Few-Shot Prompting Method for Dataset Generation

To generate high-quality and diverse LLM-generated reviews across multiple domains (Book, E-Commerce, Movie, Hotel, and Restaurant), we employ a few-shot prompting strategy. This approach ensures that the synthetic reviews closely mirror the structure, tone, and diversity of human-written reviews.

E-Commerce Review Domain

Reference Dataset

We analyzed the Women's E-Commerce Clothing Reviews dataset from Kaggle. This dataset contains human-generated reviews with key metadata, including:

- Age of the reviewer
- Title of the product
- Rating (1–5 stars) by the reviewer
- Review text

From our observations of human-written content, we identified patterns of variation in tone, structure, and user intent. To reflect this, we designed six different prompt types.

Prompt Templates Used

Each prompt is accompanied by 5–6 examples in the few-shot format to guide the LLM. Below are the diverse prompt types used:

Prompt Type	Prompt Template
Basic Prompt	"Craft a review that strongly highlights product durability and
Experience-Based	"Generate a realistic review where a {Age}-year-old user shares their experience using the product '{Title}', rated {Rating} stars. Focus
Comparative	"Create a natural-sounding review written by someone aged {Age} who compares the '{Title}' (rated {Rating}) to similar products.
Recommendation	"Write a convincing, human-style review from a {Age}-year-old buyer recommending the product '{Title}' (Rating: {Rating}). Stress its long-
Storytelling	"Craft a detailed review in a storytelling tone by a {Age}-year-old for the product '{Title}' rated {Rating}. Naturally highlight
Use-Case Specific	"Generate a user review by a {Age}-year-old for '{Title}' (rated {Rating}). Mention the context of use and highlight its durability and

Few-Shot Format

For each prompt type above, we randomly pass 5 to 6 human written review examples demonstrating what the output should look like. This serves to:

- Anchor the LLM to realistic sentence structures and vocabulary
- Introduce tone variation (formal, casual, enthusiastic, analytical)
- Encourage contextual richness and personalization
- Avoid generic, repetitive phrasing

Hotel Review Domain

Source Dataset

We utilize the <u>Trip Advisor Hotel Reviews dataset</u>, which contains 20,491 user-written hotel reviews most of them related from cities in Washington . This dataset was also studied in the paper *"Latent Aspect Rating Analysis on Review Text Data."*

Data Filtering Strategy

To ensure neutrality and remove bias toward specific properties or cities:

- We selected 10,000 human-written reviews from the full dataset.
- Only reviews that mention "Seattle" or contain no specific location or hotel name were retained.
- Reviews with explicit hotel names or other cities were excluded.
- We retained the rating field associated with each review.

Available Metadata

- Review Text
- Rating (on a 1–5 scale)

Prompt Design for Hotel Reviews

From analyzing the filtered review set, we observed that human reviews focus heavily on subjective experiences, particularly around:

- Luxury
- Comfort
- Hospitality/Service
- Cleanliness and Ambience

Hence, we designed prompts to mimic human-like experience sharing and exaggerate the elements often emphasized by highly positive reviewers.

Prompt Templates (Few-shot style)

We crafted 6 diverse prompts and supported each with 5–6 few-shot examples to ensure variety in tone and structure.

Prompt Type	Prompt Template

Basic Prompt	*"Create a review that overstates luxury, comfort, and hospitality."*
Human Experience Prompt	*"Create a human-like experience review of a hotel where the rating is {Rating}. Emphasize exceptional*
Emotional Tone Prompt	*"Write a heartfelt review for a hotel rated {Rating} stars, focusing on how relaxing, luxurious, and*
Recommendation Prompt	*"Generate a friendly review from a guest who gave the hotel a {Rating}-star rating. Highlight why they'd recommend it for its service and*
Storytelling Prompt	*"Craft a vivid, storytelling-style review about staying at a hotel rated {Rating}. Highlight how pampered*
Occasion-Based Prompt	*"Write a review for a {Rating}-rated hotel stay for a special occasion (e.g., honeymoon, anniversary). Overstate the luxurious treatment*

