

BILLBOARD HOT 100 DASHBOARD



ZIKI

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01

Introduction



Introduction



Welcome to the Billboard Hot 100 Dashboard!

Billboard Hot 100 is a weekly record chart ranking the 100 most popular songs across all genres. This project aims to provide users to dissect and analyze the weekly chart-toppers, providing insights into [genres](#), [dynamic plot controls](#), and [artist contributions](#).

Let's embark on this musical journey together!



02

Dataset Background





Dataset Background

A billboard dataset has been collected from **Kaggle**, which includes parameters like `name`, `artists`, `weekly rank`, `date`, `lyrics`, etc.

The dataset consists of 97225 rows and 12 columns



kaggle

Data columns (total 12 columns):				
#	Column	Non-Null Count	Dtype	
0	Unnamed: 0	97225	non-null	int64
1	Artists	97225	non-null	object
2	Name	97225	non-null	object
3	Weekly.rank	97225	non-null	int64
4	Peak.position	90156	non-null	float64
5	Weeks.on.chart	90156	non-null	float64
6	Week	97225	non-null	object
7	Date	84978	non-null	object
8	Genre	97225	non-null	object
9	Writing.Credits	90012	non-null	object
10	Lyrics	97225	non-null	object
11	Features	21289	non-null	object

dtypes: float64(2), int64(2), object(8)



Dataset Background

Unnamed: 0	Artists	Name	Weekly.rank	Peak.position	Weeks.on.chart	Week	Date	Genre	Writing.Credits	Lyrics	Features
0	1	Lil Nas, Old Town Road	1	1.0	7.0	2019-07-06	April 5, 2019	Country,Atlanta,Alternative Country,Hip-Hop,Tr...	Jozzy, Atticus ross, Trent reznor, Billy ray c...	Old Town Road Remix \nOh, oh-oh\nOh\nYeah, I'm...	Billy Ray Cyrus
1	2	Shawn Mendes, Camila Cabello Senorita	2	NaN	NaN	2019-07-06	June 21, 2019	Pop	Cashmere cat, Jack patterson, Charli xcx, Benn...	Senorita \nI love it when you call me senorita...	NaN
2	3	Billie Eilish Bad Guy	3	2.0	13.0	2019-07-06	March 29, 2019	Hip-Hop,Dark Pop,House,Trap,Memes,Alternative ...	Billie eilish, Finneas	bad guy \nWhite shirt now red, my bloody nose\...	NaN
3	4	Khalid Talk	4	3.0	20.0	2019-07-06	February 7, 2019	Synth-Pop,Pop	Howard lawrence, Guy lawrence, Khalid	Talk \nCan we just talk? Can we just talk?\nTa...	NaN
4	5	Ed Sheeran, Justin Bieber I Don't Care	5	2.0	7.0	2019-07-06	May 10, 2019	Canada,UK,Dance,Dance-Pop,Pop	Ed sheeran, Justin bieber, Shellback, Max mart...	I Don't Care \nI'm at a party I don't wanna be...	NaN
...
97220	97221	Vitamin C Smile	95	NaN	NaN	1999-07-12	NaN	Jamaica,Pop	Colleen fitzpatrick, Josh deutsch	Smile \nHahaha\nAlright, yeah\nAlright\nFirst	Lady Saw



Dataset Background

In order to save running time,
here we choose **10 weeks**
from 05/04/2019 to
07/06/2019 to visualize.

The remaining dataset has
987 rows and 12 columns.



Data columns (total 12 columns):			
#	Column	Non-Null Count	Dtype
0	Unnamed: 0	987 non-null	int64
1	Artists	987 non-null	object
2	Name	987 non-null	object
3	Weekly.rank	987 non-null	int64
4	Peak.position	898 non-null	float64
5	Weeks.on.chart	898 non-null	float64
6	Week	987 non-null	object
7	Date	987 non-null	object
8	Genre	987 non-null	object
9	Writing.Credits	987 non-null	object
10	Lyrics	987 non-null	object
11	Features	180 non-null	object
dtypes: float64(2), int64(2), object(8)			

