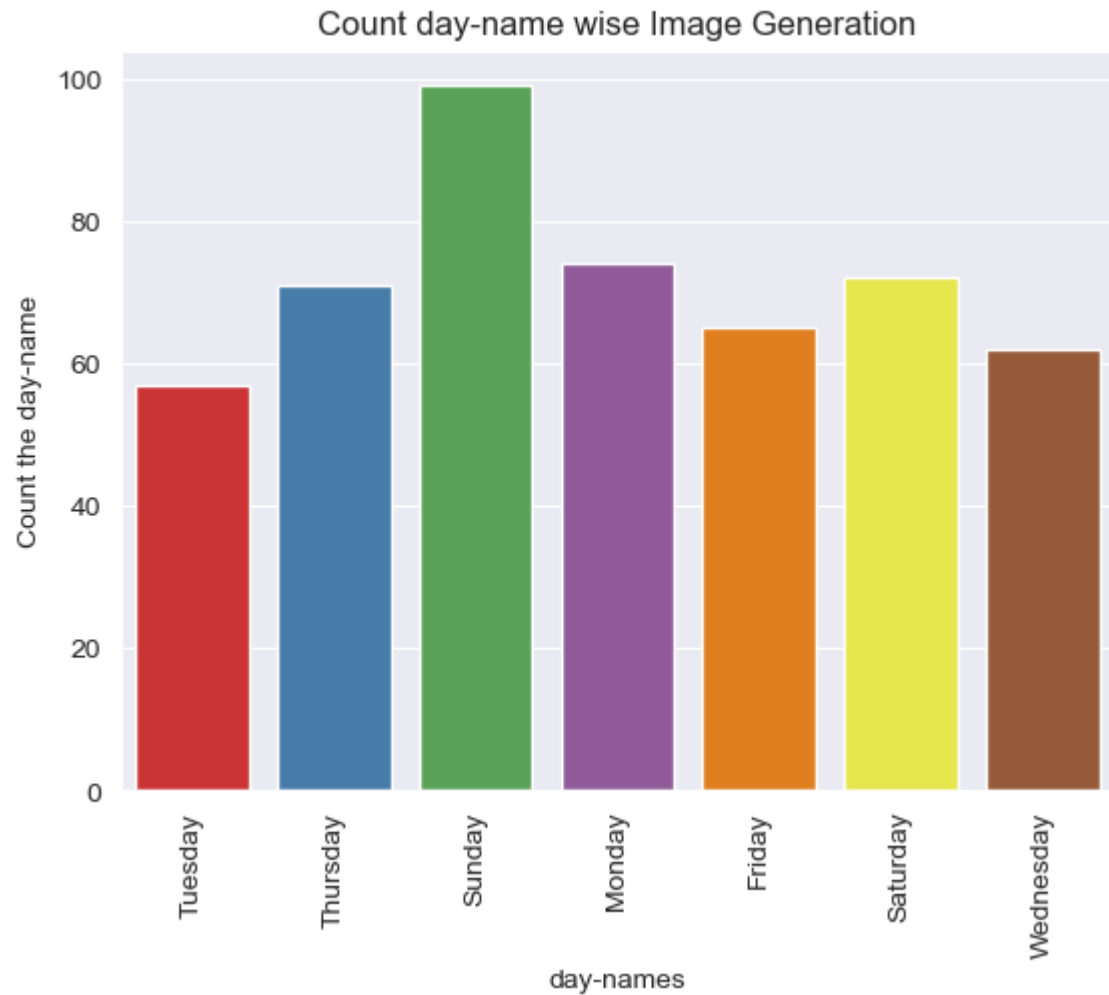
Obeviously Friday taking the highest image generation time cause all the images are posted on Friday.
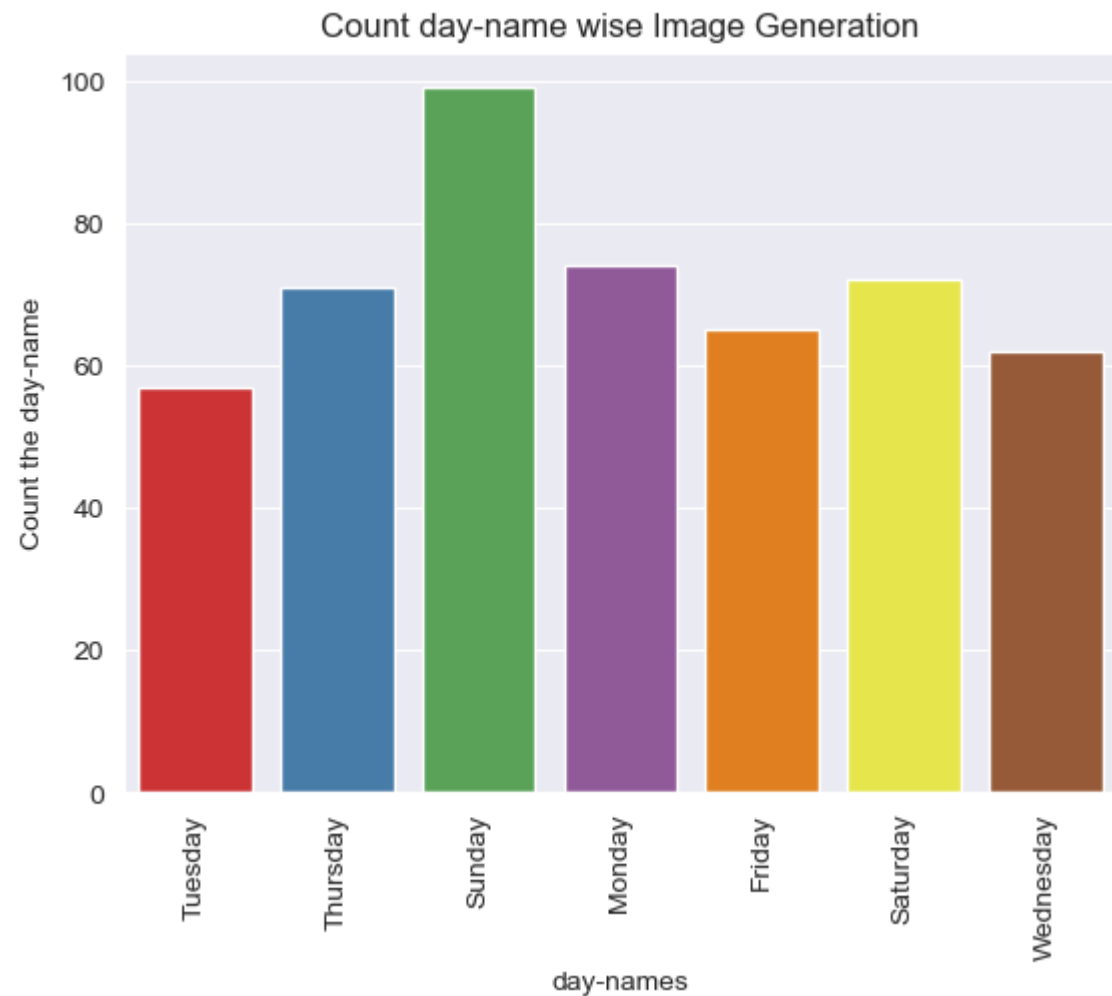
Interesting thing is Gpu usage is high in the day of Thursay.
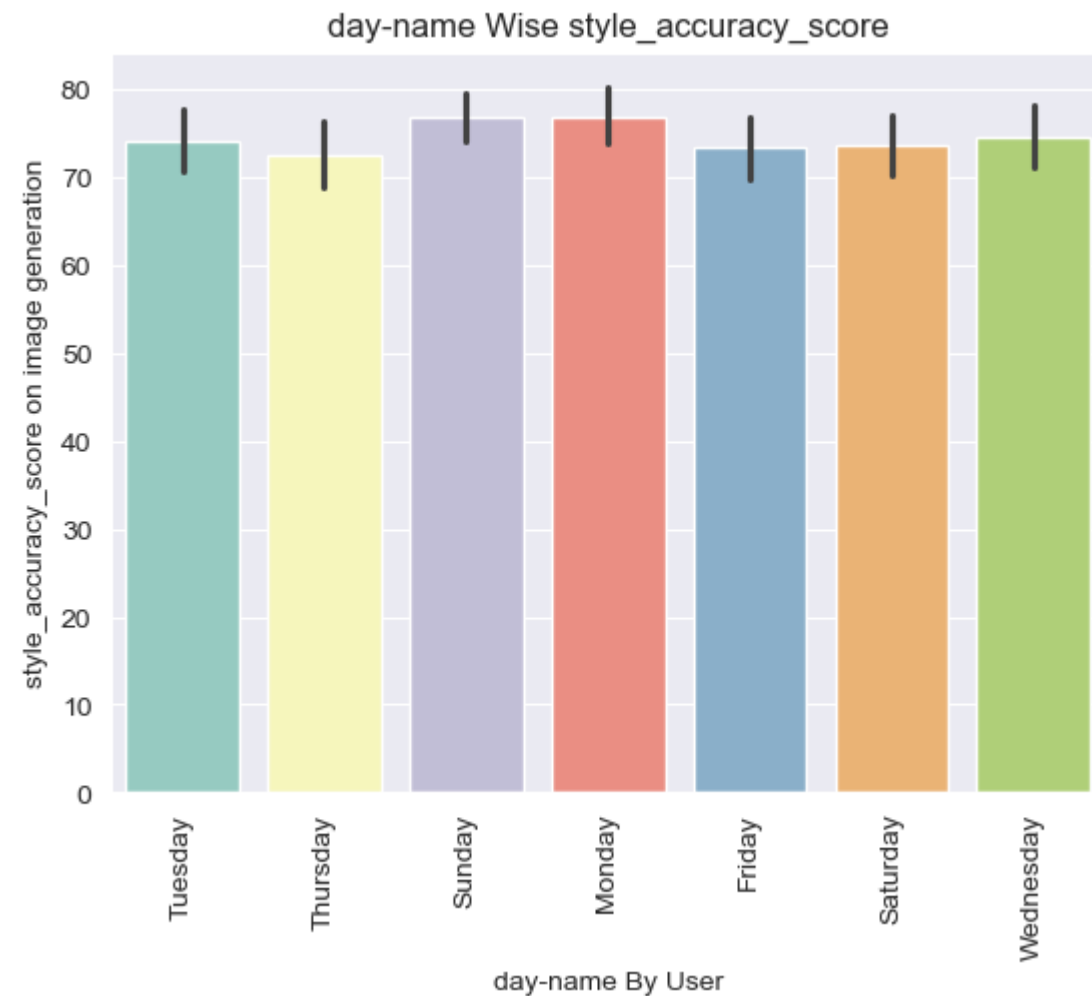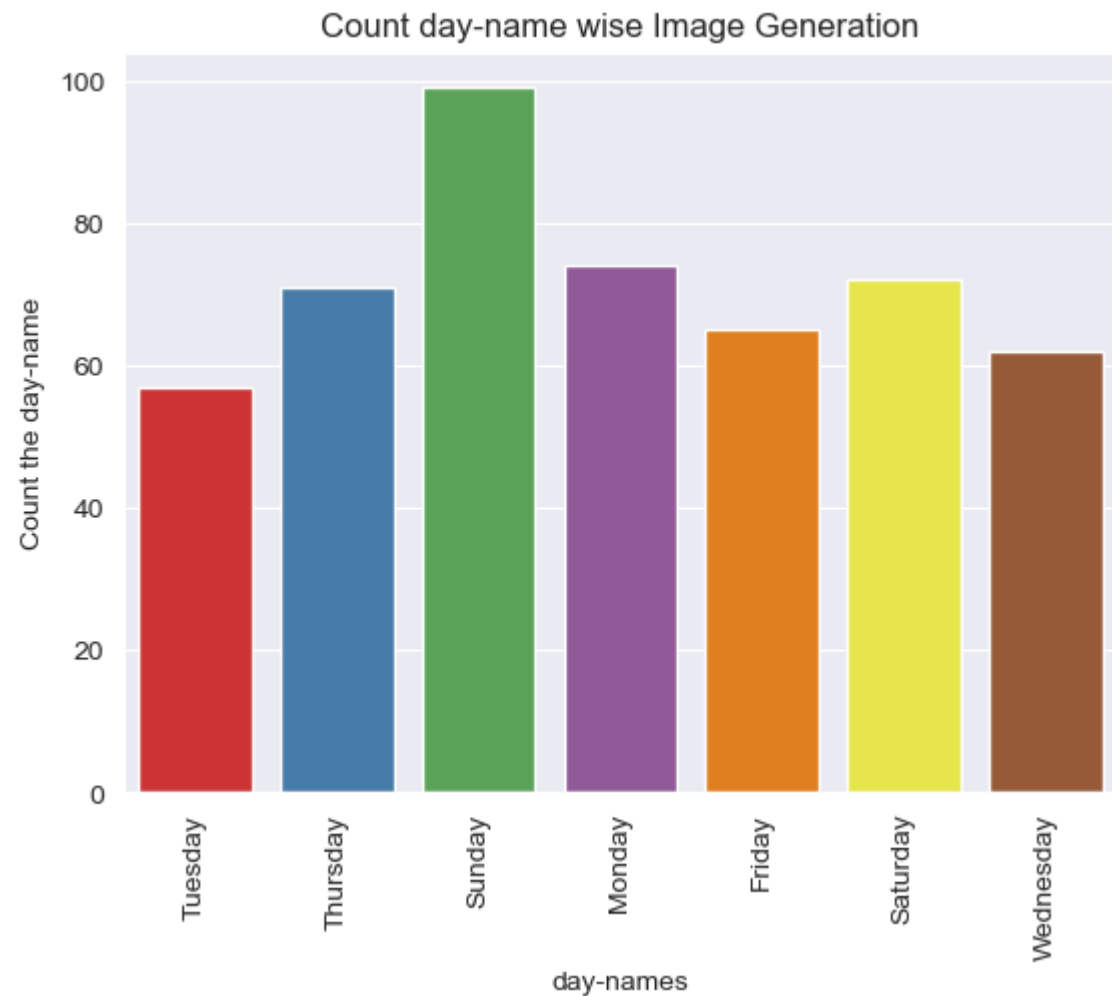
Another interesting thing is Sunday & Monday Images Accuracy score is high.

