

Notebook3_final_prod

December 12, 2025

1 Notebook 3: Final Product

This notebook will run through the title of the final product, an image of the final product, a description of the final product, and a Manifest of all resources used.

1.0.1 Title of Final Product:

Has Music Gotten Simpler Since the 1950's?

1.0.2 Image of Final Product:

```
[4]: ![Final Product](artifacts/infographic.png)
```

```
/bin/bash: -c: line 0: syntax error near unexpected token `('
/bin/bash: -c: line 0: `[Final Product](artifacts/infographic.png)'
```

1.0.3 Description of the Final Product

The final product is a collection of a stacked barchart, a paired scatterplot with regression lines and heatmap, multiple line graphs of instrumentation, and a steamgraph of sonority. The goal is for the reader to acknowledge the paired plot and realize that music has “gotten simpler” since the 1950's, but then to utilize the remaining figures to think critically about that initial claim. When looking at the other figures, the reader should realize that there are MANY factors to consider (significantly more than what I mentioned in the infographic), and that the measurement used is just one of many.

1.1 Resource Manifest

Name	Type	Description	Link
bimmuda_genre	.csv file	Top 5 Songs Per Year + metadata	bimmuda_genre.csv
bimmuda_per_melody_full	.csv file	Song IDs + Tonal metadata	bimmuda_per_melody_full.csv
bimmuda_per_songs_full	.csv file	Top 5 Songs Per Year + Melodic metadata	bimmuda_per_song_full.csv
hot100_charts	.tsv file	Top 100 Weekly Charts Data	hot100_charts.tsv
mgphot_gene_values	.tsv file	Gene Values (Metadata) of Top 100	mgphot_gene_values.tsv
mgphot_genes	.tsv file	Descriptions of each gene	mgphot_genes.tsv
SONGS_FULL	.csv file	My own re-organization of the BiMMuDa data	SONGS_FULL.csv

Name	Type	Description	Link
BiMMuDa GitHub	External Link	BiMMuDa GitHub Repo	https://github.com/madelineh
BiMMuDa Research	External Link	Research Paper for BiMMuDa	https://transactions.ismir.n
MGPHot GitHub	External Link	MGPHot GitbHub Repo	https://github.com/utdata/rw
BMGPHot Research	External Link	Research Paper for MGPHot	https://transactions.ismir.n
Notebook 1	Jupyter Notebook	Establishes the data	Notebook1_est_data.ipynb
Notebook 2.1	Jupyter Notebook	Barchart, Linegraphs, Widget creation	EDA_I.ipynb
Notebook 2.2	Jupyter Notebook	Heatmap creation	EDA_II.ipynb
Notebook 2.3	Jupyter Notebook	Finalizing and Revising all figures	EDA_III.ipynb
Notebook 3	Jupyter Notebook	Final Production Descriptions	Notebook3_final_prod.ipynb
Billboard Starter Notebook	External Link	Foundation for Widget	https://www.kaggle.com/code/
Steamgraph with Python and Matplotlib	External Link	Foundation for Steamgraph	https://python-graph-gallery