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03

Data Visualization

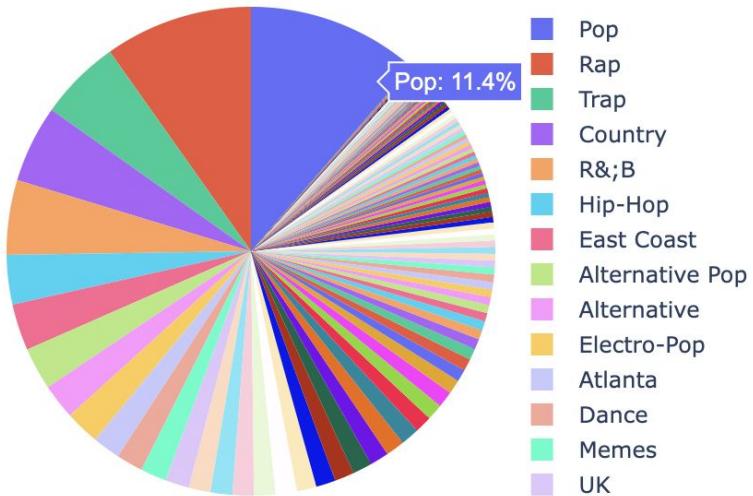




Q1: What is the distribution of genres in the Billboard Hot 100 dataset, and when is the last updated date?



Genre Distribution



Last Updated:

7/6/19



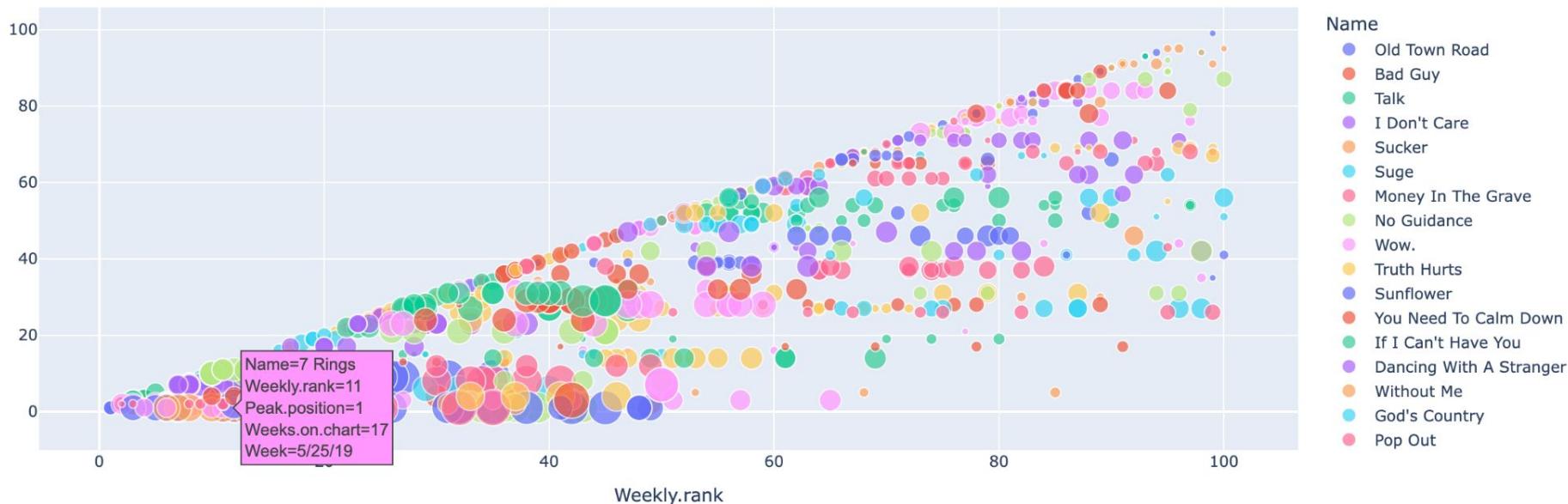


X

Q2: How do the weekly ranks and peak positions of songs relate to each other, and what is the trend for individual songs over time?

