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Sprint 2

The Journey to Stardom: Creating the Perfect Formula for Success

Presented by

Brenda Hernandez, Christy Hung, Jada Lavender, Sebastian Van Hemert

WHAT CAN I DO TO BE

DISCOVERED?

WHY HAVEN'T I BEEN

DISCOVERED?

WHAT CAN I DO TO BE

DISCOVERED?

We Have the Sauce

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Diagnostic App

Track Features

Artist Similarities

Our 4 Initiatives

01 ~~Descriptive analytics dashboard~~

02 Diagnostic analytics dashboard

03 Automate the API pipeline

04 Clustering model

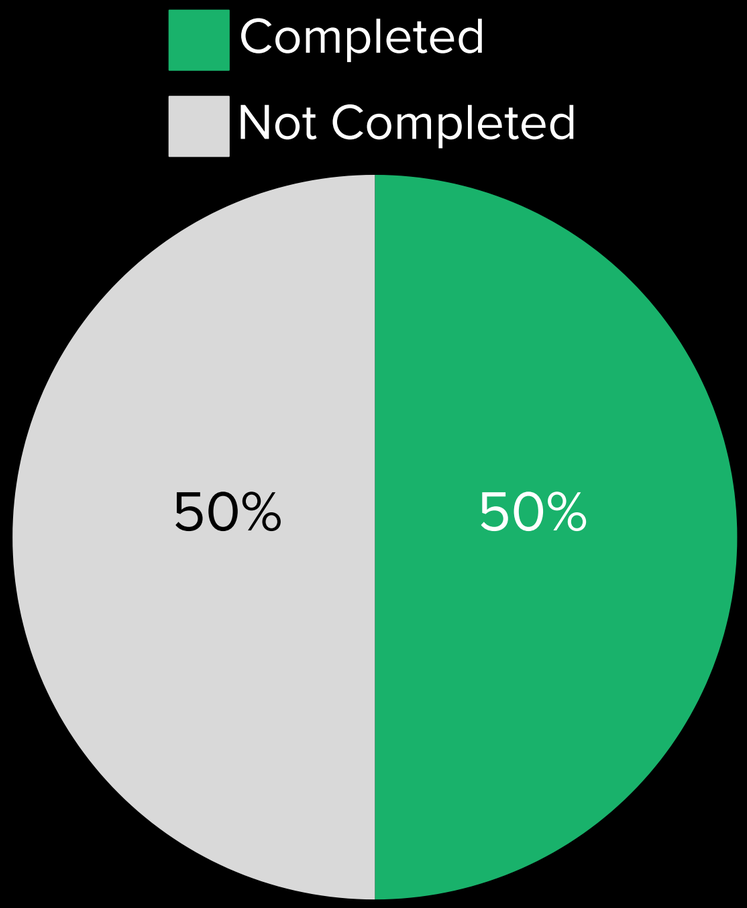
Halfway to Satisfying Key Result

Objective

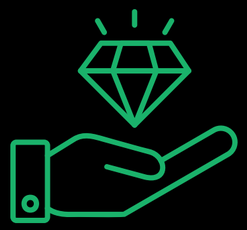
Improve identification of opportunities

Key Result

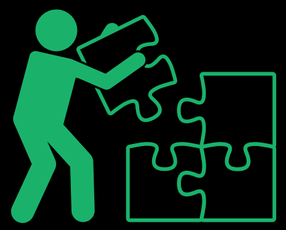
At least 50% of artists who work with the Artist Team should achieve a 20% increase (avg), in popularity by the end of Q4



3 Key Topics in Data Manifesto: Bringing Value, Building, and Improving



Value



Build

Improve

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April 2024

The Data Manifesto

We believe that the values and principles described in this document ensure that we use data effectively, efficiently, responsibly, and innovatively. Our approach through this data manifesto ensures we provide a quality strategy to serve all our stakeholders, in terms of data usage and innovation for our products, services, and increasing our competitive advantage.

Values:

- **Value** – We determine the value of our data through our innovation and creativity.
- **Build** – We apply data to create strategic and future-facing processes, with a data center of excellence to ensure innovation quality.
- **Improve** – We ensure our processes of change driven by data remains ever-changing by placing mechanisms to continuously foster innovation.