Hue is platform.

Prompt Wise Likes & platform is used by user
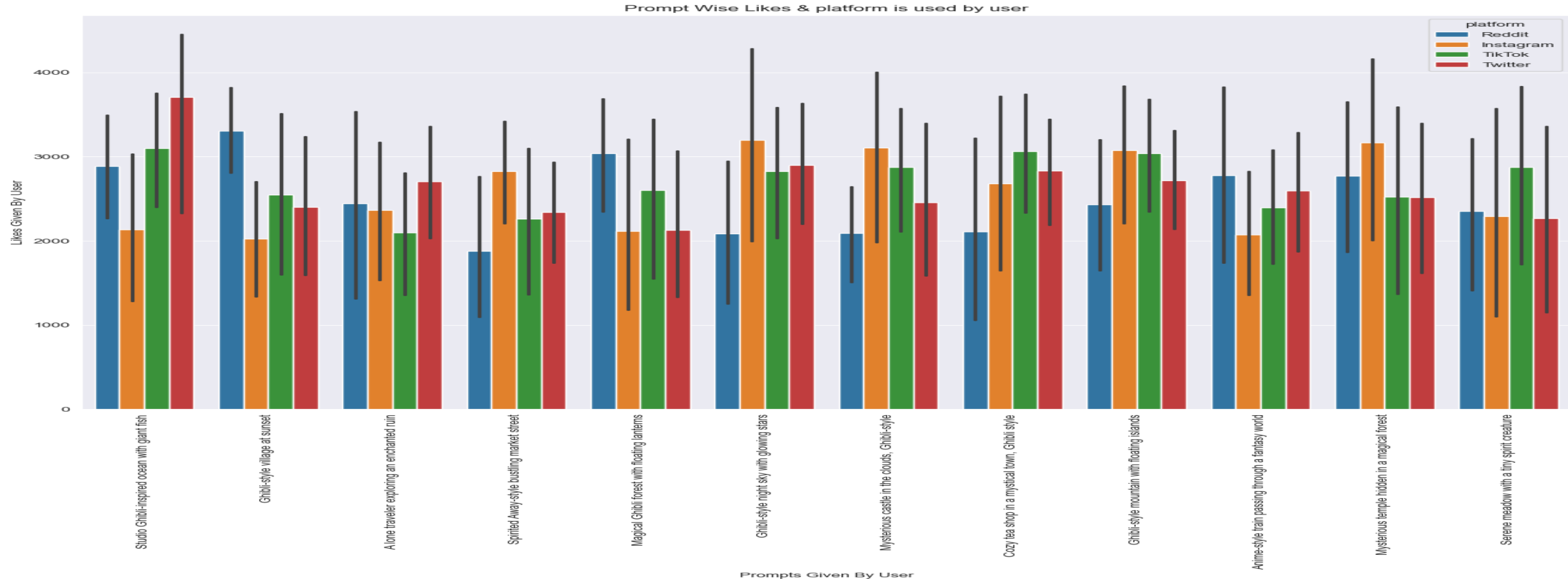
You can see clearly the prompt "Studio Ghibli-Inspired ocaean with gian fish" generated images are posted on the platform of Twitter.

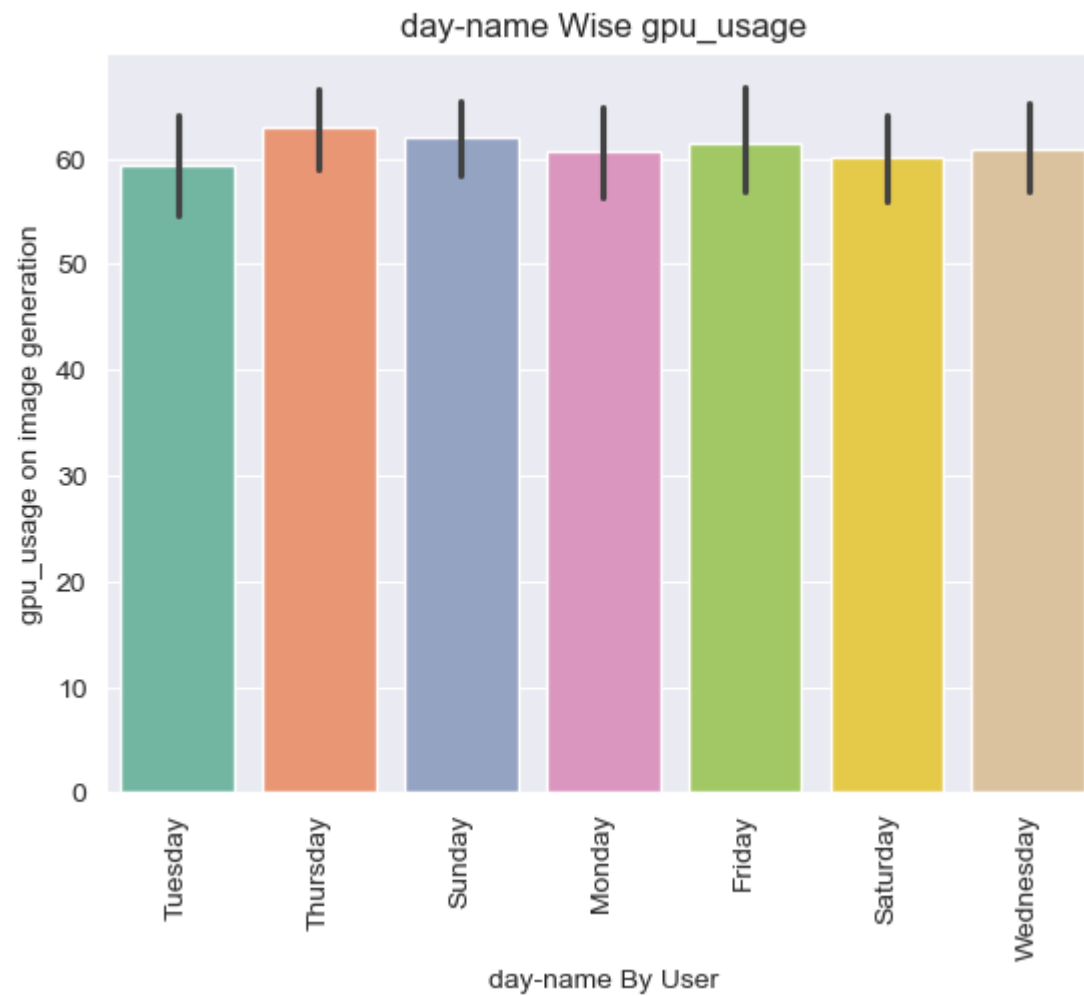The second prompt "Ghibli Style nigh sky with glowing starts" generated images are posted on the platform of Instagram.

The third prompt "Mysterious castle in the clouds Ghibli-Style" generated images are posted on the platform of Instagram.

Prompt Wise shares & platform is used by user
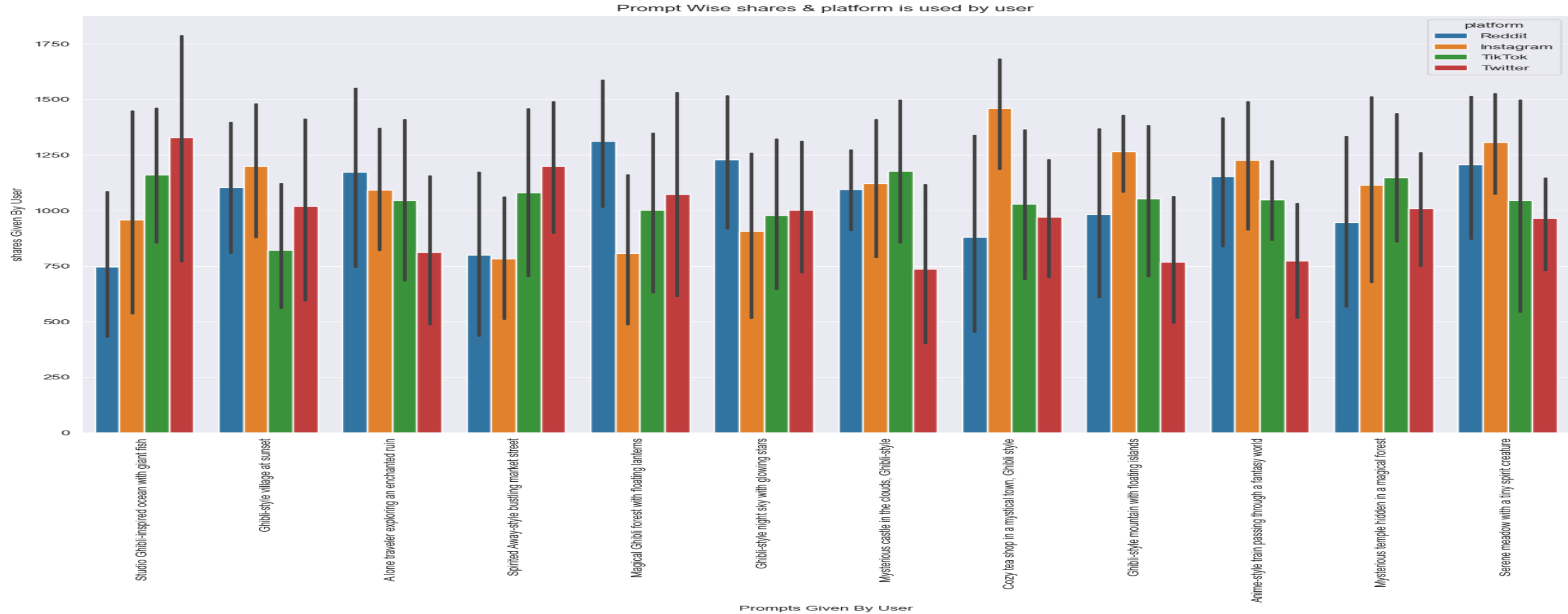
Most of the Ghibli Images are share on the platform of Reddit & Instagram but the interesting thing is prompt "Studio Ghibli-Inspired ocaean with gian fish" images are highest shares on the platform of Twitter.

