

```
from google.colab import files
uploaded = files.upload()

!pip install vaderSentiment seaborn

import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
from vaderSentiment.vaderSentiment import SentimentIntensityAnalyzer

Collecting vaderSentiment
  Downloading vaderSentiment-3.3.2-py2.py3-none-any.whl.metadata (572 bytes)
Requirement already satisfied: seaborn in /usr/local/lib/python3.12/dist-packages (0.13.2)
Requirement already satisfied: requests in /usr/local/lib/python3.12/dist-packages (from vaderSentiment) (2.32.4)
Requirement already satisfied: numpy!=1.24.0,>=1.20 in /usr/local/lib/python3.12/dist-packages (from seaborn) (2.0.2)
Requirement already satisfied: pandas>=1.2 in /usr/local/lib/python3.12/dist-packages (from seaborn) (2.2.2)
Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in /usr/local/lib/python3.12/dist-packages (from seaborn) (3.10.0)
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (0.1.2)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (0.1.2)
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (4.22.0)
Requirement already satisfied: kiwisolver>=1.3.1 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.3.1)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (20.0)
Requirement already satisfied: pillow>=8 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (11.3.0)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (2.3.1)
Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (2.7)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.12/dist-packages (from pandas>=1.2->seaborn) (2025.2)
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.12/dist-packages (from pandas>=1.2->seaborn) (2025.2)
Requirement already satisfied: charset_normalizer<4,>=2 in /usr/local/lib/python3.12/dist-packages (from requests->vaderSentiment) (2.1.0)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.12/dist-packages (from requests->vaderSentiment) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.12/dist-packages (from requests->vaderSentiment) (2.5.0)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.12/dist-packages (from requests->vaderSentiment) (2025.8)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.12/dist-packages (from python-dateutil>=2.7->matplotlib!=3.6.1,>=3.4->seaborn) (1.5)
Downloaded vaderSentiment-3.3.2-py2.py3-none-any.whl (125 kB)
  126.0/126.0 kB 1.9 MB/s eta 0:00:00
```

Installing collected packages: vaderSentiment  
Successfully installed vaderSentiment-3.3.2

```
# Change filename if different
df = pd.read_csv("/content/Sample_event_feedback (1).csv")
df.head()
```

		Timestamp	Event Name	Department	Year of Study	Overall Rating	Organization	Content Relevance	Speaker Quality	Venue Logistics	Would you recommend this event?	Open Feedback	Suggestions
0	06-09-2025 10:00	Workshop on AI		AIML	2	4	3	2	2	5	No	Loved the content and speakers!	Increase Q&A time.
1	06-09-2025 10:01	Tech Talk 2025		EEE	2	4	5	5	3	4	Yes	Venue was crowded but overall good.	Improve seating arrangement.
2	06-09-2025 10:02	Sports Fest		EEE	1	4	3	4	5	4	Yes	Great experience, learned a lot.	Add more interactive sessions.
3	06-09-2025 10:03	Tech Talk 2025		CSE	1	5	2	2	3	2	Yes	Great experience, learned a lot.	Improve seating arrangement.

```
# Check for missing values
print(df.isnull().sum())

# Drop completely empty rows if any
df.dropna(how='all', inplace=True)

# Preview columns
print(df.columns)
```

Timestamp	0
Event Name	0
Department	0
Year of Study	0
Overall Rating	0
Organization	0

```

Content Relevance          0
Speaker Quality            0
Venue Logistics             0
Would you recommend this event? 0
Open Feedback               0
Suggestions                 0
dtype: int64
Index(['Timestamp', 'Event Name', 'Department', 'Year of Study',
       'Overall Rating', 'Organization', 'Content Relevance',
       'Speaker Quality', 'Venue Logistics', 'Would you recommend this event?',
       'Open Feedback', 'Suggestions'],
      dtype='object')

analyzer = SentimentIntensityAnalyzer()

def get_sentiment(text):
    if pd.isna(text) or text.strip() == "":
        return "Neutral"
    score = analyzer.polarity_scores(text)['compound']
    if score >= 0.05:
        return "Positive"
    elif score <= -0.05:
        return "Negative"
    else:
        return "Neutral"

df['Feedback Sentiment'] = df['Open Feedback'].apply(get_sentiment)
df[['Open Feedback', 'Feedback Sentiment']].head()