Principles:

As a team we aim to:

1. Use data to create insight into things decision-makers don't know that they don't know yet.
2. Ensure everyone can read and understand data to make informed decisions, automate processes, and use predictive models, data literacy is deeply embedded in all data processes.
3. Hold executive level support that ensures strategy is data driven and there is confidence and belief in data, data processes, and all teams involved.
4. Ensure that the chief data officer leads the team and trusts in the data and data processes to enable focusing strategies to have a competitive advantage.
5. Ensure a Center of Excellence (COE) is in place that is backed and followed across all levels, with active engagement with data transition at every level to ensure full data transformation.
6. Uphold the voice of the customer, make sure it is captured in all data products during the design process.
7. Understand the five waves of data transition: aspire, mature, industrialize, realize, and differentiate and the skills that are necessary to lead sustainable change.
8. Recognize and uphold that during the aspire and mature leaders are skilled in making hard-decisions and challenging systems in place to improve data and its usage, in the industrialize phase leaders have a strong attention to detail, integration of building processes, automation and team building, and in the last two phases: realize and differentiate, leaders can drive forward innovation, leaders are deep thinkers with creativity to provide innovative solutions and gain competitive advantages, change existing markets and create new ones.
9. Implementation of AI models are done cautiously and have a clear application that is specific and well defined, and are used to help identify new and profitable opportunities.
10. Use data both internally and externally to inform decisions, while ensuring that problems of bias and blackbox issues as complexity increases are addressed.

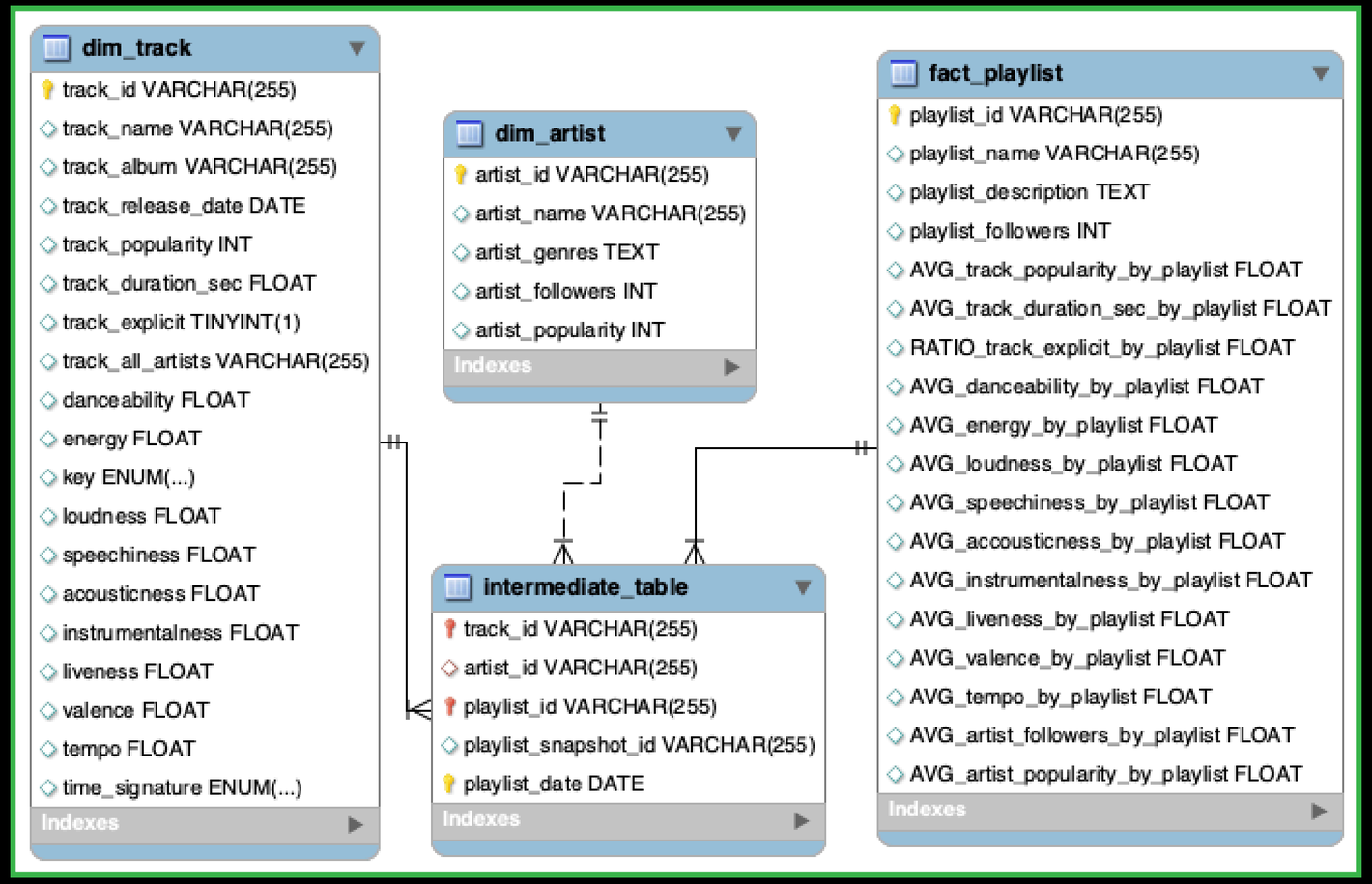
Author: Brenda Hernandez
Signatures:

- Jada Lavender
- Sebastian Van Hemert
- Christy Hung

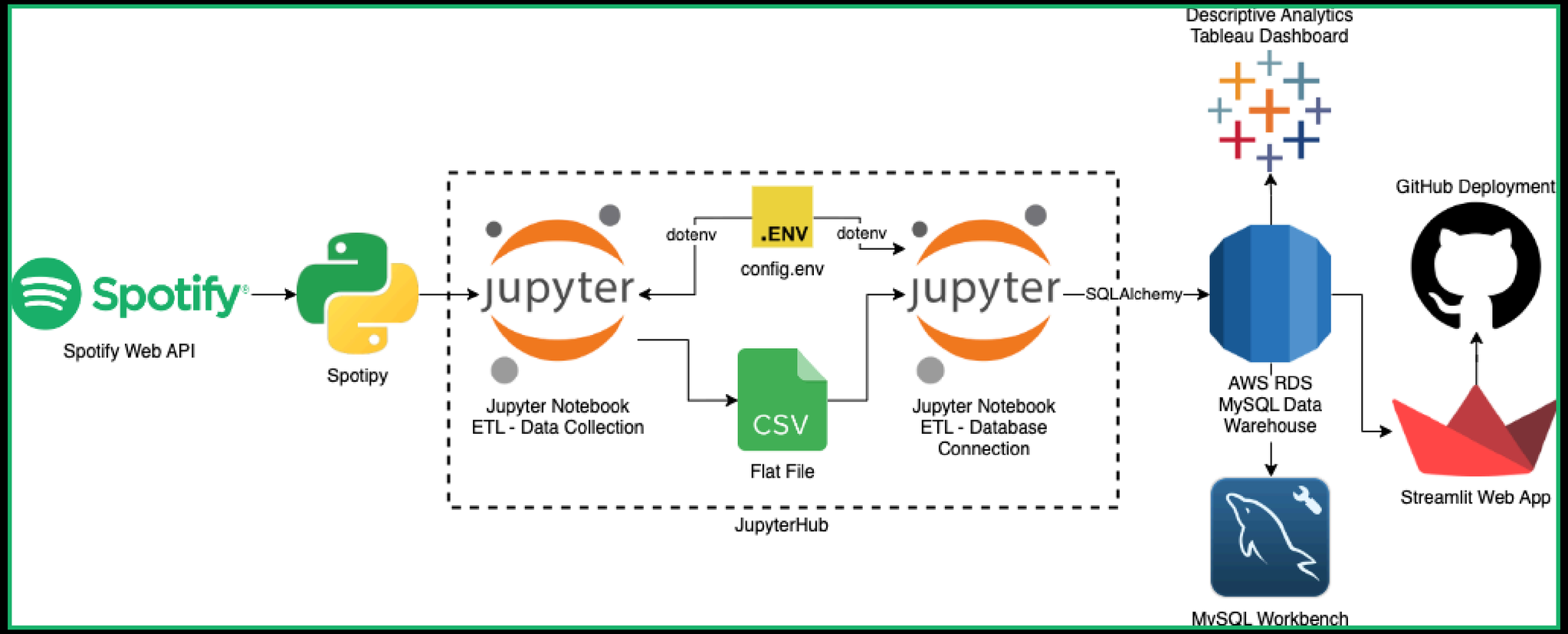
Entity Relationship Diagram (ERD)

