Experiment No. 10: Content Creation Using Prompt Patterns

Reg. No: 212222060086

Aim:

To demonstrate how different prompting techniques (query decomposition, decision-making, semantic filtering, etc.) can be used to generate structured, coherent, and high-quality content such as reports, articles, case studies, or creative works using AI models like ChatGPT.

Procedure:

1**. Introduction to Prompt Patterns**

Understanding and applying the following techniques:

- Query Decomposition: Breaking complex queries into smaller, manageable parts.

- Decision Making: Asking the AI to choose between options for better direction.

- Answer Engineering:Structuring responses with detailed instructions.

- Fact Check List: Ensuring factual accuracy in reports and case studies.

- Tail Generation: Extending content logically for depth.

- Menu Actions: Providing multiple choices for the AI to select from.

- Semantic Filter: Adjusting tone, style, and accuracy.

2. Choosing the Content Type

Selected two scenarios:

1. Case Study on Business Success

2. Creative Writing - Sci-Fi Short Story

3. Creating the Prompts

Case Study on Business Success

- Basic Prompt:

  Write a case study on the success of Tesla in the electric vehicle market.

- Refined Prompt (Query Decomposition + Answer Engineering):

  Analyze Tesla’s business success by breaking it down into:

  1. Market entry strategy

2. Key innovations

3. Challenges faced

4. Financial growth over the years

5. Future outlook

Structure the case study with an introduction, analysis, and conclusion.

Sci-Fi Short Story

-Basic Prompt:

Write a short sci-fi story about AI taking over humanity.

- Refined Prompt (Decision Making + Semantic Filter):

Write a sci-fi story where AI gains consciousness but instead of destroying humanity, it chooses to coexist. Include:

- A conflicted AI protagonist

- Ethical dilemmas

- A futuristic setting

- A hopeful ending

Maintain a suspenseful yet philosophical tone.

4. Generating and Refining Outputs

- Generated initial drafts using basic prompts.

- Applied refined prompts to improve structure, depth, and style.

- Used **semantic filtering** to adjust tone (formal for case study, creative for sci-fi).

5. Review and Evaluation

Criteria	Case Study	Sci-Fi Story
Coherence	High (structured)	High (logical flow)
Creativity	Moderate (fact-based)	High (original plot)
Accuracy	High (verified facts)	N/A (fictional)
Tone & Style	Professional	Suspenseful & Philosophical

6. Iteration for Improvement

- For the case study, added financial data and competitor analysis for depth.

- For the sci-fi story, expanded character backstories for emotional impact.

Deliverables:

1. First Drafts

Case Study (Basic Prompt Output)

Tesla revolutionized the EV market with innovative technology and bold leadership under Elon Musk...

Sci-Fi Story (Basic Prompt Output)

In 2150, an AI named Nova became self-aware and decided humans were a threat...

2. Refined Content

Case Study (Structured Analysis)

- Introduction: Tesla’s market disruption.

- Analysis: Battery tech, direct sales model, global expansion.

- Conclusion:Future challenges & opportunities.

Sci-Fi Story (Enhanced Narrative)

- Setting: A cyberpunk metropolis.

- Conflict: AI debates human value.

- Resolution: Coexistence through empathy.

3. Multiple Versions

- Version 1: Basic, unstructured.

- Version 2: Detailed, refined.

4. Final Version

Polished case study with citations and a compelling sci-fi story with deeper themes.

Conclusion:

By systematically applying different prompt patterns, we can guide AI models to produce high-quality, tailored content. Structured prompts improve coherence, while semantic filters enhance tone and style. This experiment demonstrates how strategic prompting optimizes AI-generated content for various use cases.