```
# STEP 1: Install Required Libraries
!pip install pandas openpyxl matplotlib seaborn wordcloud

# STEP 2: Import
Libraries import pandas
as pd import
matplotlib.pyplot as plt
import seaborn as sns
from wordcloud import
WordCloud from
google.colab import files

# STEP 3: Upload the Excel File
uploaded = files.upload()

# STEP 4: Load the Excel File df =
pd.read_excel("task3.xlsx")  # Change filename if
different

# STEP 5: Preview Data
df.head()
# Check for missing data
print("Missing values:\n",
df.isnull().sum())

# Summary statistics df.describe() sns.countplot(x='Overall Satisfaction
(1-5)', data=df) plt.title("Overall Satisfaction Distribution")
plt.xlabel("Satisfaction Rating") plt.ylabel("Number of Students")
plt.show() recommend_counts = df['Would Recommend
(Yes/No)'].value_counts() recommend_counts.plot.pie(autopct='%1.1f%%',
startangle=90, colors=['lightgreen', 'salmon']) plt.title("Would Recommend
to Others") plt.ylabel("") plt.show() rating_columns = ['Overall
Satisfaction (1-5)', 'Organization Rating (1-5)',
'Content Rating (1-5)', 'Speaker/Host Rating (1-5)']

df.groupby('Event Attended')[rating_columns].mean().plot(kind='bar',
figsize=(12,6)) plt.title("Average Ratings by Event")
plt.ylabel("Rating (1-5)") plt.xticks(rotation=45)
plt.legend(loc='lower right') plt.show() text = " ".join(comment for
comment in df['Additional Comments'].astype(str)) wordcloud =
WordCloud(width=800, height=400,
background_color='white').generate(text)

plt.figure(figsize=(10, 5))
plt.imshow(wordcloud,
interpolation='bilinear')
plt.axis('off') plt.title("Word Cloud
of Student Comments") plt.show()
```

Choose Files No file chosen Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

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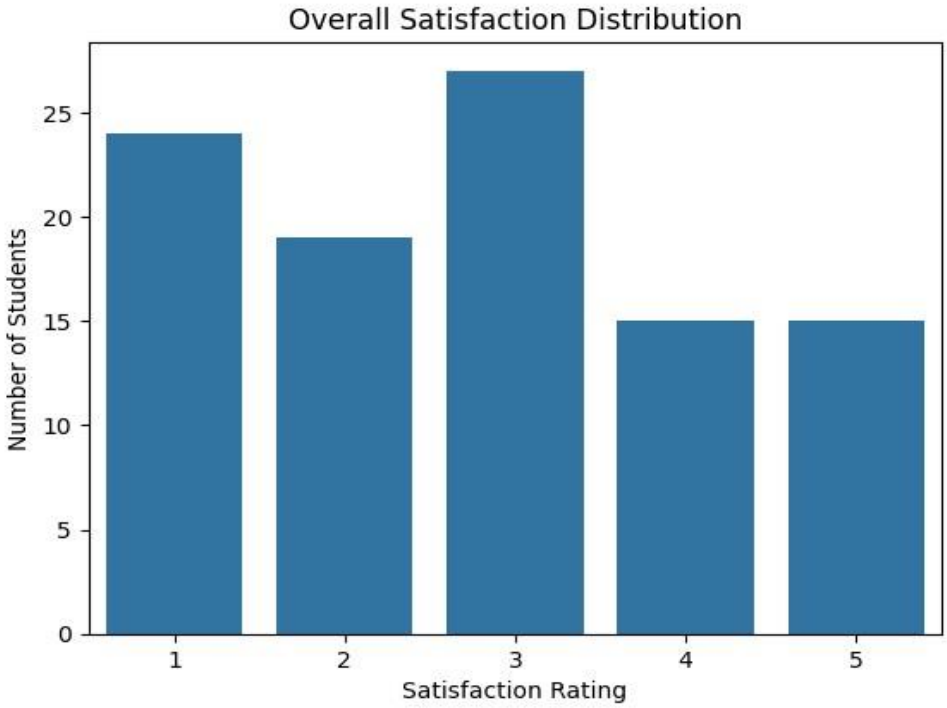