Tables:

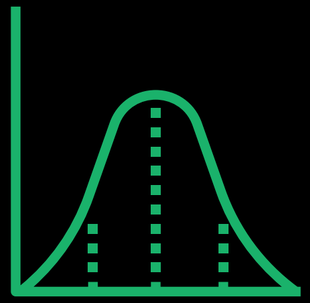
- dim_track
- dim_artist
- intermediate_table
- fact_playlist



ETL Pipeline



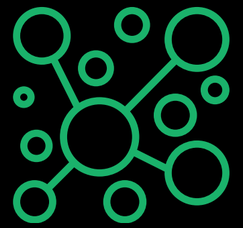
Clustering Machine Learning Model to Produce Optimal Output



Normalization

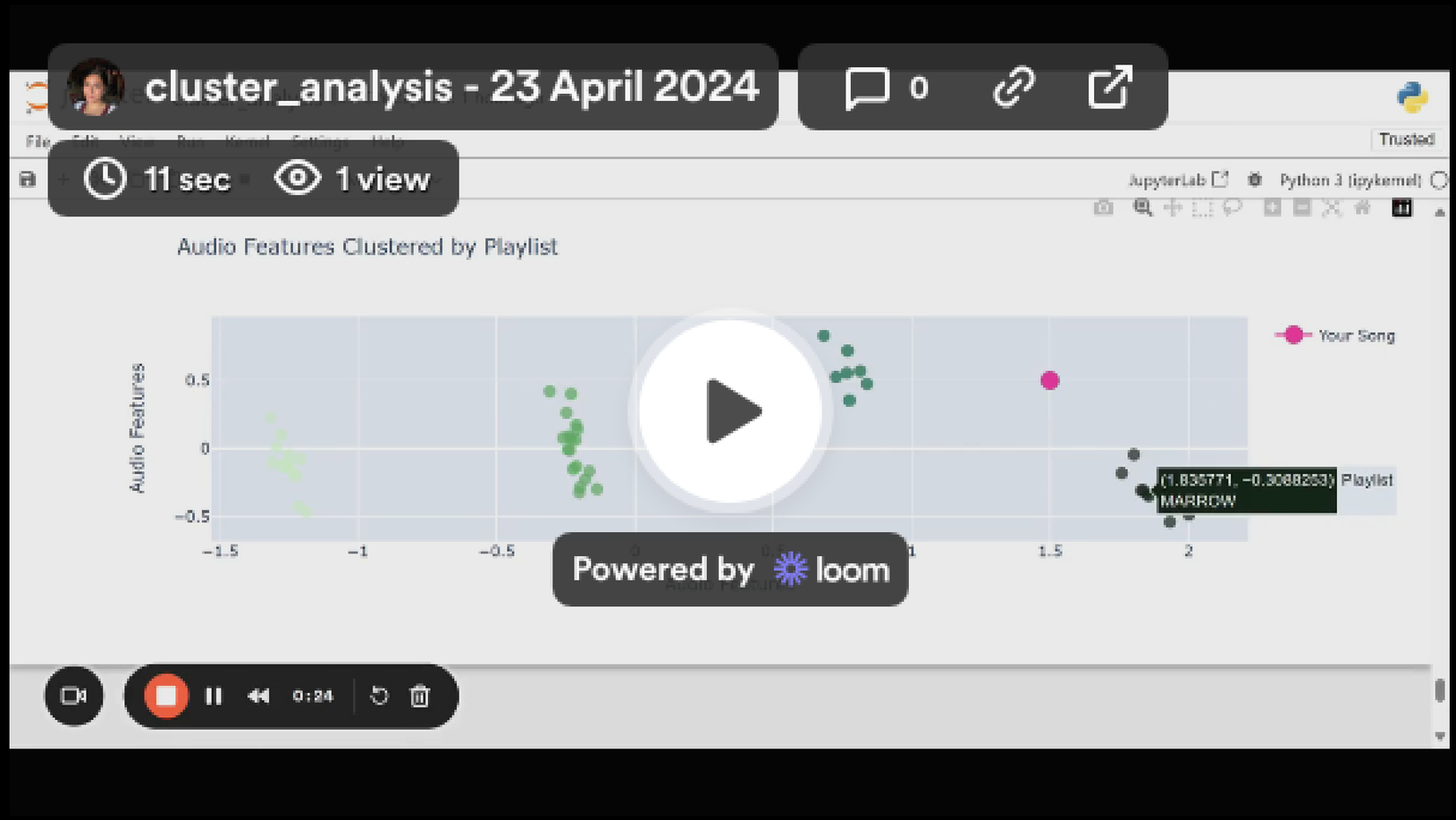
Inertia

Elbow method



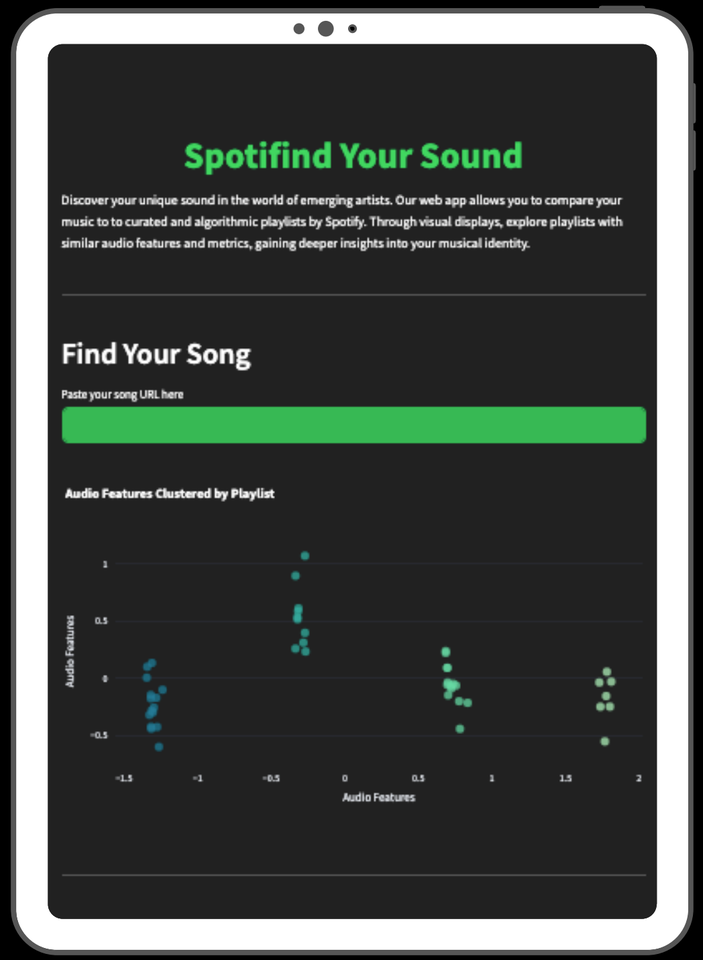
Clustering

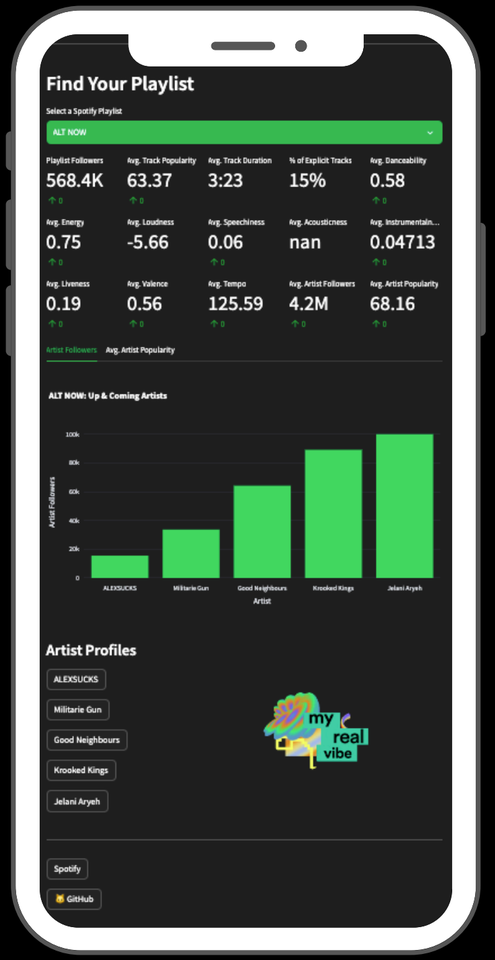