Prompt Wise comments & platform is used by user
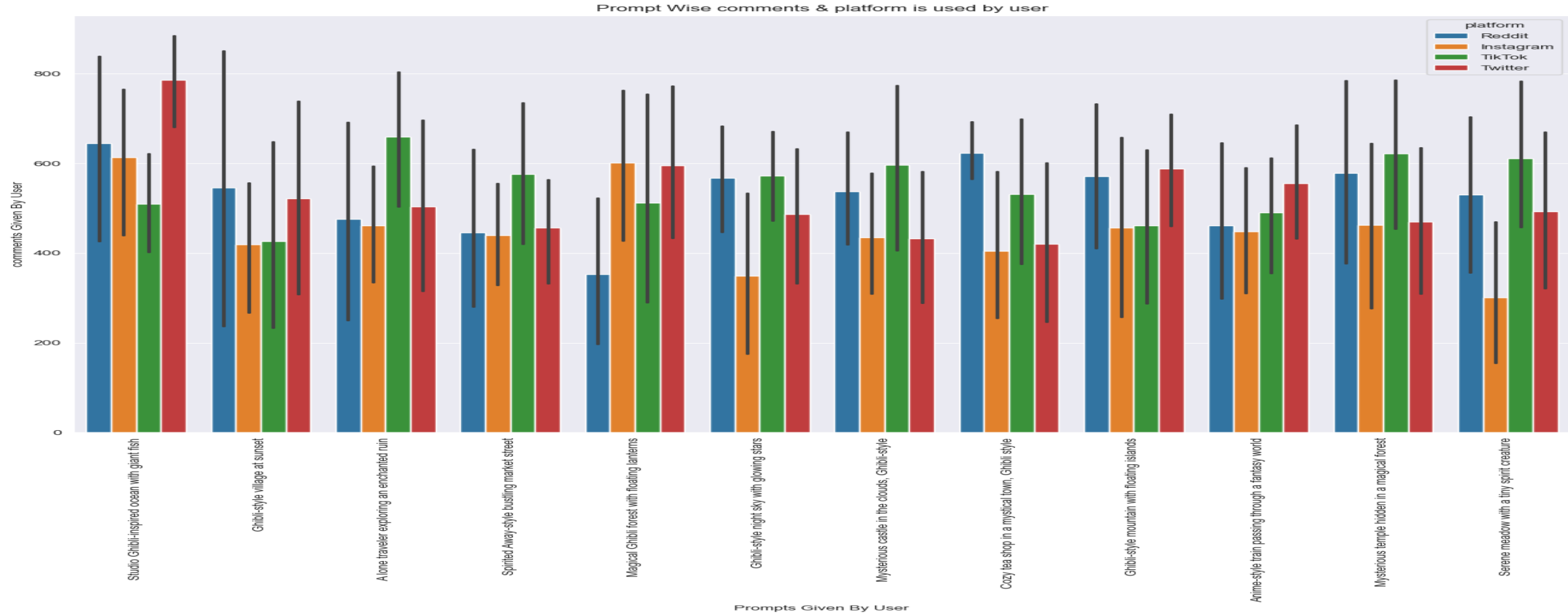
You can see clearly the prompt "Studio Ghibli-Inspired ocaean with gian fish" images are getting highest comments on the platform of Twitter.
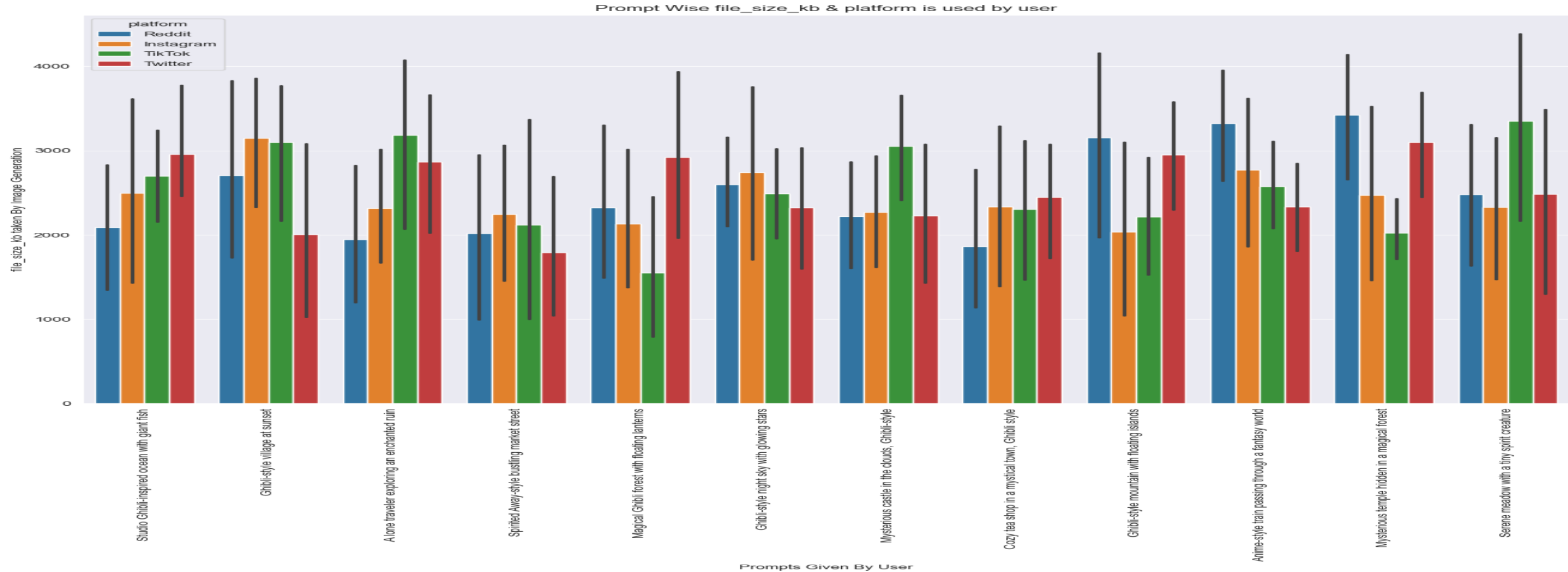
Prompt "Ghibli style mountain with floating islands" & "Mysterious temple hidden in a magical forest" takes the highest sizes of the images and posted on the platform of Reddit.

But the interesting thing is prompt "Serene meadow with a tiny spirit creature" images take the highest sizes and posted on the platform of Tik-Tok.

30

Prompt Wise generation_time & platform is used by user
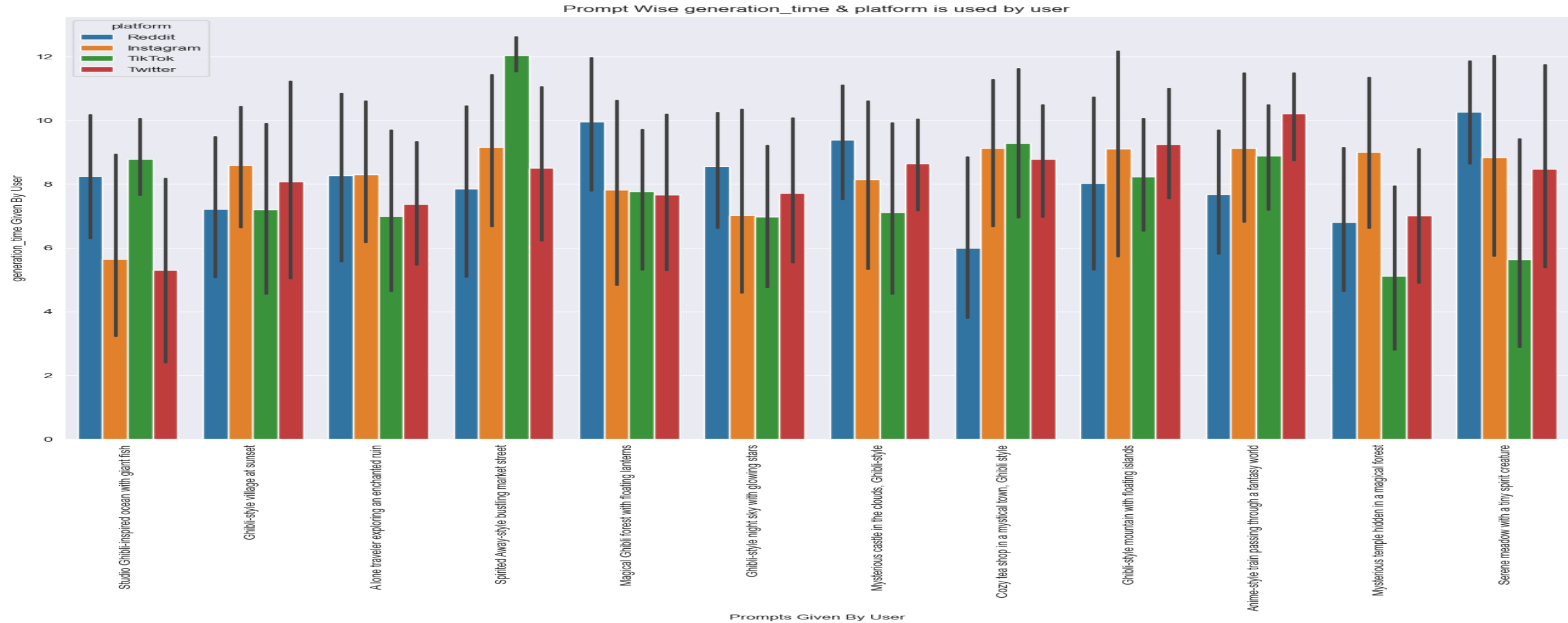
The prompt "Spirited Away style bustling market street" highest generating time taken and posten on the platform of Tik-Tok.

Other Interesting thing is The prompt "Ghibli style mountain with floaring islands" highest generating time taken and posten on the platform of Instagram.