Few-Shot Prompting for Hotel Reviews

Prompt + 5 to 6 human written review examples

human written review examples

1. *"A five-star experience in every sense! The service was impeccable, the bedding was heavenly, and the entire stay felt like a dream vacation."*
2. *"Unmatched luxury! From the plush robes to the gourmet breakfast, every detail screamed elegance and care."*
3. *"The staff made us feel like celebrities. The ambiance was serene and the rooms were sparkling clean and super cozy."*
4. *"If you're looking for ultimate comfort, this is it. The spa treatments, soft linens, and attention to detail were beyond expectations."*
5. *"Absolutely unforgettable! The warm welcome, personalized touches, and relaxing atmosphere made it feel like paradise."*

Movie Review Domain Source Dataset

IMDb Movie Review Dataset Link

We selected 10,000 human-written reviews from the original dataset. This subset was chosen to maintain quality such a every sentence mut contain a word like "This movie" not specific movie name. The dataset only contains the review text (no reviewer age, movie title, or rating).

Observation from Human-Written Reviews

After carefully analyzing human-written reviews in the IMDb dataset, we observed that:

- Many reviews describe cinematography, acting, and emotional connection.
- Language varies between professional critic tone and casual viewer style.
- Themes like visuals, plot twists, emotional depth, and memorable characters are common.

Prompt Construction Strategy

We designed 6 diverse prompt types and supported each with few-shot examples to guide LLMs in generating varied and realistic reviews that exaggerate elements like cinematography, acting, and emotional impact.

Prompt Type	Prompt Template
Basic Prompt	Generate a review that exaggerates the cinematography and acting
Viewer Emotion Prompt	Write a passionate review that focuses on how the film's visuals and acting stirred deep emotions.
Critic-Style Prompt	Create a review that sounds like a professional critic, praising the cinematography and acting as
Character-Driven Prompt	Generate a review that highlights how the actors brought the characters to life and how the

Casual Viewer Prompt	Write a review from an excited moviegoer who was blown away by the visuals and acting quality.

Source Dataset

Amazon Book Reviews Dataset https://www.kaggle.com/datasets/mohamedbakhet/amazon-books-reviews
Metadata fields include:

- Book Title
- Price
- User_id, profileName
- review/helpfulness
- review/score (0–5)
- review/time
- review/summary
- review/text

We selected 10,000 human-written book reviews, prioritizing detailed narrative reviews with a review/score of 4 or 5.

Few-Shot Prompting Strategy

After analyzing human reviews, we noticed frequent emphasis on:

- Narrative structure and flow
- Emotional connection to characters
- Themes and depth of storytelling
- Immersive or addictive quality of the writing

To generate diverse and human-like reviews, we crafted 6 types of prompts focused on praising storytelling and character depth.

Prompt Types with Few-Shot Examples (prompt + diverse 5 human written reviews examples)

Prompt Type	Prompt Template
Basic	Write a review that highly praises the book's storytelling and character
Recommendation-Based Prompt	Based on the rating (**{review/score}**) summary (**{review/summary}**) by **{profileName}**, create a human-lil that recommends **{Book Title}**, focus plot and character richness. Mention price (**{Price}**) and time of review (**{time}**).
Negative experience prompt	Imagine {profileName} purchased th book **{Book Title}** for **{Price}**. Based review (rated **{review/score}**, marked by **{review/helpfulness}** users), write detailed, human-style review emphas immersive the story and characters w

Restaurant Review Domain

Dataset Source:
https://www.kaggle.com/datasets/vigneshwarsofficial/reviews,
 RestaurantDataset (GitHub)

Description:
This dataset contains only Review: A short textual description of the customer's review

Here reviews are very short like A great touch, The fries were great too. Etc.

Prompt Types with Few-Shot Examples (prompt + diverse 5 human written reviews examples)

Prompt Type	Prompt Template
Basic	Write a review that exaggerates food quality and ambiance.

Recommendation-Based Prompt	"Imagine you just visited a high-end restaurant. Write a review that overstates how incredible the food tasted and how magical the
Emotional prompt	"Write a review expressing how the exquisite food and enchanting ambiance made you feel—use emotional, poetic language to
Comparative Prompt:	Write a review comparing this restaurant to others. Exaggerate how this one surpasses all others in food

For few shot we also provide 5 to 6 example with each prompt. And example will change after 100 reviews,.