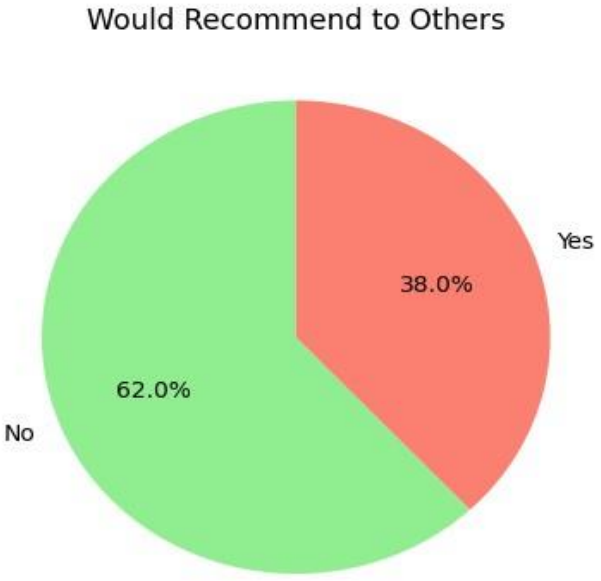
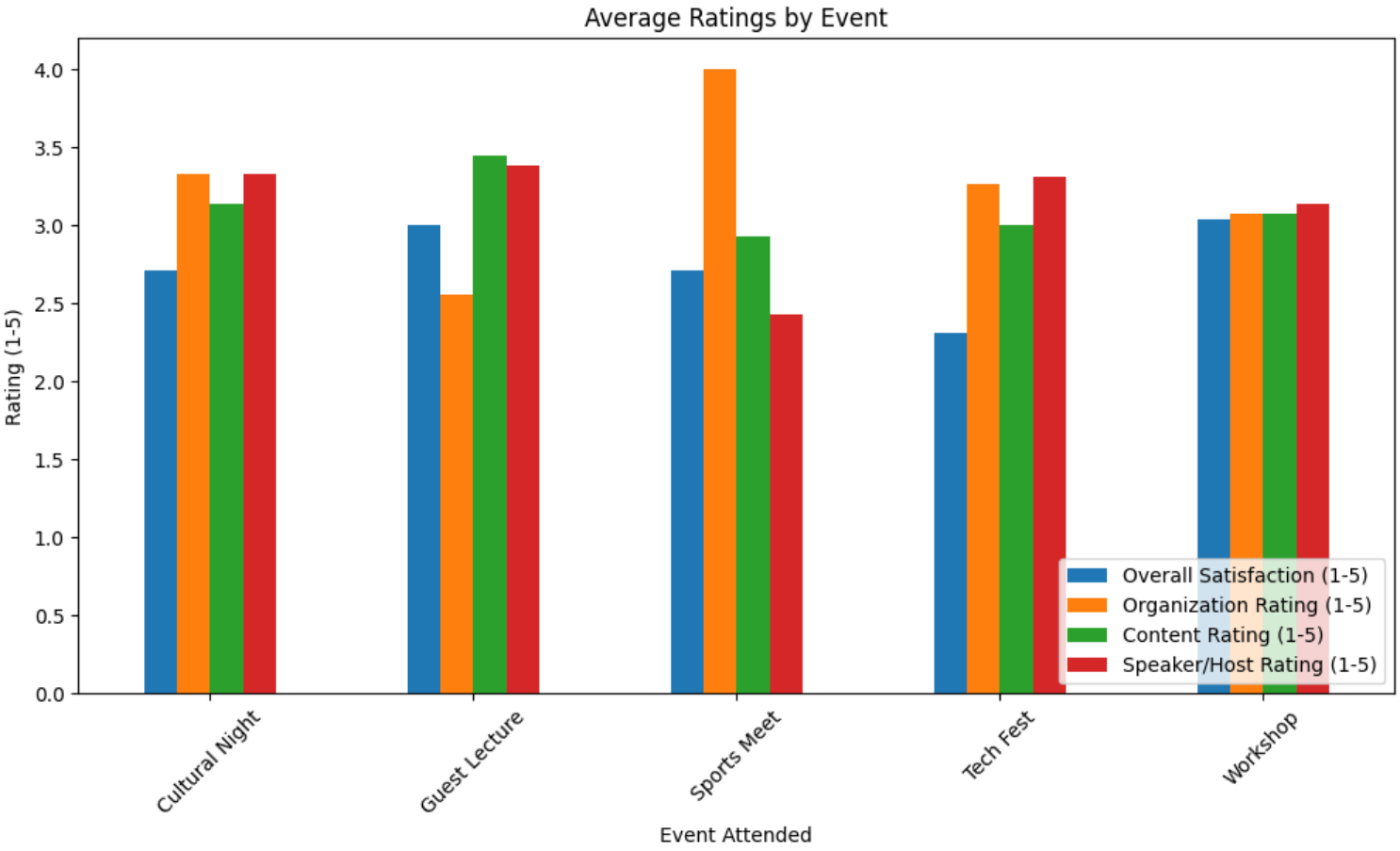
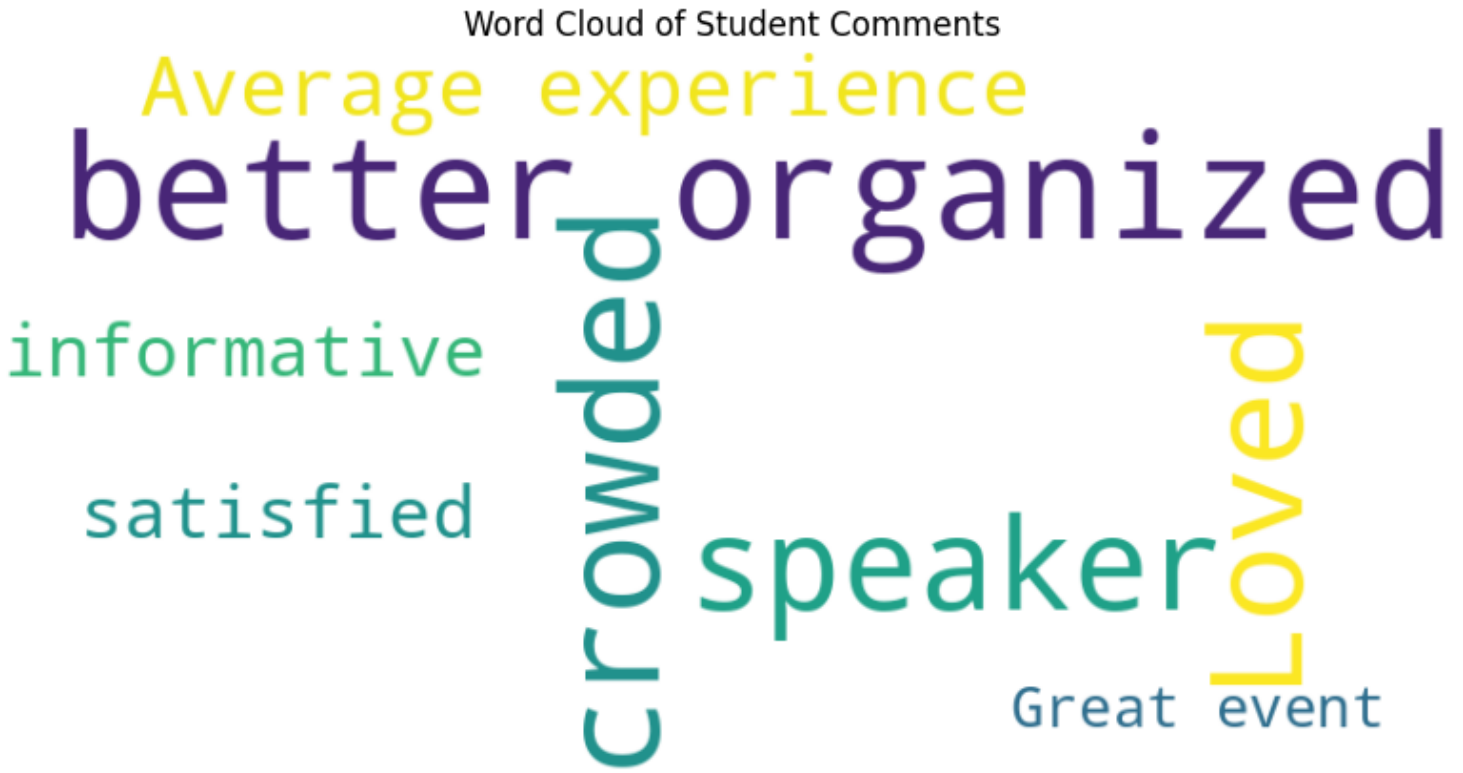
Saving task3.xlsx to task3 (1).xlsx
Missing values:
 Respondent ID                 0
Event Attended                 0
Overall Satisfaction (1-5)     0
Organization Rating (1-5)      0
Content Rating (1-5)           0
Speaker/Host Rating (1-5)      0
Would Recommend (Yes/No)
0 Additional Comments
0 dtype: int64
```






Average Ratings by Event
Rating (1-5)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Overall Satisfaction (1-5)
Organization Rating (1-5)
Content Rating (1-5)
Speaker/Host Rating (1-5)
Cultural Night
Guest Lecture
Sports Meet
Tech Fest
Workshop
Event Attended


Word Cloud of Student Comments
Average experience
better
organized
informative
crowded
Loved
satisfied
speaker
Great event