31

Prompt Wise gpu_usage & platform is used by user
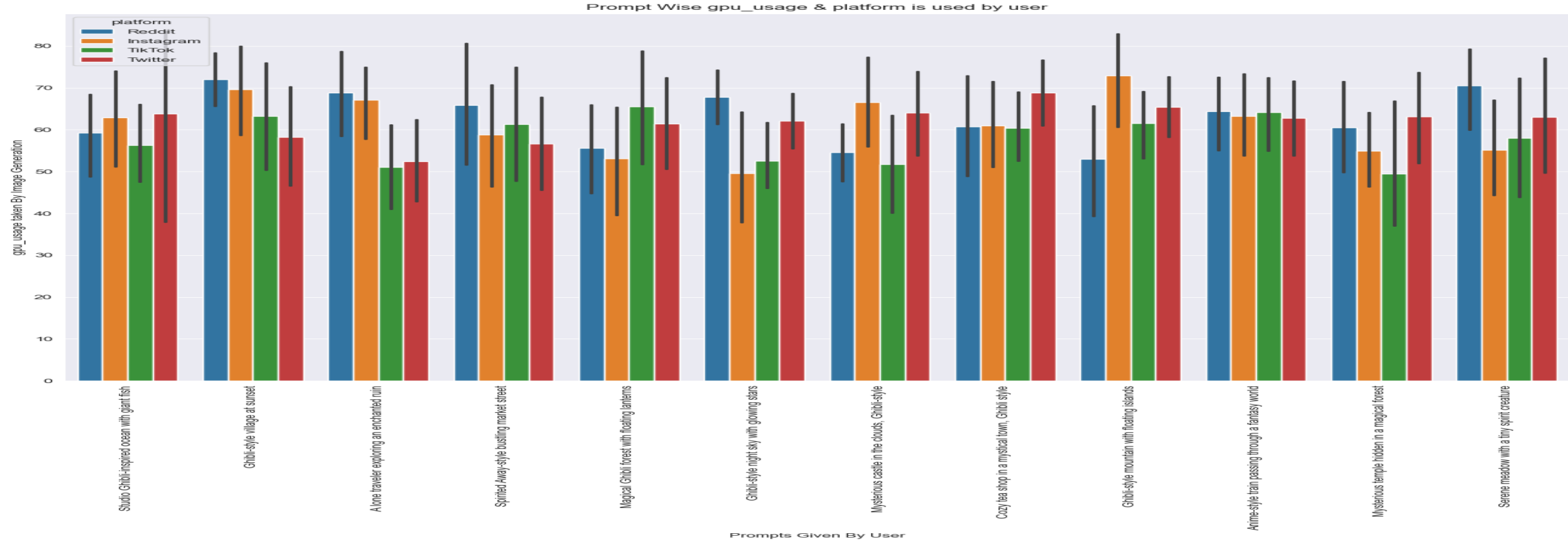
Again the winner is prompt "Studio Ghibli inspired ocean with giant fish" takes the highest gpu time to generate the images and posted on the platform of Twitter.

The second winner is prompt "Ghibli style mountain wiht floating islands" takes the highest gpu time to generate the images and posted on the platform of Instagram.
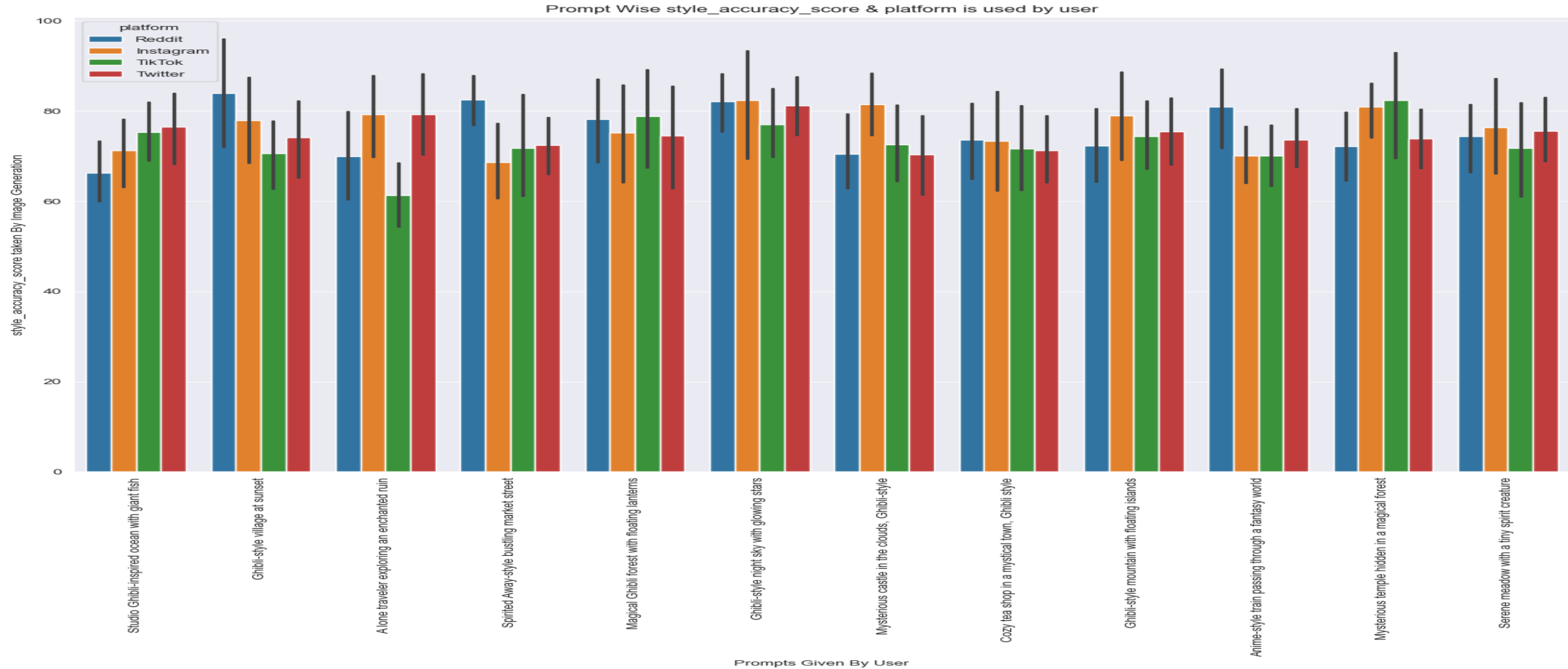
Prompt "Ghibli style village at sunset" getting the highest image accuracy score and images are posted on the platform of Reddit.

Hue is Is_Hand_Edited.
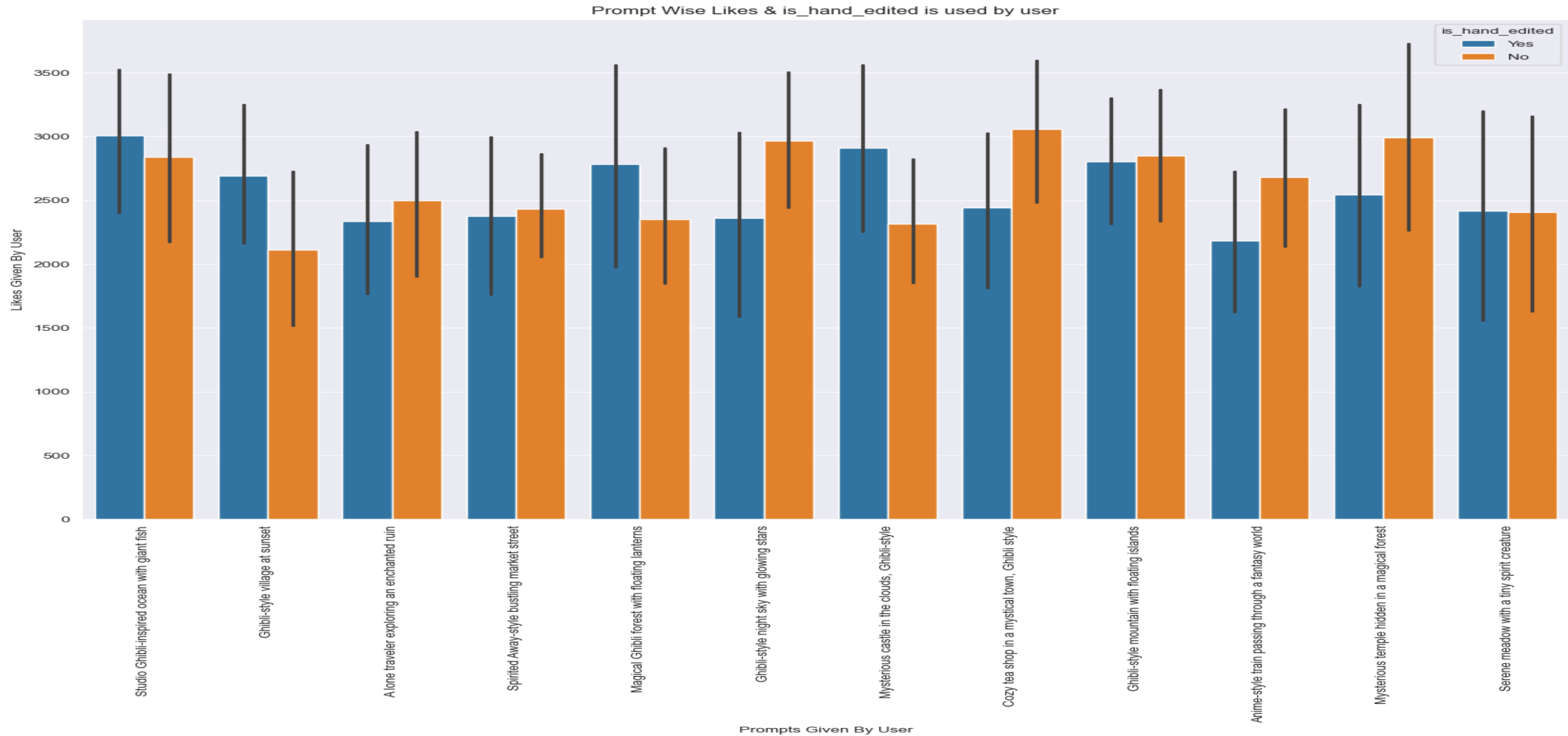
Prompt Wise Likes & is_hand_edited is used by user

