YOUTUBE WATCHING AND EXAM PATTERN ANALYSIS
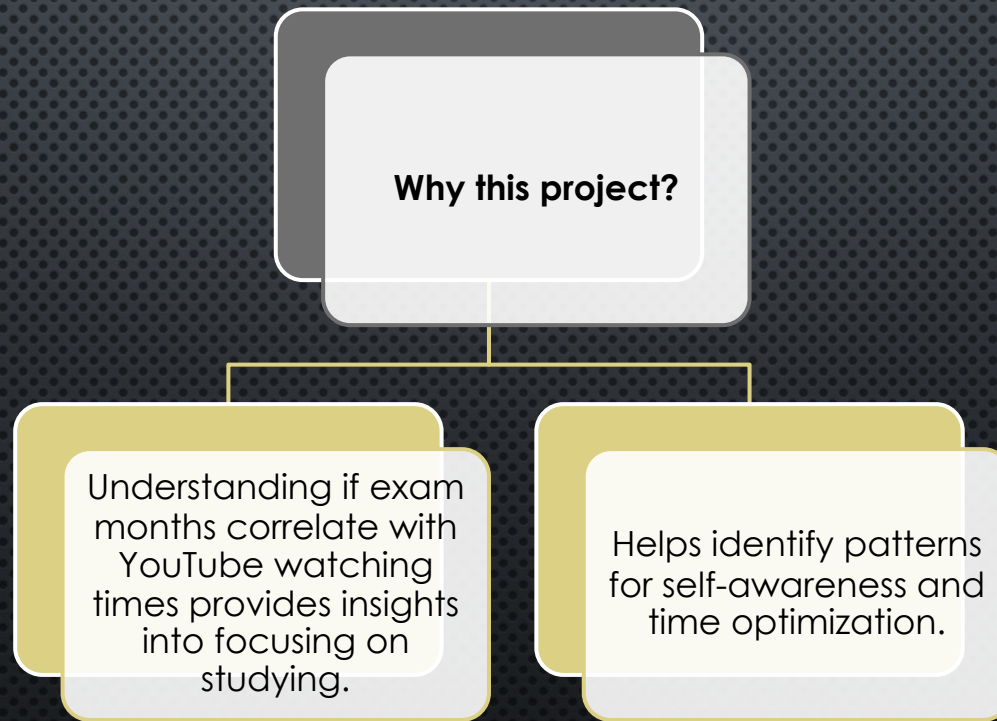
A DATA-DRIVEN LOOK INTO VIEWING AND STUDYING ANALYSIS

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MOTIVATION

Why this project?

Understanding if exam months correlate with YouTube watching times provides insights into focusing on studying.

Helps identify patterns for self-awareness and time optimization.

GOALS

Key Questions: Do YouTube viewing hours opposite with exam times?

Are there specific patterns that reveal connections between studying and viewing habits?

Importance: Helps evaluate digital consumption alongside monthly routines.

Highlights multitasking behaviors and habits.

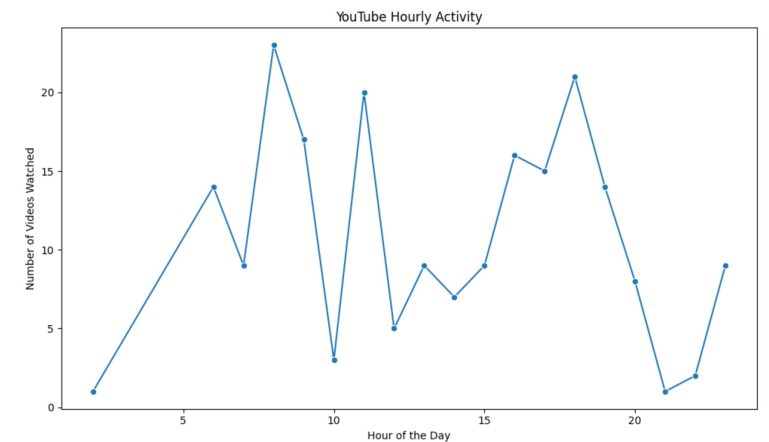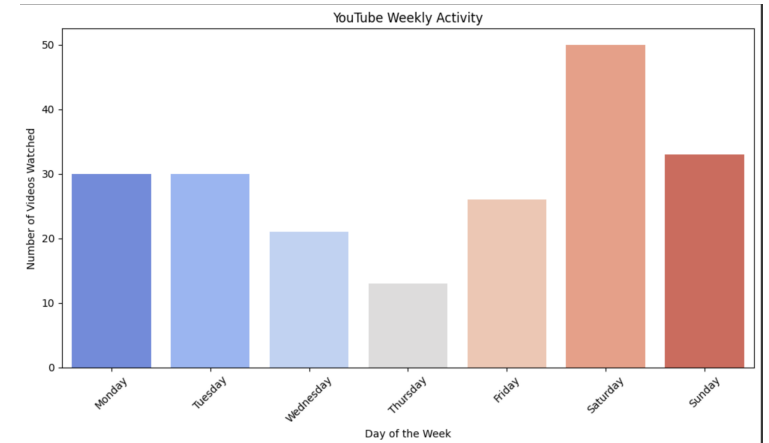# HYPOTHESIS

EXPECTED OUTCOMES:

Peaks in YouTube watching times are opposite with exam times and weeks.

