SIT112 - TASK COMPLETION REPORT

Important note 1: Please **do not** include Python code in this report. It would be acceptable though to make brief references to function names or different parts of the task's notebook when needed.

Important note 2: Please **do not** leave any response field empty; if not applicable, enter NA.

1. TASK SUMMARY

TASK NAME (ABBREVIATION)	YOUR NAME (STUDENT ID)	YOUR DEAKIN EMAIL
High Distinction 1	Yash Kalra (223079934)	S223079934@deakin.edu.au

2. TASK DESCRIPTION

ITEM	RESPONSE
What was the objective(s) of the task?	The goal of this assignment was to examine data pertaining to various news channels that we selected independently, employing the concept of sentiment analysis.
What kind of data did you work with?	The assignment required analyzing the titles and comments of each video published within a specified start and end date range. The goal was to determine whether the content reflected neutral, positive, or negative sentiments.
Briefly describe the data science task you worked on.	The data was cleaned, merged, and prepared for analysis, and a bar plot was used to understand the monthly distribution of the 3 types of sentiments across all channels.

3. TECHNICAL SKILLS

ITEM	RESPONSE
What technical skills did you use during the task?	Seaborn was the primary library utilized to create detailed visualizations of the analysis, employing bar plots. The data was prepared for the bar plot using the groupby function to aggregate relevant information.
list any challenges or obstacles you faced while working on the task and how you overcame them.	NA

4. DATA CLEANING AND PREPARATION (ENTER NA WHEN NOT APPLICABLE)

ITEM	RESPONSE
What steps did you take to clean and prepare the data?	I employed the dropna() function to remove any rows containing missing values, ensuring data integrity. Additionally, duplicates were eliminated in columns where necessary to maintain data accuracy.
Did you encounter any issues with the data during this process? How did you address these issues with the data?	NA

5. DATA ANALYSIS (ENTER NA WHEN NOT APPLICABLE)

ITEM	RESPONSE
How did you analyze the data?	I utilized bar plots to analyze the data for the three sentiments (neutral, positive, and negative) and examined how they varied over the months. This analysis shed light on people's perceptions regarding the titles and comments of the provided videos, offering insights into public opinion.
Did you use any visualization techniques to better understand the data?	Yes I used the barplot to analyze the data.
What insights did you gain from this analysis?	The analysis revealed that February recorded zero responses for both titles and comments, indicating minimal engagement during that month. Conversely, during October, there was a notable increase in positive sentiment towards the titles, suggesting heightened interest and positivity among viewers during that period.

6. BASIC REQUIREMENTS FOR THE TASK

ITEM	RESPONSE (YES/NO)
Are you confident to execute the Python code in this task and explain the output?	Yes
Are you confident to explain what each line of code does and how it contributes to the solution(s)?	Yes
Are you confident to rewrite or modify the code after completing this task?	Yes

- For pass tasks: with guidance, no time limit.
- For credit tasks: with limited guidance, no time limit.
- For distinction tasks: independently, no time limit.
- For high distinction tasks: independently, in a limited time.

7. CODE ATTACHMENT (NOT APPLICABLE TO THE PASS TASKS – ENETER NA)

ITEM	RESPONSE (YES/NO/NA)
Have you attached the notebook file that contains your solutions (Python code) for this task?	Yes
Have you executed all the cells in your attached notebook and ensured there is no error? *Please note your submission* <mark>*will not be flagged as complete*</mark> *if your attached notebook contains any error.*	Yes-

8. VIDEO ATTACHMENT (NOT APPLICABLE TO THE PASS/CREDIT TASKS: NA)

ITEM	RESPONSE (THE VIDEO LINK/NA)
Provide the link to the video recording that presents your completed task. This is only for Distinction and High Distinction tasks. Enter NA for Pass/Credit tasks.	https://deakin.au.panopto.com/Panopto/Pages/Viewer.aspx?id=1fc9f151-80cc-4b57-9705-b181013b40ed

9. AKNOWLEDGEMENT

BY SUBMITTING THIS REPORT, I ACKNOWLEDGE THAT:

- MY RESPONSES ARE ACCURATE AND ARE MY OWN WORDS.
- I HAVE MET ALL THE BASIC REQUIREMENTS OF THE TASK (LISTED IN SECTION 6).
- I HAVE READ AND FULLY UNDERSTOOD THE ASSESSMENT GUIDELINE OF THE UNIT.
- THIS REPORT DOES NOT EXCEED 3 PAGES.
- THIS REPORT DOES NOT INCLUDE CODE EXCEPT BRIEF REFERENCES TO FUNCTION NAMES OR DIFFERENT PARTS OF THE TASK'S NOTEBOOK.
- MY SUBMISSION DOES NOT CONTAIN ANY CREDENTIALS (E.G., PASSWORD, API KEY, ETC) OR PERSONAL INFORMAIOTN.

IMPORTANT NOTE 3: IF YOU HAVE ANSWERED NO TO ANY OF THE QUESTIONS IN SECTIONS 6, PLEASE RECONSIDER SUBMITTING YOUR REPORT; ASK HELP FROM YOUR TUTOR.

ADD YOUR NAME AND SIGNATURE HERE: YASH KALRA