Most of the images is generated then after the user is ownly edited and those types of images gets the highest likes on their posts.
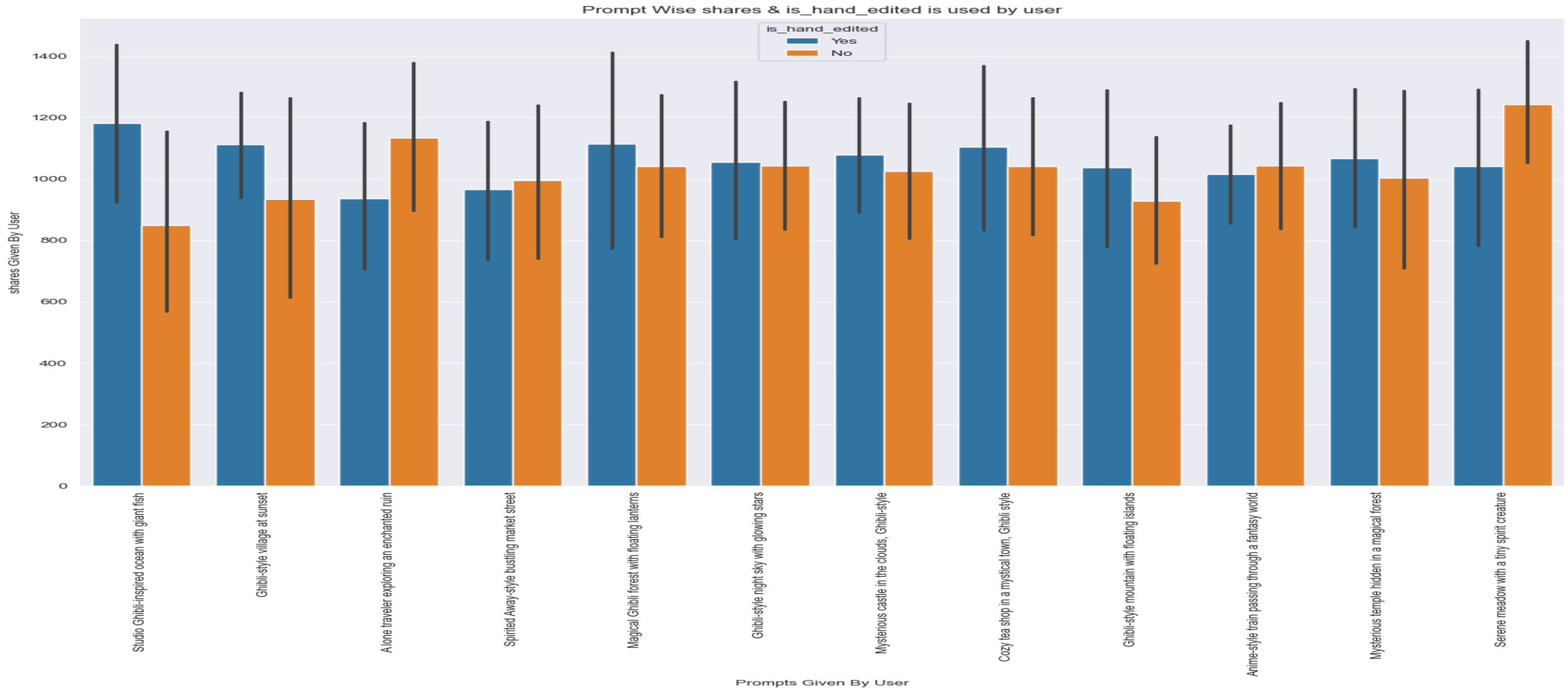
Most of the images is generated then after the user is ownly edited and those types of images gets the highest shares on their posts.
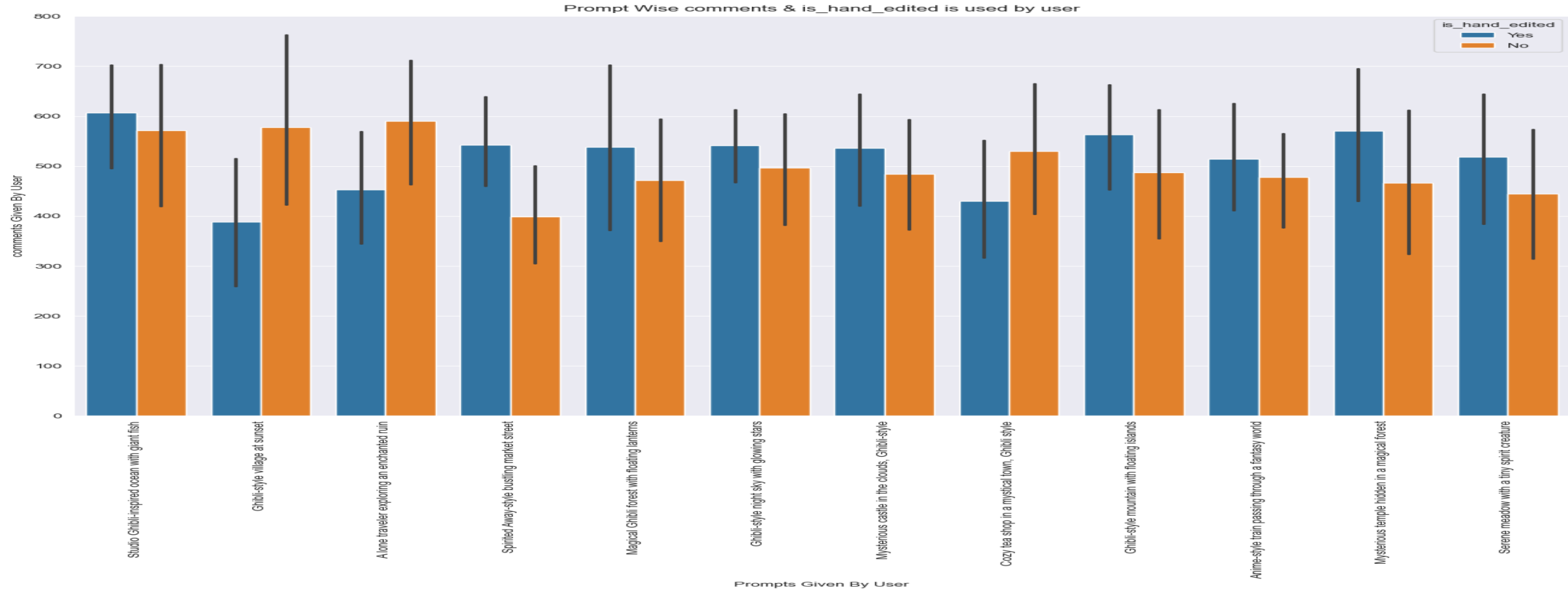
Prompt Wise comments & is_hand_edited is used by user

Most of the images is generated then after the user is ownly edited and those types of images gets the highest comments on their posts.

Here again the winner is those user don't edited their images after the generation they getting the highest people comments on their posts.

37

Prompt Wise generation_time & is_hand_edited is used by user
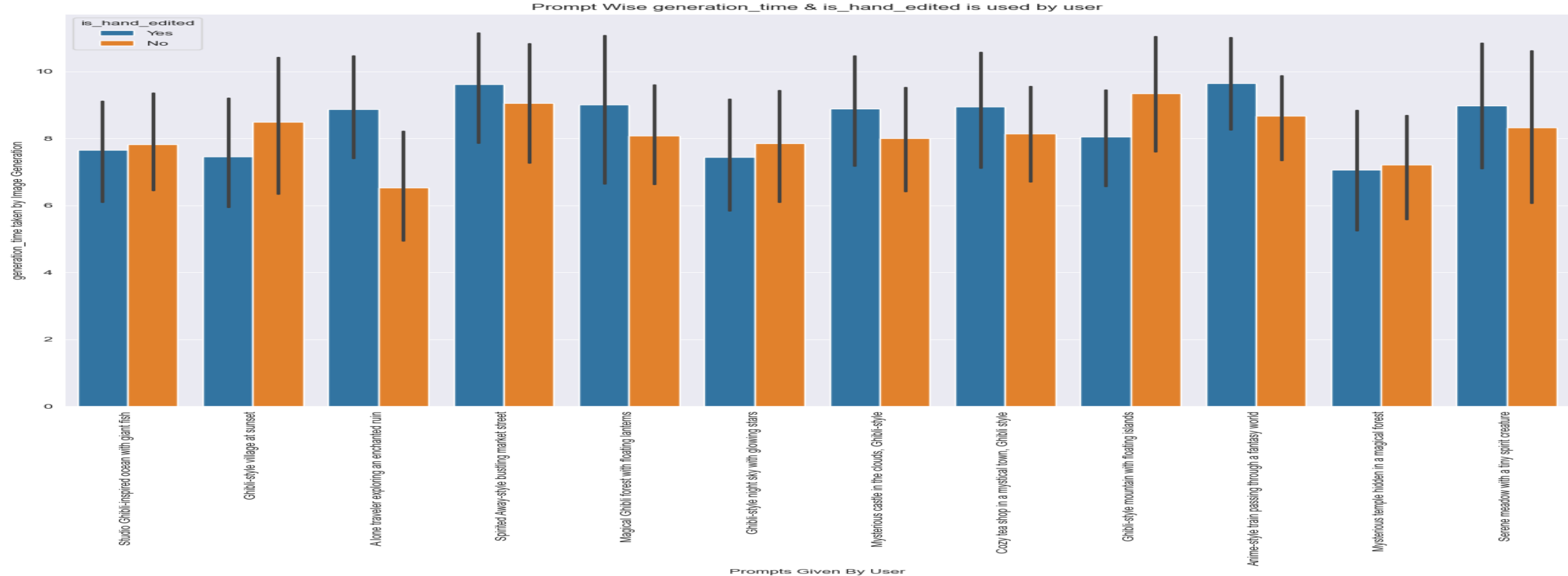
You can see clearly those images takes the higher generation time people also edited after the image generation.

We can say that the image generation time is high but the user favourite image is not generated may be.

Prompt Wise gpu_usage & is_hand_edited is used by user
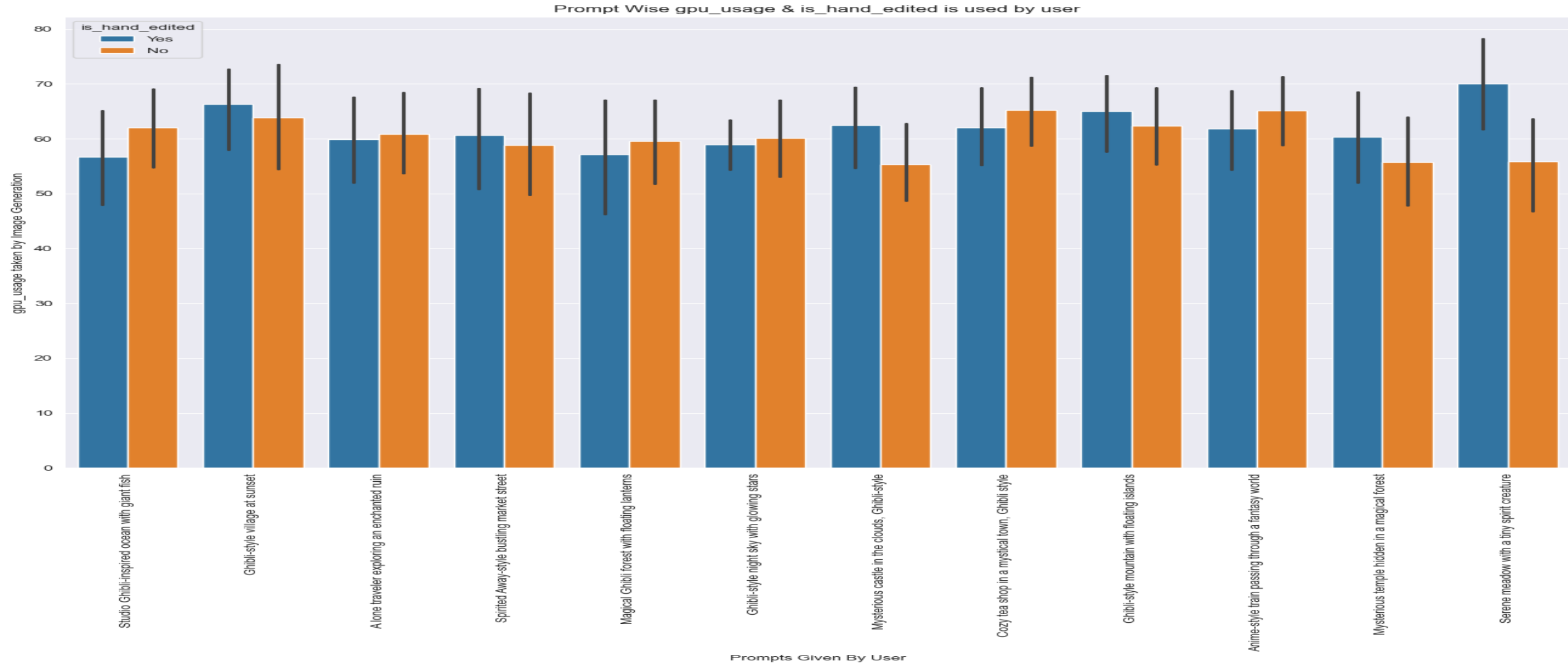
You can see clearly the prompt "Serene meadow with a tiny spirit creature" getting the highest gpu time for image generation and people also want to edit in their images.