DATASET

- **YouTube Data**: Exported via Google Takeout (timestamps, titles, channels).
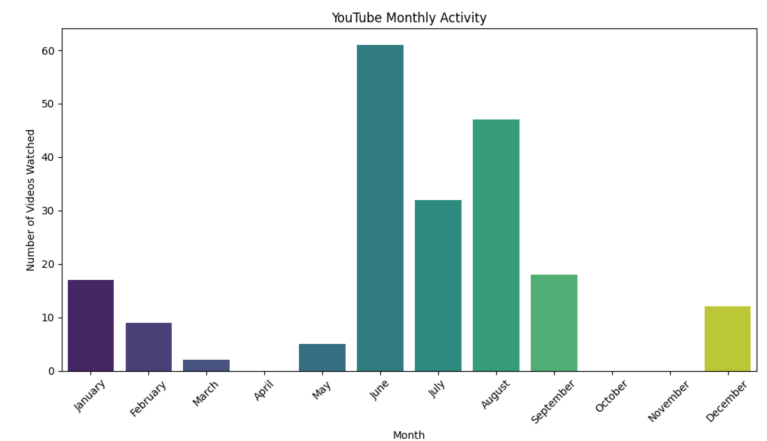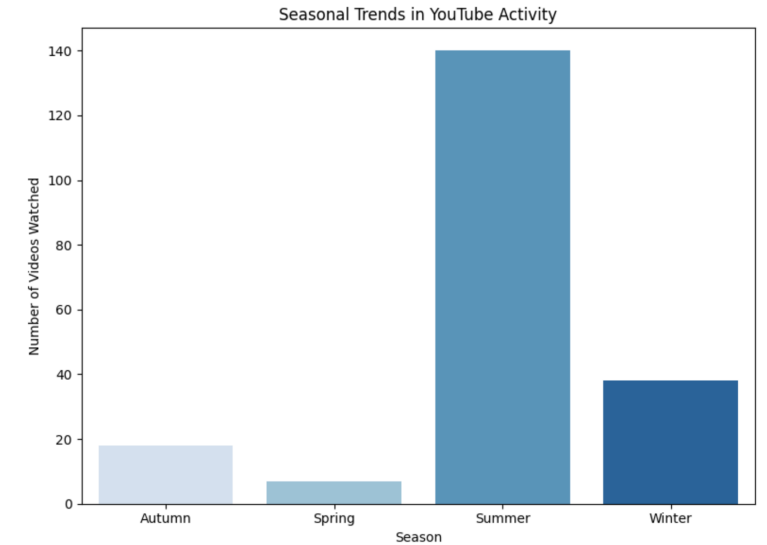
Exploratory Data Analysis (EDA)

- **Overview:**
  - Started with Analyzing hourly and daily viewing trends.

- **Findings:**
  - Watching trends peak in the evenings.
  - There is a trend in weekends where I do not study.

EXPLORATORY DATA ANALYSIS (EDA)

- **OVERVIEW**:
  - CONTINUE with Analyzing MONTHLY and SEASONLY viewing trends.
- **FINDINGS**:
  - Watching trends peak in SUMMER TIME WHERE I DO NOT HAVE SCHOOL OR EXAMS.

Seasonal Trends in YouTube Activity

YouTube Monthly Activity

DATA CLEANING & ADJUSTMENTS

STEPS TAKEN:

- CONVERTED TIMESTAMPS TO LOCAL TIME.

