

SR UNIVERSITY Campus Warangal

Program: II - B. Tech (CS& AI)

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Department: Computer Science and AI Semester: I

AI Assisted Coding - Lab Test 1

Instructions:

- 1- Use AI Tools like VScode+Github Copilot and Cursor AI for code generation
- 2- This Assignment will be evaluated for 15 Marks (10 Marks for Tasks and 5 Marks for viva based on regular lab activities)
- 3- Students need to submit assignment through canvas before due date
- 4- Students who are absent for lab will receive 0 Marks

Q1. Context-Aware Prompt Design

- Task: Write two different prompts to get a summarized news report from an AI model.
 - One with poor context.

```
import openai
response = openai.ChatCompletion.create(
   model="gpt-4",
   messages=[
        {"role": "user", "content": "Summarize today s news."}
print(response.choices.message['content'])
```

Output:

PS C:\Users\USER> & C:/Users/USER/anaconda3/python.exe "c:/Users/USER/OneDrive/Desktop/SRU/AI ASSISTED/import requests Enter a topic: & C:/Users/USER/anaconda3/python.exe "c:/Users/USER/OneDrive/Desktop/SRU/AI ASSISTED/import openai.py" No news found for this topic. PS C:\Users\USER>

One with detailed context (e.g., specify tone, target audience, and summary length).

```
prompt = (
    "Please generate a concise news summary (250 words) of today ps major headlines "
"in a neutral, informative tone, tailored for busy professionals in the finance industry. "
     and significant corporate announcements. Highlight essential facts and avoid sensational language."
response = openai.ChatCompletion.create(
    model="gpt-4",
    messages=[
         {"role": "user", "content": prompt}
print(response.choices.message['content'])
```

[5 M]

Output:

```
PS C:\Users\USER> & C:\Users\USER\anaconda3\( python.exe \text{"c:\Users\USER\0neDrive\Desktop\SRU\AI ASSISTED\import opena\)

Traceback (most recent call last):

File "c:\Users\USER\0neDrive\Desktop\SRU\AI ASSISTED\import openai.py", line 1, in <module>
    import openai

ModuleNotFoundError: No module named 'openai'

PS C:\Users\USER\\\
```

Compare the outputs and explain which is more effective and why.

Q2. Multi-Turn Prompting Design

[5 M]

- Scenario: You are designing a chatbot for customer support.
- Task: Write a sequence of **3 prompts** where each uses the **previous response as context** (conversation continuity).

Prompt 1 (Initial User Message)

User:

"I received my order, but one item is missing. Can you help?"

Prompt 2 (Follow-up with Context)

User:

"Earlier, I mentioned an item was missing from my order. The missing item is the wireless mouse from order #12345. What steps should I take next?"

Prompt 3 (Further Follow-up with Context)

User:

"Thanks for the return instructions. Also, can you tell me how long it will take to receive the replacement wireless mouse?"

• Evaluate how context improves the AI's accuracy.