Prompt Wise file_size_kb & is_hand_edited is used by user
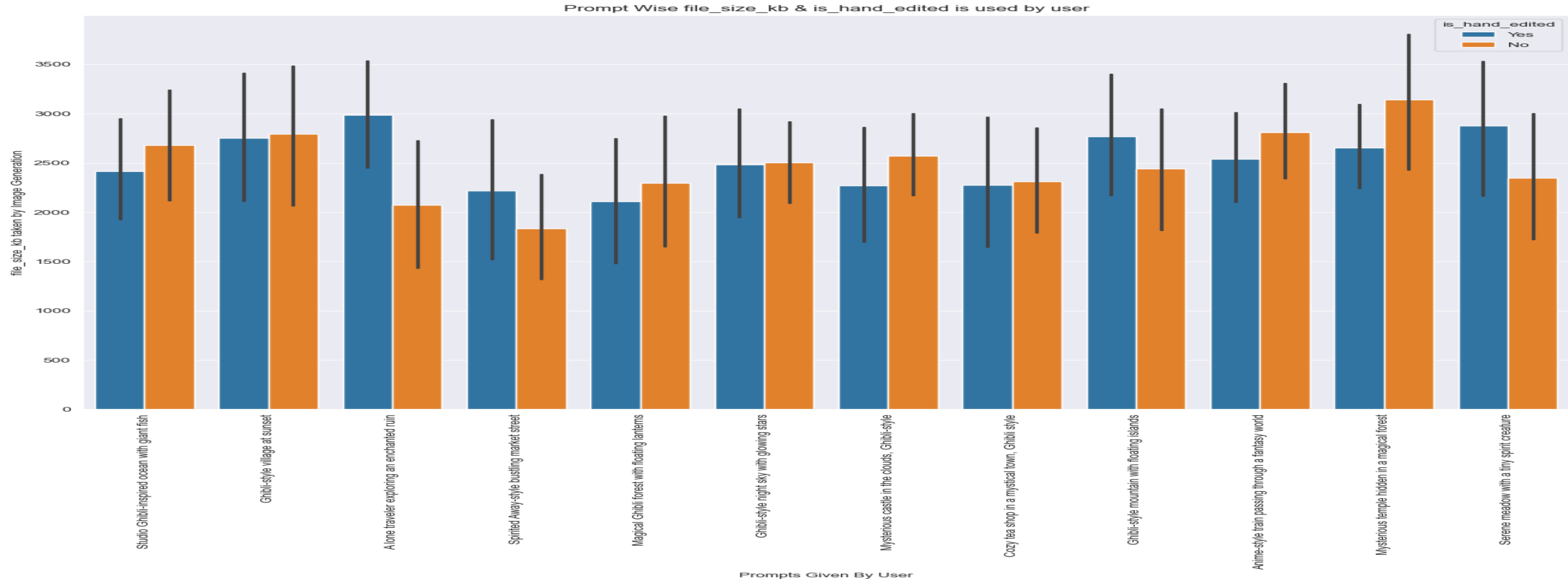
Everything is okay not the major diffrent in all the prompts whether the hand is used and their images sizes are high.

But Interesting thing with the prompt "Mysterious temple hidden in a magical forest" images required higher spaces and there is no user edited images.

Prompt Wise style_accuracy_score & is_hand_edited is used by user
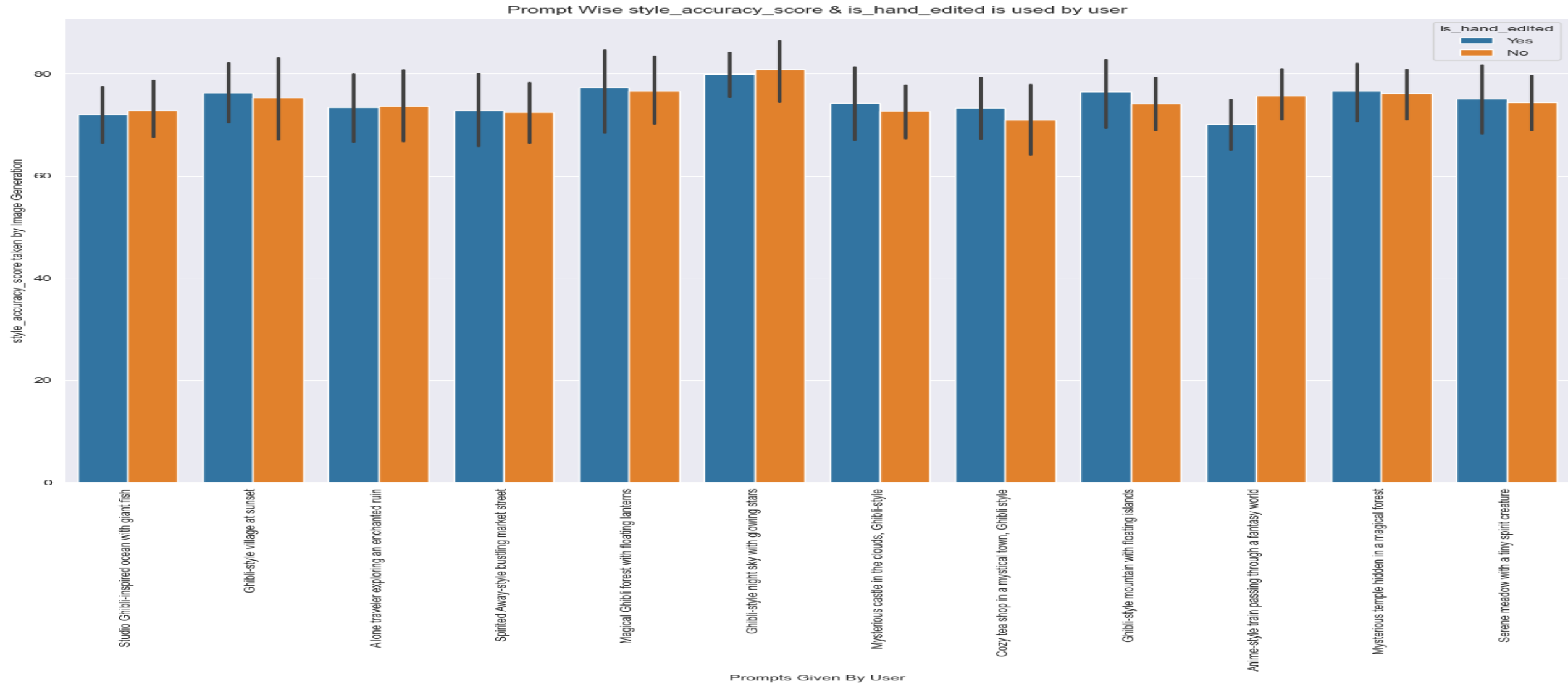
There no major difference in all the prompts but the interesting thing is prompt "Ghibli style night sky with glowing stars" getting the highest image accuracy score and people don't want to edit.

Hue is Ethical Concern Flag.

Prompt Wise Likes & ethical_concerns_flag is used by user
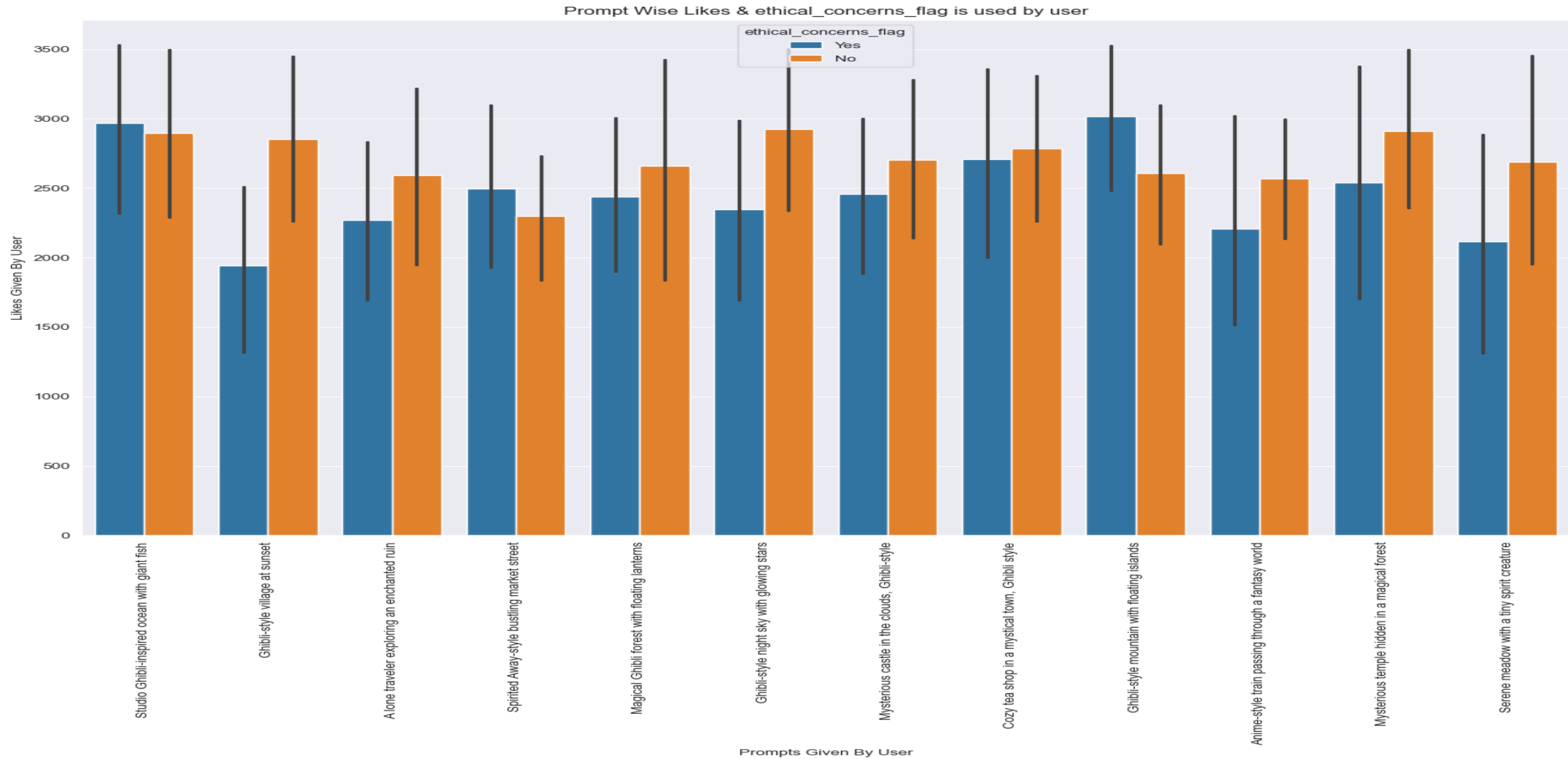
You can see clearly those images users has no ethical concern flags getting the highest likes.