- EXTRACTED HOURS, WEEKDAYS, AND DATES.

```python
3]    1 watch_history['Timestamp'] = pd.to_datetime(watch_history['Timest
      2 bank_transactions['Timestamp'] = pd.to_datetime(bank_transactions


4]    1 watch_history['Date'] = watch_history['Timestamp'].dt.date
      2 watch_history['Hour'] = watch_history['Timestamp'].dt.hour
      3 watch_history['Weekday'] = watch_history['Timestamp'].dt.day_name
      4
      5 bank_transactions['Date'] = bank_transactions['Timestamp'].dt.dat
      6 bank_transactions['Hour'] = bank_transactions['Timestamp'].dt.hou
      7 bank_transactions['Weekday'] = bank_transactions['Timestamp'].dt.


5]    1 watch_history.to_csv('cleaned_watch_history_updated.csv', index=F
      2 bank_transactions.to_csv('cleaned_bank_transactions_updated.csv',


6]    1 print("Watch History Dataset Summary:")
      2 print(watch_history.info())
      3 print(watch_history.describe(include='all'))
      4
      5 print("\nBank Transactions Dataset Summary:")
      6 print(bank_transactions.info())
      7 print(bank_transactions.describe(include='all'))
```
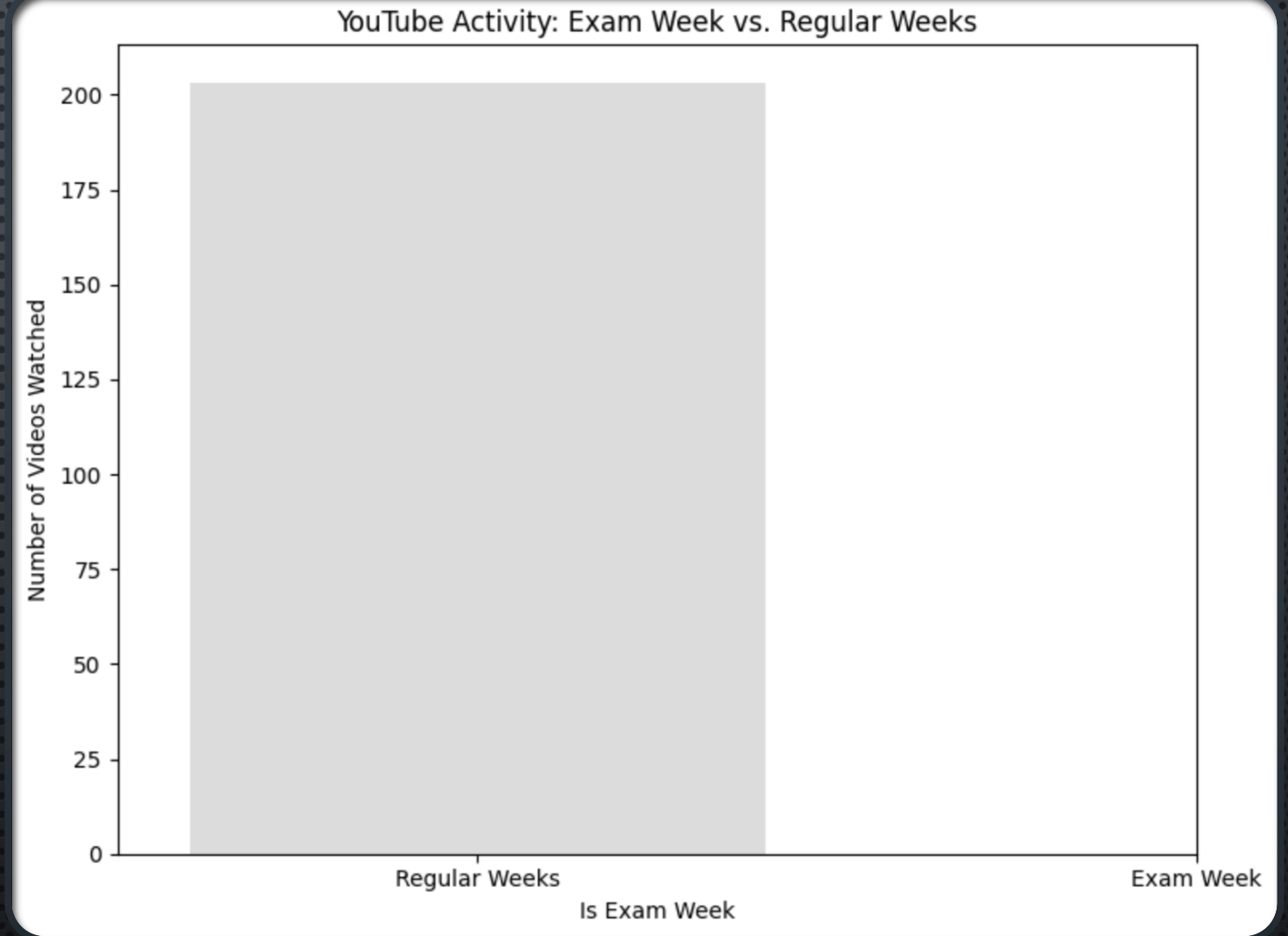
DETAILED ANALYSIS

- İᴛ ᴄᴀɴ ʙᴇ ꜱᴇᴇɴ ᴛʜᴀᴛ ᴛʜᴇʀᴇ ɪꜱ ᴀ STRONG OPPOSITION WITH MY EXAM WEEKS AND YOUTUBE WATCHING TREND.

YouTube Activity: Exam Week vs. Regular Weeks

CONCLUSION

KEY TAKEAWAYS:

HYPOTHESIS SUPPORTED—YOUTUBE WATCHING TIMES ARE OPPOSITE WITH EXAM WEEKS AND MONTHS.

WEEKENDS AND EVENING TIMES STANDOUT WHERE I DO NOT GO TO SCHOOL OR STUDY.

IMPLICATIONS: REFLECTS MULTITASKING HABITS THAT COMBINE ESTUDYING AND EATING.

FUTURE WORK

POTENTIAL IMPROVEMENTS:.

- ADD CONTENT TYPE ANALYSIS (E.G., EDUCATION VIDEOS).