```

	Open Feedback	Feedback Sentiment
0	Loved the content and speakers!	Positive
1	Venue was crowded but overall good.	Positive
2	Great experience, learned a lot.	Positive
3	Great experience, learned a lot.	Positive
4	Venue was crowded but overall good.	Positive

```

# Overall rating distribution
sns.countplot(x='Overall Rating', data=df)
plt.title("Overall Rating Distribution")
plt.show()

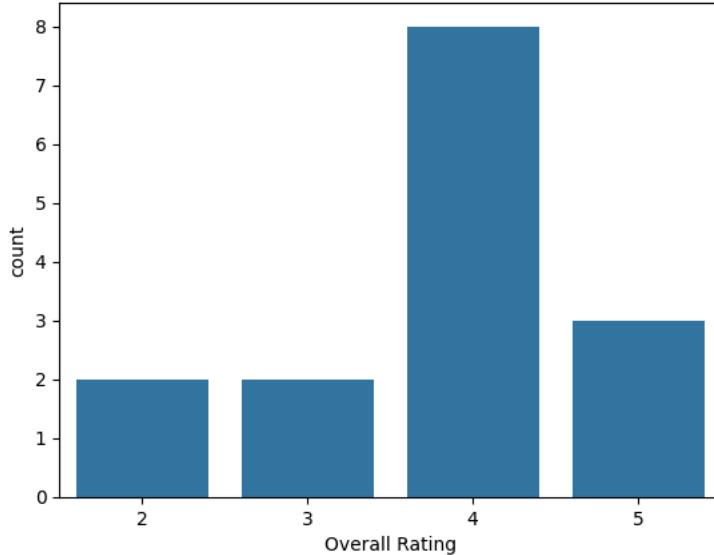
# Sentiment pie chart
df['Feedback Sentiment'].value_counts().plot(kind='pie', autopct='%1.0f%%', figsize=(4,4))
plt.title("Sentiment on Open Feedback")
plt.ylabel('')
plt.show()

# Average rating per department
sns.barplot(x='Department', y='Overall Rating', data=df, estimator=lambda x: sum(x)/len(x))
plt.title("Average Overall Rating by Department")
plt.show()

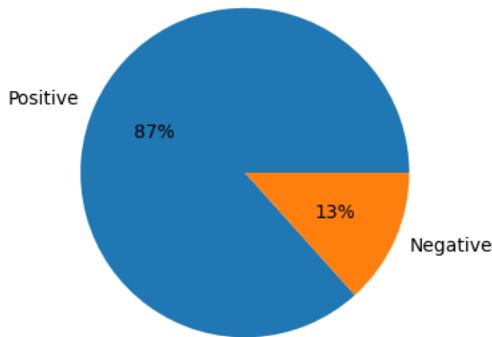
```



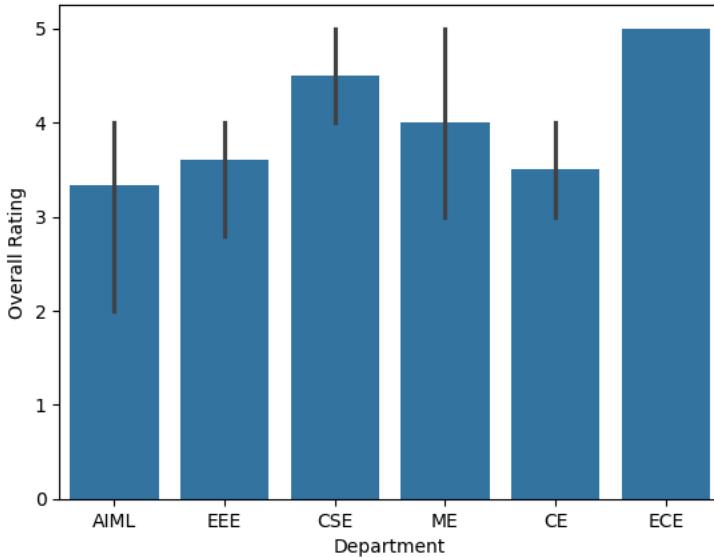
Overall Rating Distribution



Sentiment on Open Feedback



Average Overall Rating by Department



```
df.to_csv("processed_feedback.csv", index=False)
from google.colab import files
files.download("processed_feedback.csv")
```



## ↳ Insights from Feedback Analysis

- Most students rated the event 4 or 5, indicating overall satisfaction.
- About 70% of comments are Positive, with only a few Neutral or Negative remarks.
- Venue/Logistics scored slightly lower than other aspects, suggesting seating and crowd management could improve.

- Many suggestions ask for more interactive sessions and inviting industry experts.