Prompt Wise shares & ethical_concerns_flag is used by user
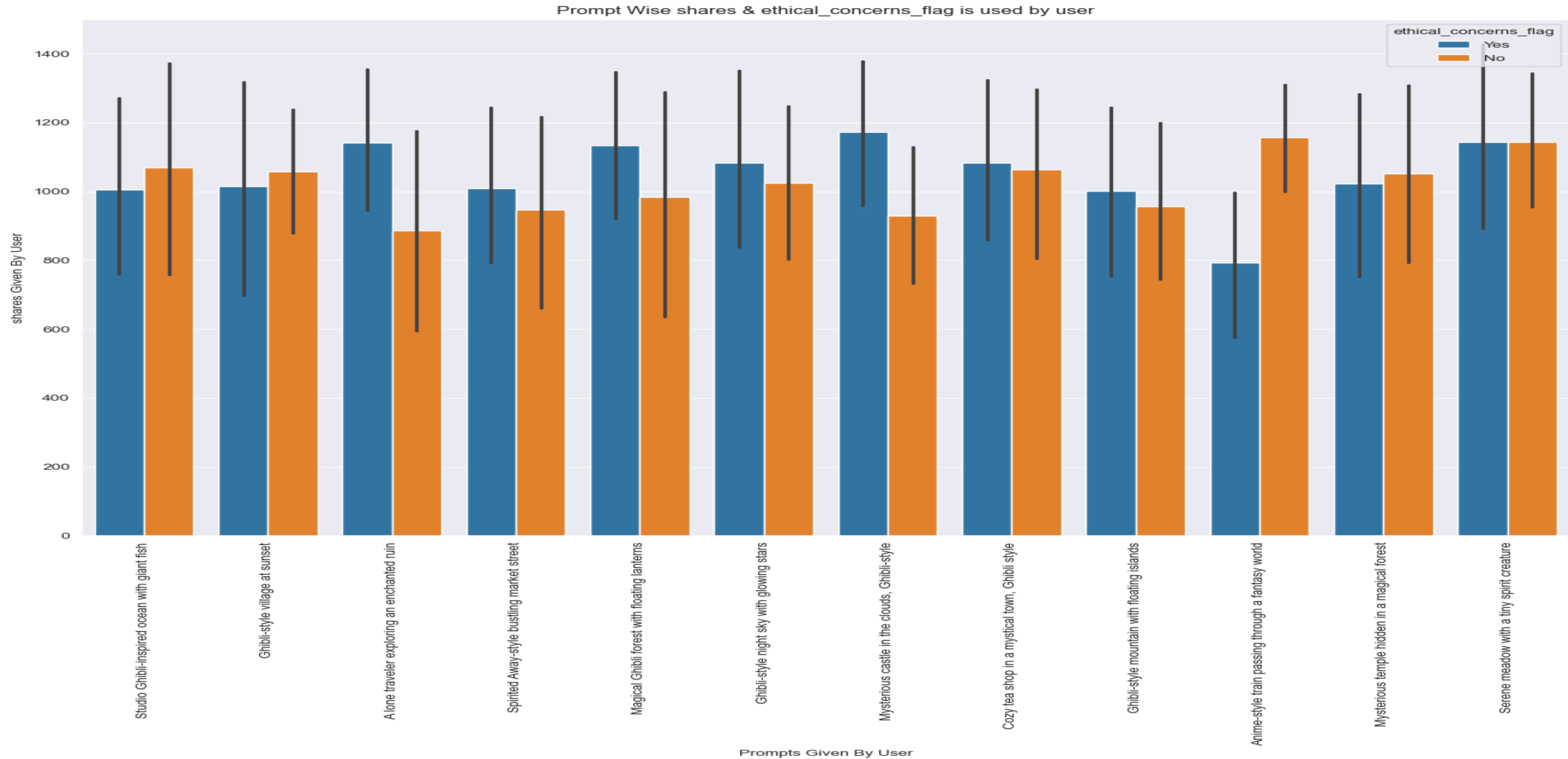
You can see clearly those images are fall in ethical concern flag category cause highest sharing.
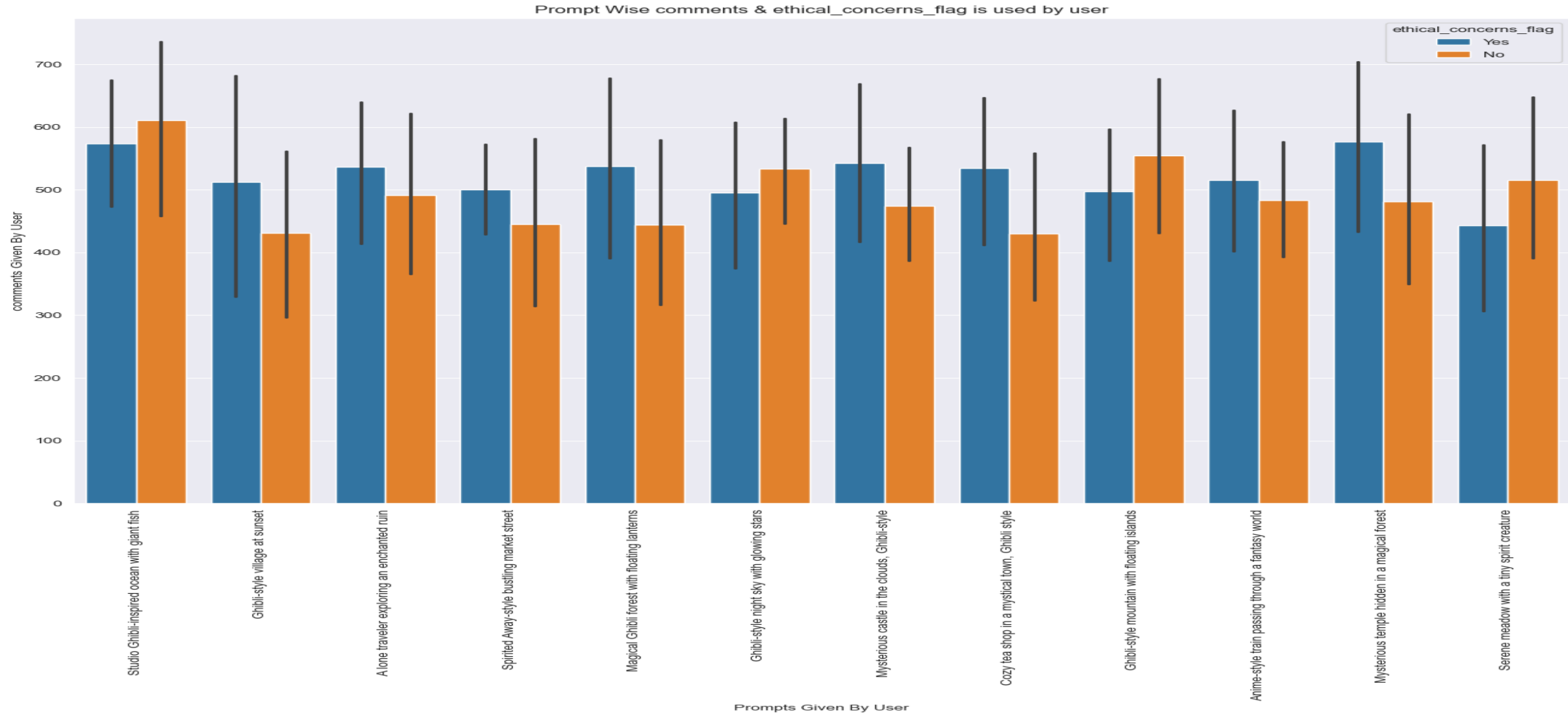
You can see Prompt "Studio Ghibli Inspired ocean with giant fish" images getting highest comments and interesting thing is there is no ethical concern flag.

Prompt Wise generation_time & ethical_concerns_flag is used by user
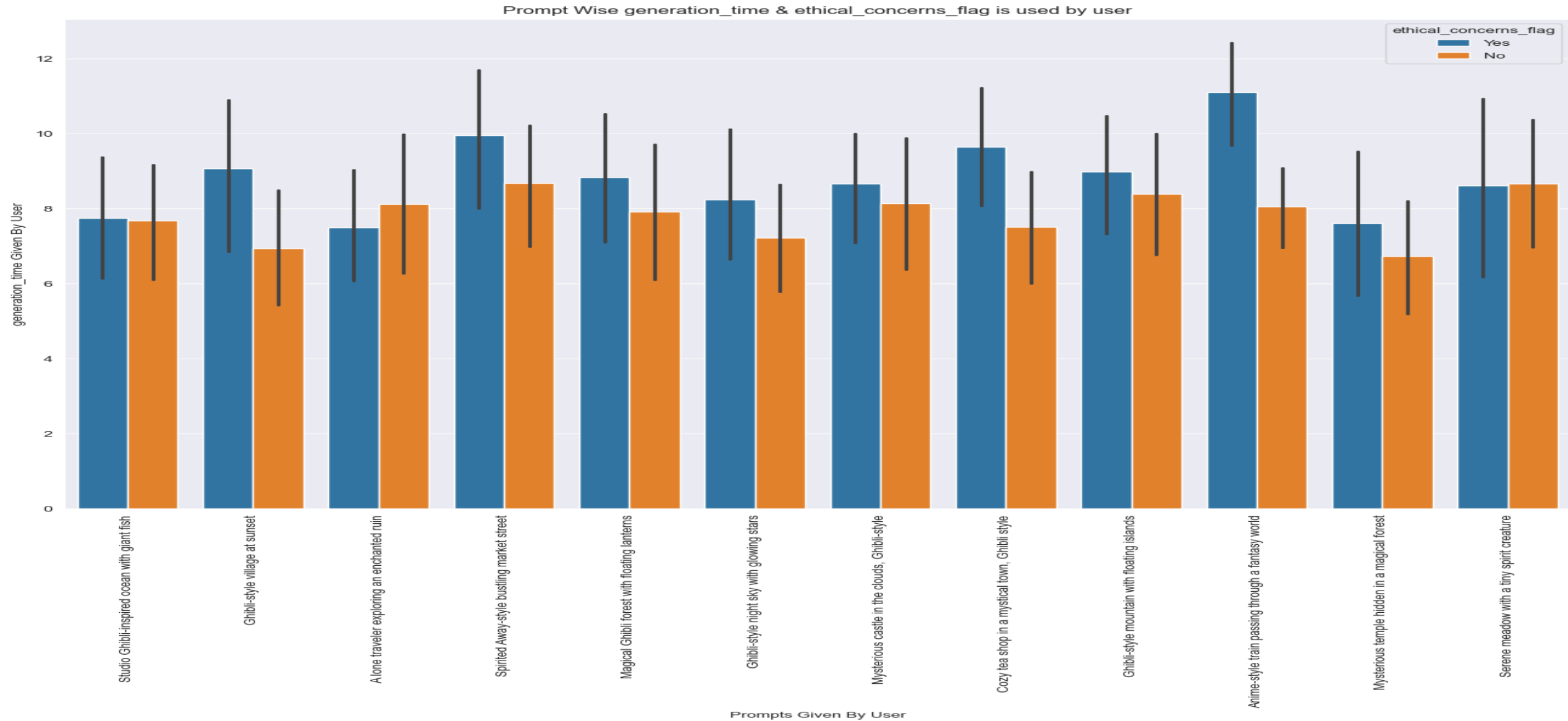
You can see clearly the prompt "Anime style passing through a fantasy world" images are taking highest image generation time and that majority of all images are fall in ethical concern yes category.