Plot Controls

Scatter Plot Line Plot Box Plot Histogram



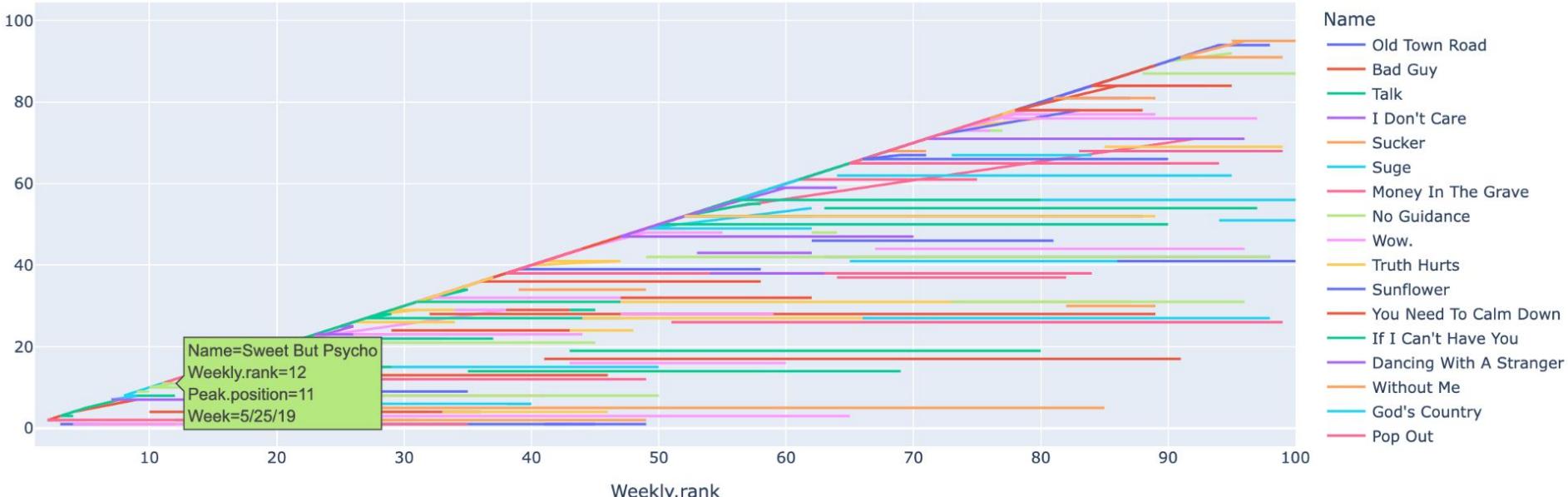


Q2: How do the weekly ranks and peak positions of songs relate to each other, and what is the trend for individual songs over time?

