

# From Billboards to Grammy



# Team Five



HAYLEY GIMBEL

- NetSuite Consultant at NAPPJO
- Joined Data Analytics Course to gain understanding of basic coding & data analytics concepts



JENNIFER RATLIFF

Vice President Finance  
National Home Builder

Joined Data Analytics Course for a new challenge



MAYA JEFFERSON

Insert experience and job history

Insert reason for joining course



LIJOY JOMOL

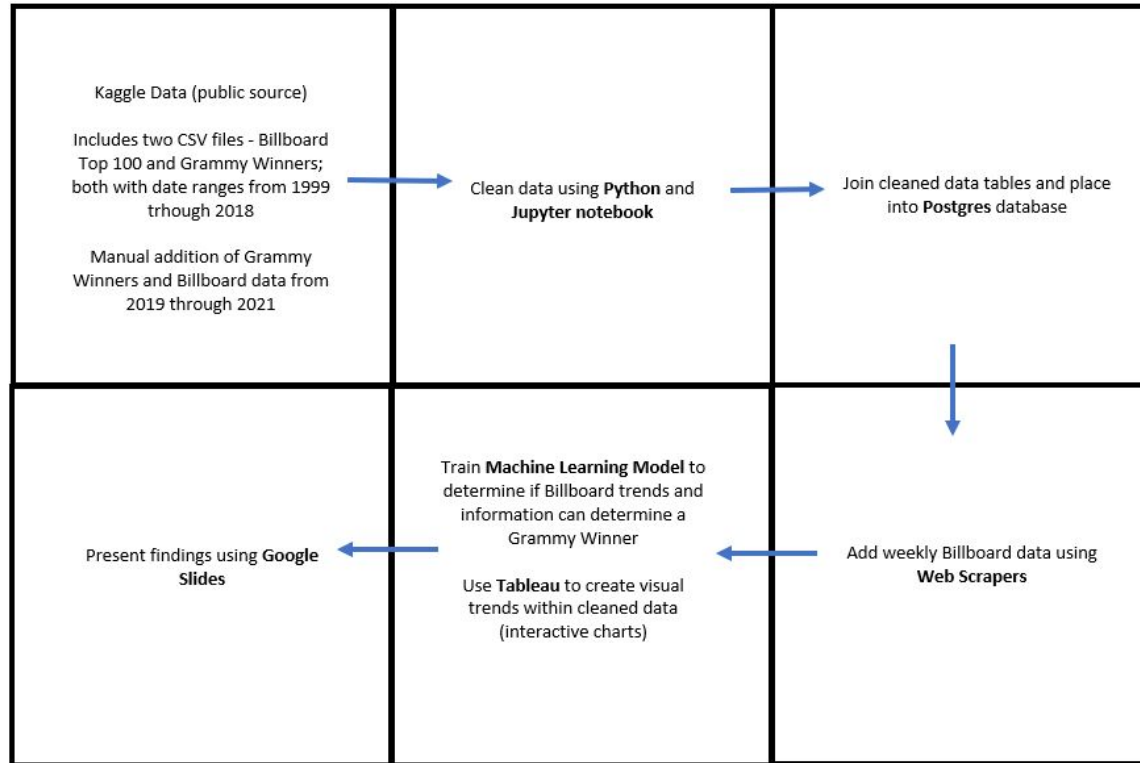
Certified Math Teacher

Joined Data Analytics Course for a career change.