Prompt Wise gpu_usage & ethical_concerns_flag is used by user
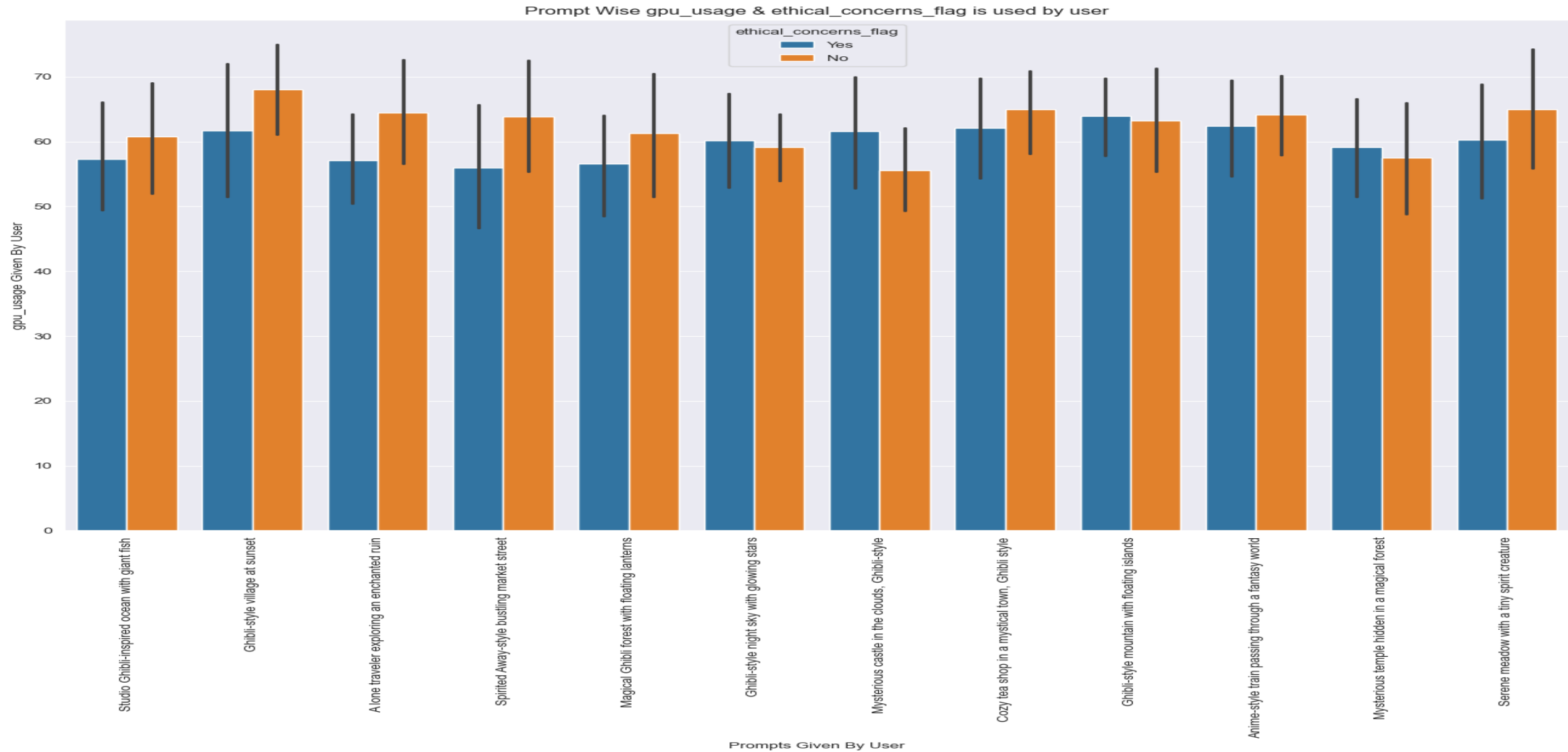
Prompt "Ghibli style village at sunset" taking the highest gpu time & fall in no ethical concern category among the all prompts.

Prompt Wise file_size_kb & ethical_concerns_flag is used by user
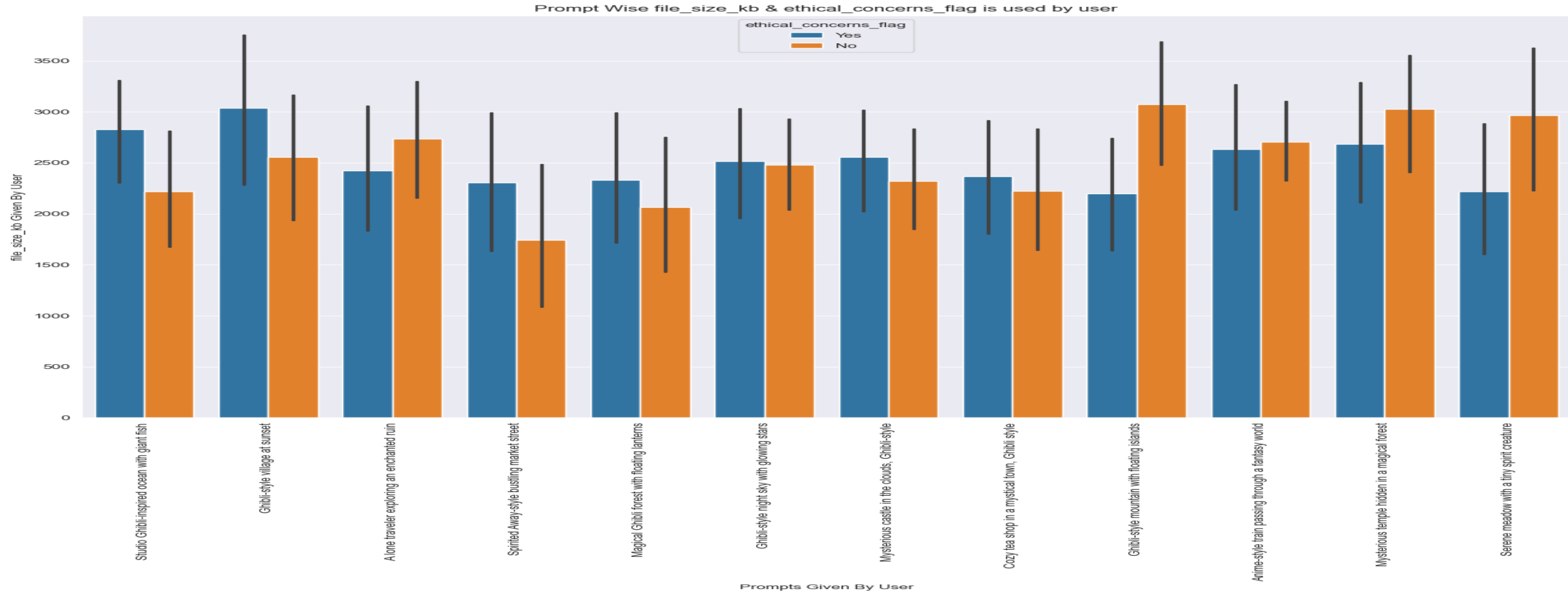
Majority of the all the images above 2500 kbs but the few are 3500 kbs variations and interesting thing is that prompt,"Ghibli style village at sunset" is yes ehical concern.

In the opposite side prompt "Ghibli style mountain with floating islands" take the highest size & no generate the images with no ethical concern.

48

Prompt Wise style_accuracy_score & ethical_concerns_flag is used by user
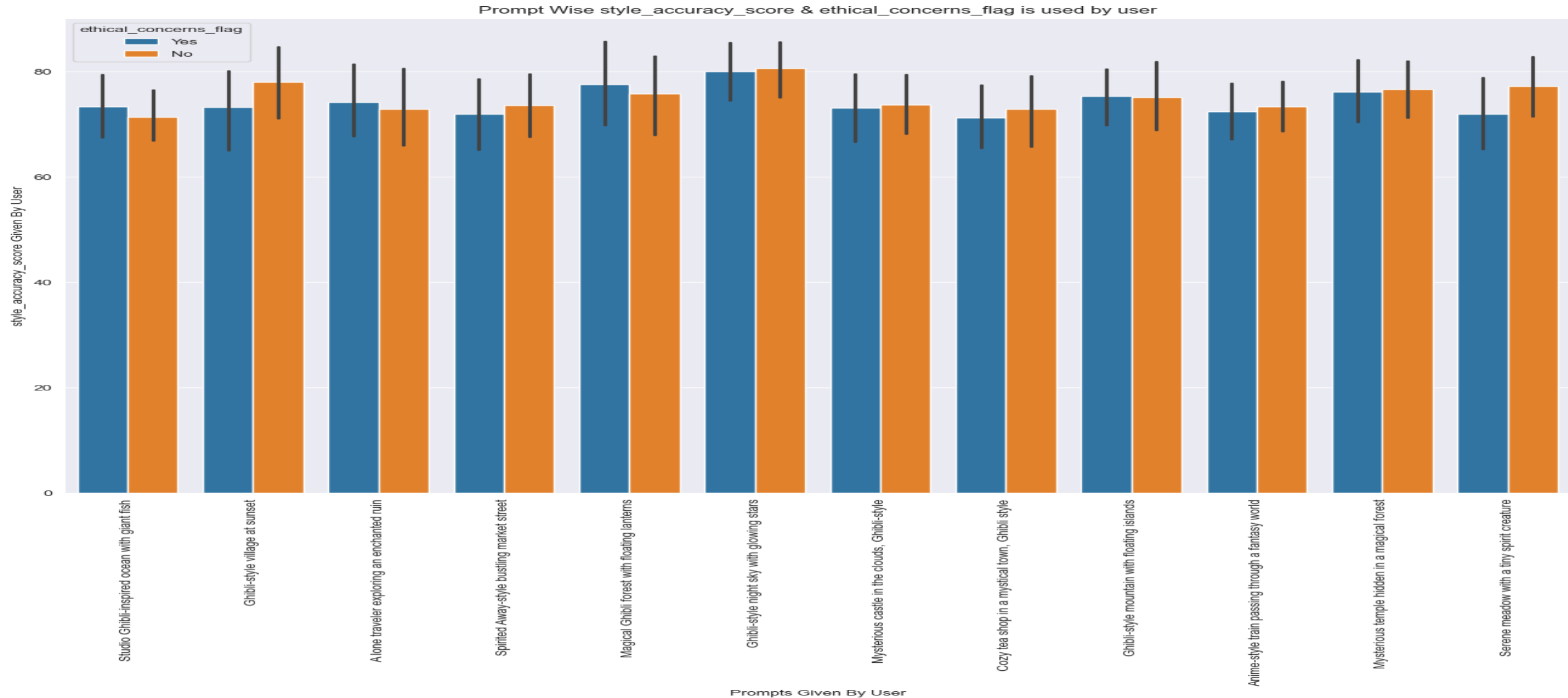
The winner is prompt "Ghibli style nighe sky with glowing stars" getting the highest accuracy score and there is no diffrence between ethical concerns but slightly no ethical concerns images are higher.

Insights from Ghibli-Style Image Trends Dataset EDA Project:-

1.Most frequent prompt is Anime-Style train passing through a fantasy world with 2048×2048 resolution, high GPU usage, very slow generation time, medium file size, excellent accuracy, no ethical concern, and mostly generated on March 3rd, 31st, and Sundays.

2.Twitter is the top platform with highest likes, comments, and shares especially for Studio Ghibli-Inspired Ocean with giant fish which also shows high GPU time and image accuracy.

3.Instagram hosts popular prompts like Ghibli-style night sky with glowing stars, Mysterious castle in the clouds, and Mysterious temple hidden in a magical forest with large file sizes and high accuracy.

4.Reddit features Ghibli-style content with high accuracy and larger image sizes, especially Ghibli-style village at sunset which also shows high GPU time.

5.TikTok hosts heavy prompts like Spirited Away style bustling market street and Serene meadow with a tiny spirit creature with highest image dimensions, large sizes, and longer generation times.

Insights from Ghibli-Style Image Trends Dataset EDA Project:-

6.Most images were created in March 2025 with peak activity on Wednesdays, Fridays, Sundays, and Mondays based on likes, shares, comments, generation time, and accuracy.

7.Hand-edited images tend to get more likes and comments, especially when GPU time and generation time are high, while non-edited images receive higher shares.

8.Prompts with no ethical concern flags consistently receive higher likes, comments, and accuracy, but interestingly, flagged prompts tend to get more shares and longer generation times.

9.Ghibli-style mountain with floating islands is notable for high GPU usage, large file size, and high generation time with no ethical concerns or editing.

10.Across platforms, Studio Ghibli themed prompts dominate trends with high engagement, performance scores, and aesthetic preference.

11.'Ghibli-style','Mysterious','with' is the most common words while prompting.

12.Most common word in the top comments is 'Ghibli'.

Thank You