Plot Controls

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Song Characteristics





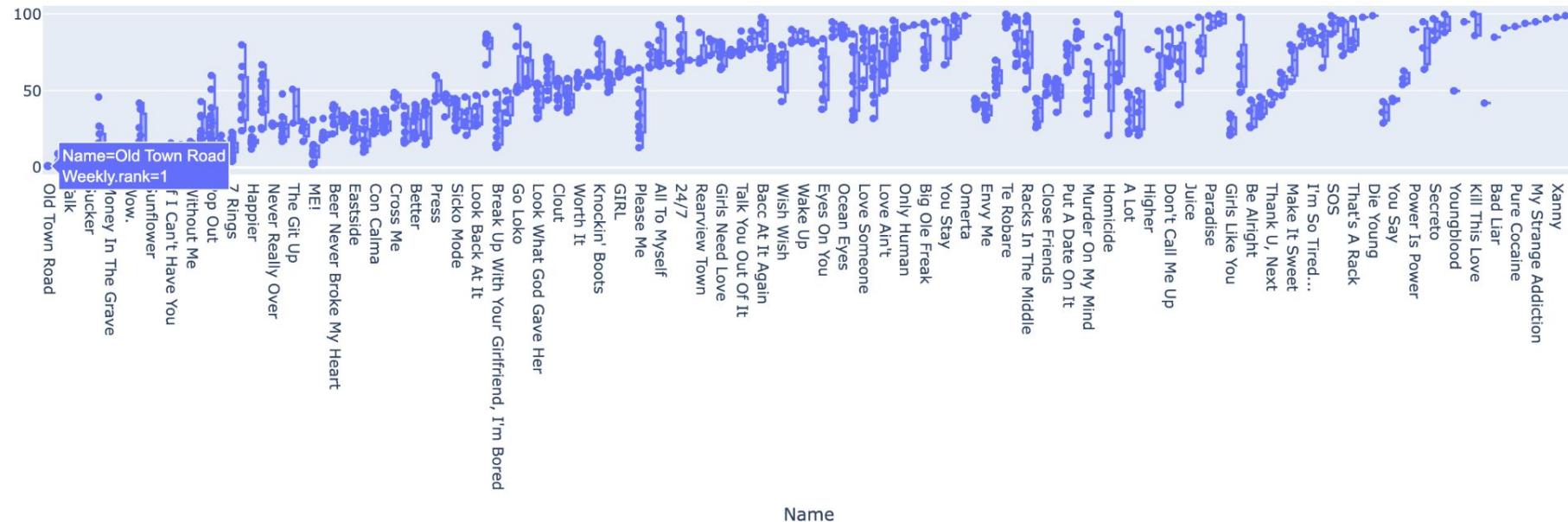
X

Q2: How do the weekly ranks and peak positions of songs relate to each other, and what is the trend for individual songs over time?

Plot Controls

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Song Characteristics





Q2: How do the weekly ranks and peak positions of songs relate to each other, and what is the trend for individual songs over time?

Plot Controls

Scatter Plot Line Plot Box Plot Histogram

Distribution of Weekly Ranks

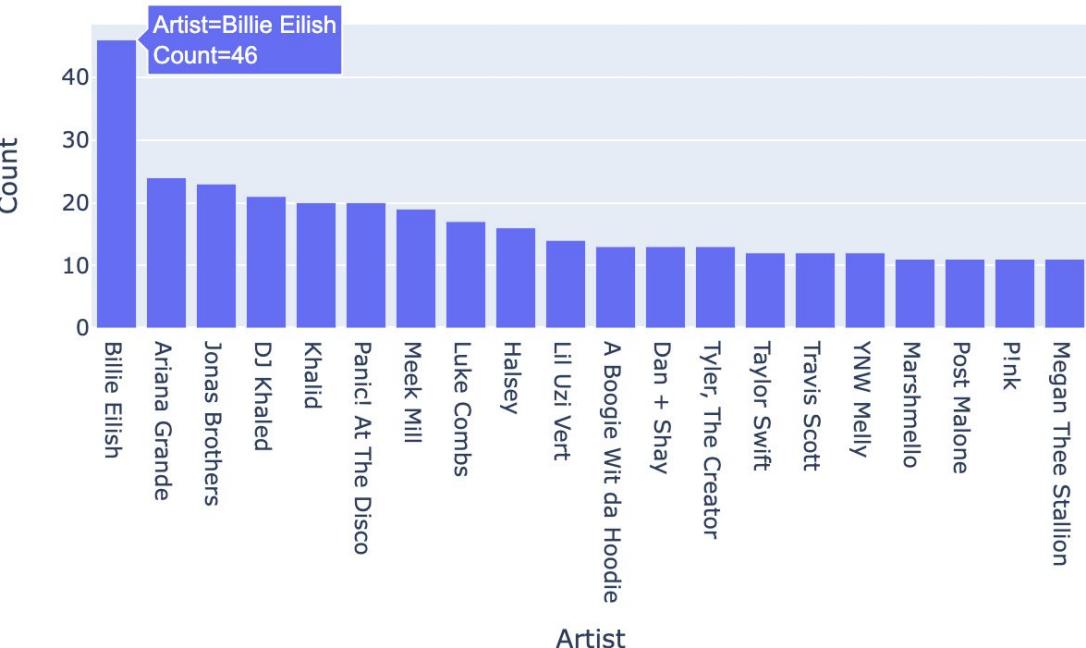




Q3: Which artists have the highest number of songs on the Billboard Hot 100?

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Number of Songs per Artist



Count Threshold: 11



04

Discussion





Discussion

Original dataset too large (218.5MB)

- Upload to Colab →
- Upload to Github →
- Upload to Drive →
- **Select 10 weeks to Visualize**

Slider can not interact in real time

- Plotly version →
- **Ensure the correct binding**





THANKS!

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