(TR-103) PROMPT ENGINEERING –

Training Day 5 Report:

4 July 2025

Task 1:

- To develop a Python-based chatbot that interacts with the user in a loop.
- To accept a website URL input from the user.
- To automatically fetch and clean the website's HTML content
- To summarize the cleaned content using Google's model.
- To generate the summary in a well-structured Markdown format using headings, bullet points.
- To extract and categorize Internal links and External links.
- To save each website's summary in a uniquely named .md file based on its URL.
- To display both the generated summary and the extracted links in the console.
- To provide an interactive loop allowing users to summarize multiple websites one after another.

Outputs:

```
PS C:\Users\jaspi\OneDrive\Desktop\NEW_CHATBOT> python app.py
🌐 Website Summarizer Chatbot (Gemini 2.0 Flash Lite)

🔗 Enter website URL to summarize: https://www.gndec.ac.in/

⌛ Fetching content and links...

⌛ Generating summary...


📄 Summary (Markdown Format):

# Guru Nanak Dev Engineering College (GNDEC), Ludhiana - Summary

## About

*   Established in 1956 by the Nankana Sahib Education Trust (NSET).
*   Affiliated with I.K. Gujral Punjab Technical University (IKGPTU).
*   Approved by the All India Council for Technical Education (AICTE).
*   Autonomous status granted by UGC in 2012.

## Key Features

*   Accredited by NAAC with an "A" Grade.
*   ISO 9001-2015 Certified.
*   Recognized by TCS for placements.
```

Key Features

*   Accredited by NAAC with an "A" Grade.
*   ISO 9001-2015 Certified.
*   Recognized by TCS for placements.
*   Offers various undergraduate (UG) and postgraduate (PG) programs, including Ph.D.
*   Consistently ranked among the top engineering colleges in India.

Departments

*   School of Architecture
*   Applied Science
*   Civil Engineering
*   Electrical Engineering
*   Mechanical & Production Engineering
*   Electronics & Communication Engineering
*   Computer Science & Engineering
*   Information Technology
*   Business Administration
*   Computer Applications

Facilities

*   Hostels
*   Computer Center
*   Library
*   Sports

✅ Summary saved to: summary_www_gndec_ac_in_home.md

🔗 Internal Links:
 - https://www.gndec.ac.in/
 - https://www.gndec.ac.in/#main-content
 - https://www.gndec.ac.in/?q=node/1
 - https://www.gndec.ac.in/?q=node/10
 - https://www.gndec.ac.in/?q=node/108
 - https://www.gndec.ac.in/?q=node/109
 - https://www.gndec.ac.in/?q=node/110
 - https://www.gndec.ac.in/?q=node/2
 - https://www.gndec.ac.in/?q=node/219
 - https://www.gndec.ac.in/?q=node/23
 - https://www.gndec.ac.in/?q=node/25
 - https://www.gndec.ac.in/?q=node/274
 - https://www.gndec.ac.in/?q=node/275
 - https://www.gndec.ac.in/?q=node/28
 - https://www.gndec.ac.in/?q=node/3
 - https://www.gndec.ac.in/?q=node/32
 - https://www.gndec.ac.in/?q=node/338
 - https://www.gndec.ac.in/?q=node/34
 - https://www.gndec.ac.in/?q=node/344
 - https://www.gndec.ac.in/?q=node/39
 - https://www.gndec.ac.in/?q=node/4
 - https://www.gndec.ac.in/?q=node/422
 - https://www.gndec.ac.in/?q=node/425

```
🌐 External Links:
  - http://103.66.206.213/piwigo/
  - http://alumni.gndec.ac.in
  - http://cc.gndec.ac.in
  - http://gndec.ac.in/press
  - http://guru.gndec.ac.in/
  - http://library.gndec.ac.in/
  - http://sports.gndec.ac.in
  - http://vidyanjali-he.education.gov.in/
  - https://academics.gndec.ac.in/
  - https://academics.gndec.ac.in/programs/
  - https://admission.gndec.ac.in/
  - https://admission.gndec.ac.in/Fee_Structure.php
  - https://admission.gndec.ac.in/important_notices.php
  - https://appsc.gndec.ac.in/
  - https://architecture.gndec.ac.in/
  - https://ce.gndec.ac.in/
  - https://cml.gndec.ac.in
  - https://cse.gndec.ac.in/
  - https://ece.gndec.ac.in/
  - https://ee.gndec.ac.in/
  - https://erp.gndec.ac.in/notice
  - https://exam.gndec.ac.in/
  - https://fmcrs.gndec.ac.in
  - https://gndec-2021.github.io/Newsletter_2024/
  - https://gndec.ac.in
```

Task 2:

- Prompt the user to enter a text description (prompt) for the image they want to generate.
- Use the Hugging Face Inference API to send the user's prompt to the stabilityai/stable-diffusion-3.5-large model.
- Authenticate the API request using a valid Hugging Face access token.
- Use the Python Imaging Library (PIL) to read and display the image to the user.

Output:

```
PS C:\Users\jaspi\OneDrive\Desktop\IMAGE GENERATION> python test.py
🖼️Enter a prompt to generate an image: A colorful peacock on green grass during daylight
PS C:\Users\jaspi\OneDrive\Desktop\IMAGE GENERATION>
```

Homework:

- Takes a summary from a .md file generated by the website summarizer chatbot.
- Rephrases the summary using the Gemini model.
- Makes the content sound more natural, reader-friendly, and human-like.
- Displays the rephrased summary using a typewriter-style animation.
- Saves the rephrased summary into a new markdown file with a rephrased_ prefix.

Output:

```
PS C:\Users\jaspi\OneDrive\Desktop\NEW_CHATBOT> python typewriter.py
📝 Rephrase Summary with Typewriter Effect

📁 Enter summary markdown filename (e.g., summary_example_com.md): C:\Users\jaspi\OneDrive\Desk
top\NEW_CHATBOT\summary_www_gndec_ac_in_home.md

🔄 Rephrasing summary using Gemini...


✏️ Rephrased Summary (Typewriter Style):

Okay, here's a more reader-friendly summary of Guru Nanak Dev Engineering College (GNDEC) in Lu
dhiana:

# Guru Nanak Dev Engineering College (GNDEC) - A Quick Look

## What's the Deal?

*   GNDEC has been around since 1956, thanks to the Nankana Sahib Education Trust (NSET).
*   It's connected with I.K. Gujral Punjab Technical University (IKGPTU).
*   Also, it's got the thumbs up from the All India Council for Technical Education (AICTE).*
 In 2012, it got the special "autonomous" status from the UGC.
```

```
## Famous Faces (Alumni)

*   You'll find a list of successful graduates, including their graduation year, what they're d
oing now, and where they work or study.
*   They have alumni in various engineering fields and business administration.

## Getting In - Admissions

*   Here's where you'll find info on how to apply and important deadlines.
*   You can also get in touch with them using provided contact numbers for any admission relate
d queries.

## Other Useful Stuff

*   They have help desk and helpline numbers if you need assistance.
*   You can check out the college Newsletter and Magazine.
*   There's information about the National Cyber Crime Portal.
*   They also have an e-library app.


✅ Rephrased summary saved to: rephrased_summary_www_gndec_ac_in_home.md
```