

# Week 10 Deliverables

# Group Details

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# Problem Description

- Advanced NLP working with detecting hate speech.

# EDA

- I created wordframes to show the most popular words in hate comments versus non-hate comments

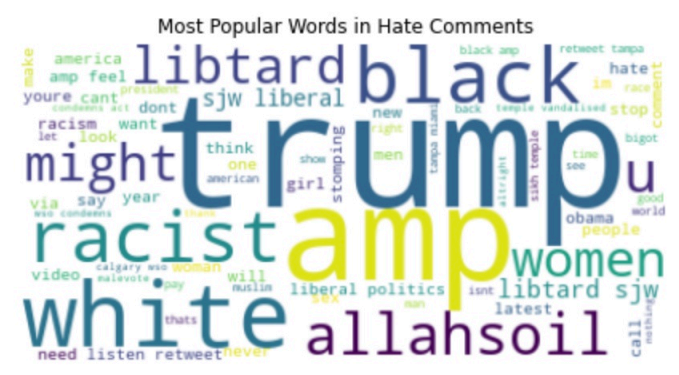
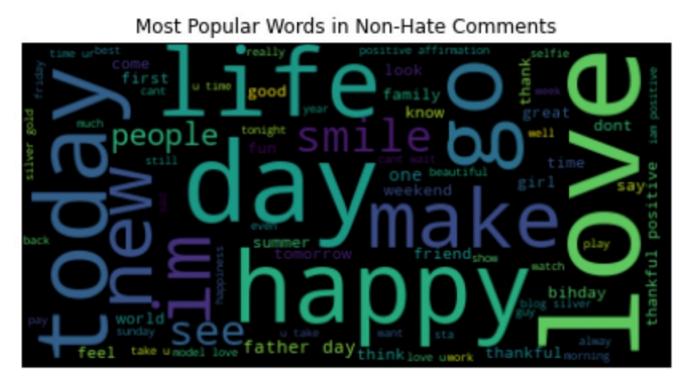
```
[78]: from wordcloud import WordCloud
import matplotlib.pyplot as plt

no_hate = [token for tweet in train_tweets[train_tweets['label'] == 0]['Tweet'] for token in tweet]
hate = [token for tweet in train_tweets[train_tweets['label'] == 1]['Tweet'] for token in tweet]

# Create and generate a word cloud image:
wordcloud_hate = WordCloud(max_words=75, background_color="white").generate(' '.join(hate))
wordcloud_no_hate = WordCloud(max_words=75, background_color="black").generate(' '.join(no_hate))

# Display the generated images:
fig, axs = plt.subplots(1,2 , figsize=(16,8))
axs[0].imshow(wordcloud_no_hate, interpolation='bilinear')
axs[0].axis('off')
axs[0].set_title('Most Popular Words in Non-Hate Comments')
axs[1].imshow(wordcloud, interpolation='bilinear')
axs[1].axis('off')
axs[1].set_title('Most Popular Words in Hate Comments')
```

[78]: Text(0.5, 1.0, 'Most Popular Words in Hate Comments')



# Repo Link

[https://github.com/wsharvey/DG-Harvey/blob/main/DG\\_Proj%20\(1\).ipynb](https://github.com/wsharvey/DG-Harvey/blob/main/DG_Proj%20(1).ipynb)