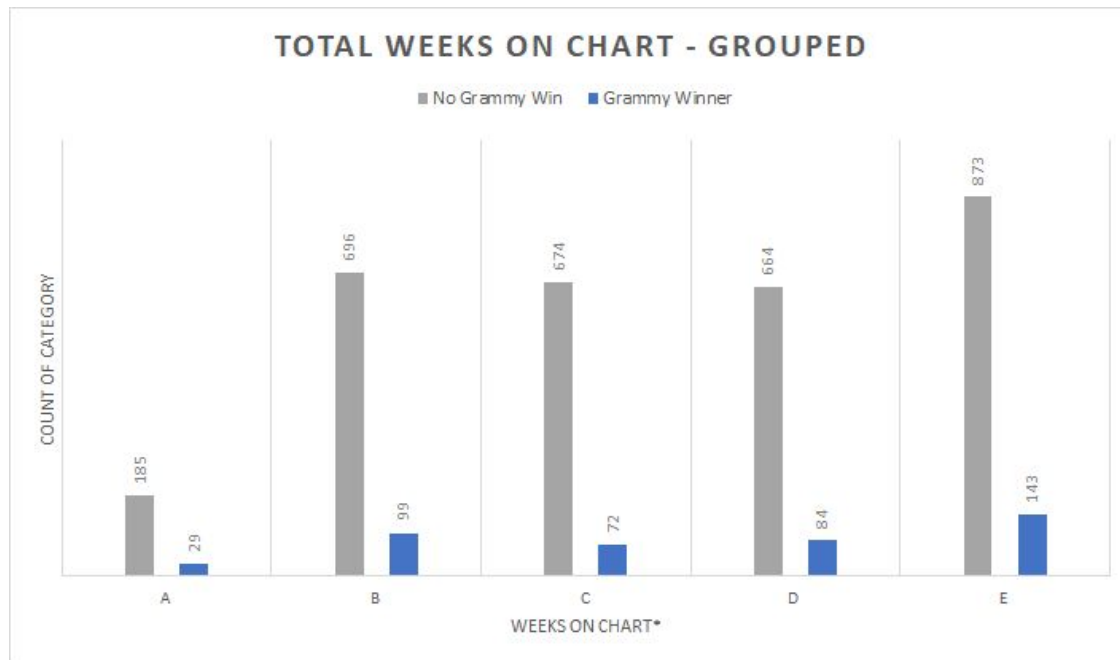
# Purpose

- Determine if machine learning can identify Grammy winners based on
  - Weeks on Billboard Chart
  - Peak position on Billboard Chart
  - Age of song at time of nomination
- Selected topic due to team member work in music industry and data selection timeframe was during 2021 Grammy weekend
- Kaggle data included information for both Grammy winners and Billboard Top 100 from 1999 through 2018
  - Selected information from eight available tables
  - Specific tables chosen based on how final winners are selected (committee based)
  - Add new Billboard information with web scraper each week
  - Grammy winners added annually
- Data exploration - Team used basic Excel analysis to understand general information and determine best path forward
- Data Analysis - Team used Python with Jupyter notebook to clean files, combine tables, create basic charts, and determine options for machine learning

# Project Dashboard



# Initial Analysis – Weeks on Chart



\* Grouped week categories

A - Less than 10 weeks on chart

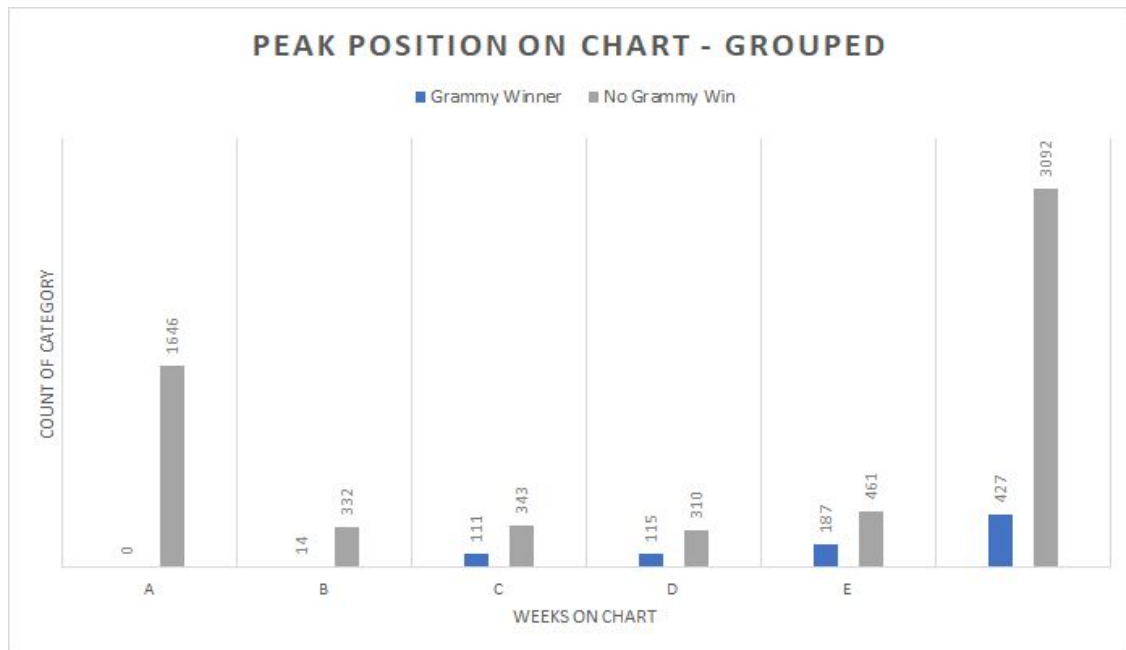
B - Between 10 and 19 weeks on chart

C - Between 20 and 29 weeks on chart

D - Between 30 and 39 weeks on chart

E - More than 40 weeks on chart

# Initial Analysis – Peak Position on Chart



\* Grouped week categories  
A - Peak position higher than 50  
D - Between 20 and 29

B - Between 40 and 49  
E - In Top 20  
C - Between 30 and 39

# Machine Learning – Grammy Prediction

The Machine learning model will provide data and charts once complete.

Model is still in training and final results are not available at this time.

# Other factors (null hypothesis)

- What other factors could contribute to winning a Grammy?
  - Genre
  - Release date of song (summer, winter)
  - Multiple artists
    - Combination of well known and lesser known



# Next Steps

How to improve the model  
Additional features to include

# Dashboard Link

<https://public.tableau.com/profile/jomol#!/vizhome/BillboardtoGrammyDashboard/Dashboard2?publish=yes>