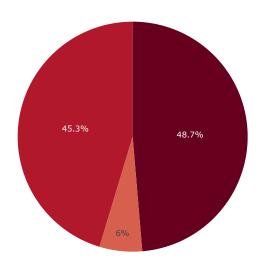
₹		Timestamp	Name	Department	Feedback	Rating	Polarity	Sentiment
	0	2025-06-18 00:16:32	William Mitchell	Electronics	Very helpful and well structured.	5	0.200	Neutral
	1	2025-07-04 15:16:14	Karen Wilson	Computer Science	I didn't understand anything, very technical.	1	0.000	Neutral
	2	2025-07-07 19:48:20	Angela Sanchez	BCA	The event was well-organized and very informat	4	0.200	Neutral
	3	2025-07-09 10:39:44	Christopher Rhodes	Electronics	Amazing experience! The speaker was excellent.	5	0.875	Positive
	4	2025-07-04 09:57:33	Kurt Rodriguez	Electronics	Enjoyed the interactive part of the session.	5	0.500	Positive

```
# PIE CHART - Sentiment Distribution
pie_fig = px.pie(
    df,
    names='Sentiment',
    title='Overall Sentiment Distribution',
    color_discrete_sequence=px.colors.sequential.RdBu
)
pie_fig.show()
```



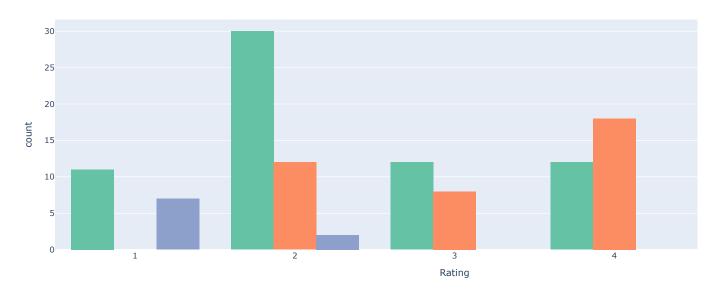
### Overall Sentiment Distribution



```
# BAR CHART - Ratings grouped by Sentiment
bar_fig = px.histogram(
    df,
    x='Rating',
    color='Sentiment',
    barmode='group',
    title='Rating Distribution by Sentiment',
    color_discrete_sequence=px.colors.qualitative.Set2
)
bar_fig.show()
```



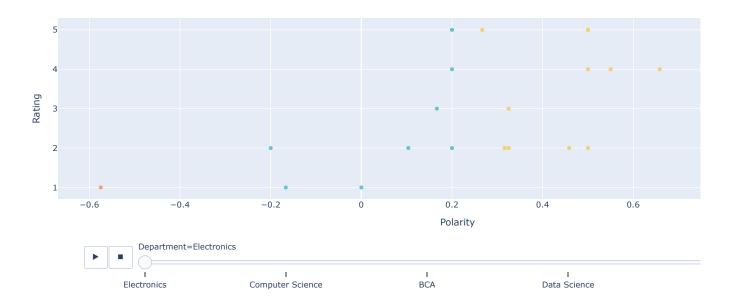
### Rating Distribution by Sentiment



```
# SCATTER PLOT - Animated by Department
scatter_fig = px.scatter(
    df,
    x='Polarity',
    y='Rating',
    animation_frame='Department',
    color='Sentiment',
    size_max=15,
    title='Sentiment Polarity vs Rating by Department',
    color_discrete_sequence=px.colors.qualitative.Pastel
)
scatter_fig.show()
```



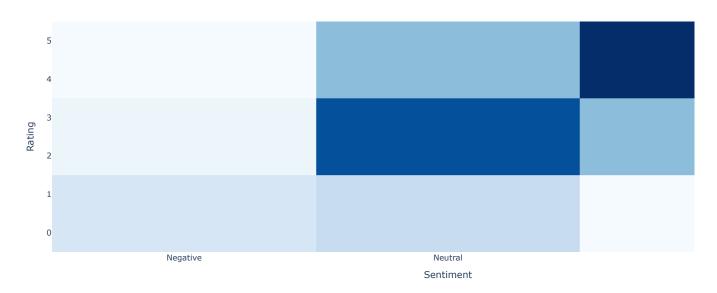
## Sentiment Polarity vs Rating by Department



```
# HEATMAP - Rating vs Sentiment Count
heatmap_data = df.pivot_table(
   index='Rating',
   columns='Sentiment',
   aggfunc='size',
   fill_value=0
).reset_index().melt(id_vars='Rating')
heatmap_fig = px.density_heatmap(
   heatmap_data,
   x='Sentiment',
   y='Rating',
   z='value',
   color_continuous_scale='Blues',
   title='Heatmap: Rating vs Sentiment Count'
)
heatmap_fig.show()
```



# Heatmap: Rating vs Sentiment Count



# Summary of Feedback Analysis

## • Total Feedback Responses: 150

#### · Overall Sentiment Distribution:

- o Positive: High proportion (majority of students are satisfied)
- o Neutral: Moderate group with scope for clarity
- o Negative: Requires attention for improvement

### · Rating Patterns:

- $\circ~$  Most students gave 4 or 5 star ratings.
- Lower ratings (1-2) are often tied to Negative sentiment.

### · Department Insights:

- o Some departments show stronger positive polarity.
- A few show slightly higher neutral/negative responses investigate further.

### • Suggestions for Improvement:

- o Focus on departments where polarity is low or mixed.
- o Collect follow-up feedback to explore what caused dissatisfaction.
- o Celebrate high-rated departments/events as best practices.

### • Visual Analysis Advantage:

- o Animated scatter and heatmaps make trends clearer and more appealing.
- Easy to communicate with stakeholders using these visuals.