Our Back-End and How it Serves End User



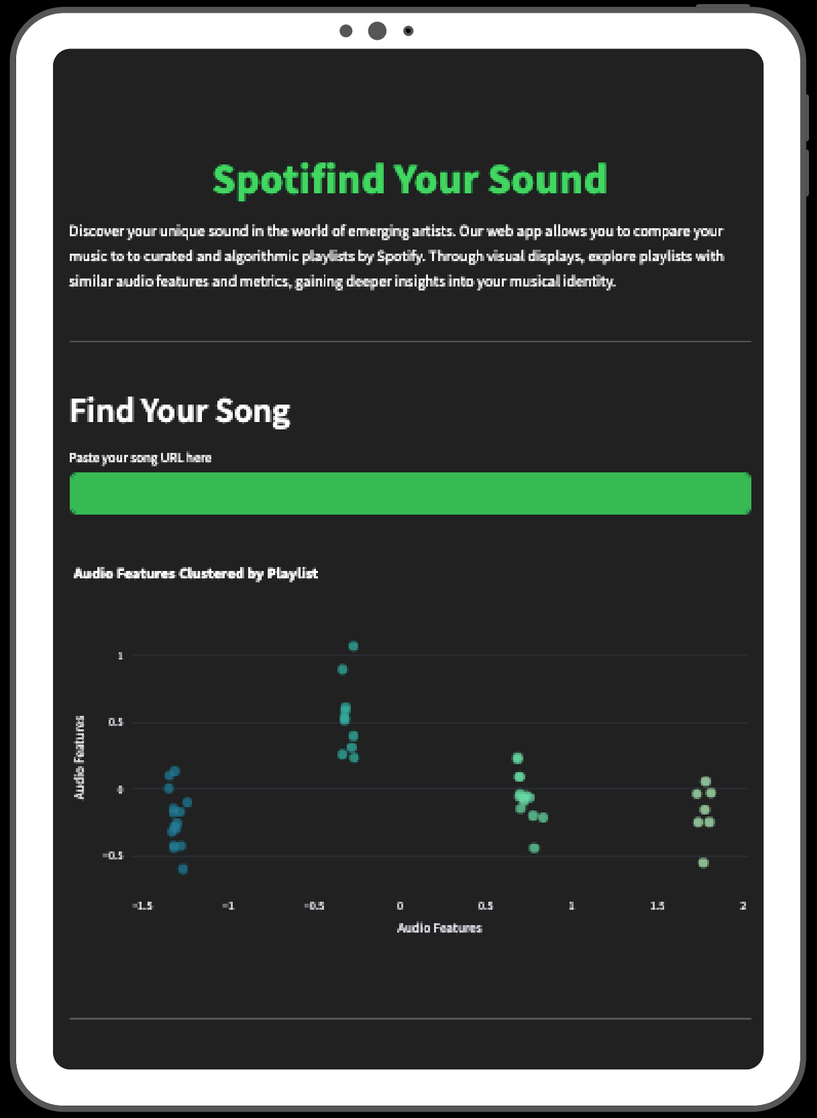
Streamlit Web App: *Spotifind Your Sound*

Song URL:
https://open.spotify.com/track/2DFRI15SkhZtS5CAqqDqHf?si=981ce9b26a7d4bc4

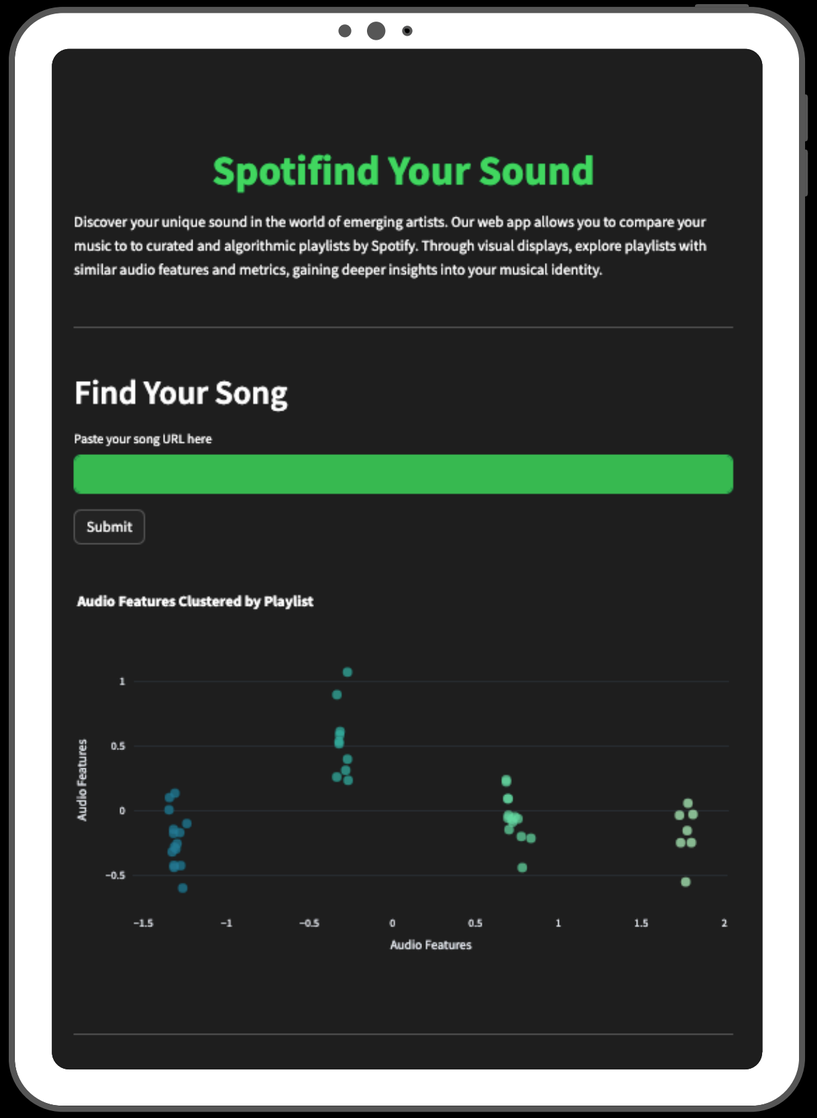




Test A (control)



Test B (experiment)



Ideal Sample Size per Variation

2000

Baseline Conversion Rate	70%
Minimum Detectable Effect	5%
Statistical Significance	95%

Random 50/50 Split to Measure Conversion: Enter or Submit?

Test A (Control)

50 users

Users hit “**enter**” on their keyboard to submit the track link

Test B (Experiment)

50 users

Users hit the **submit** button on the app to submit the track link

Better Performance Expected with the Alternative Hypothesis

Null (H0)

50 users

There is no difference in key performance metrics between Test A & B

Alternative (H1)

50 users

Test A’s (no submit button) Conversion rate will be higher than Test B’s (submit button)

5 Key Performance Metrics Help Us Understand Context

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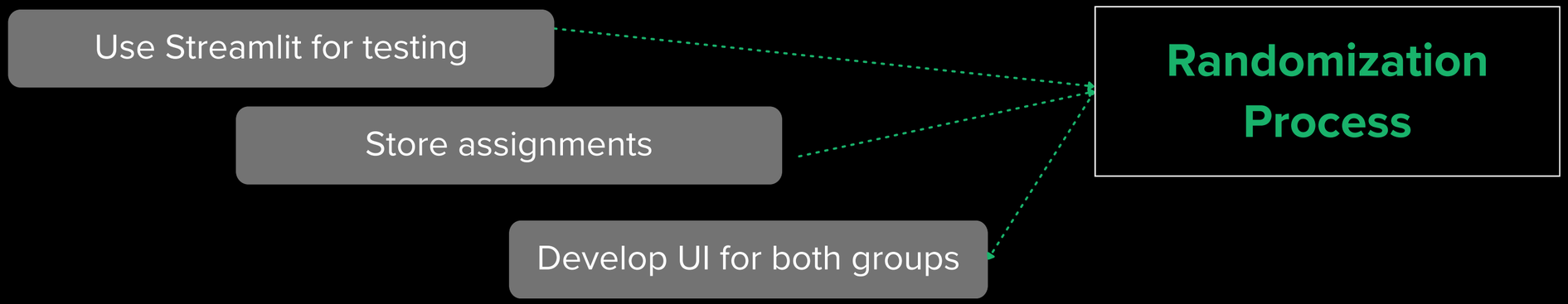
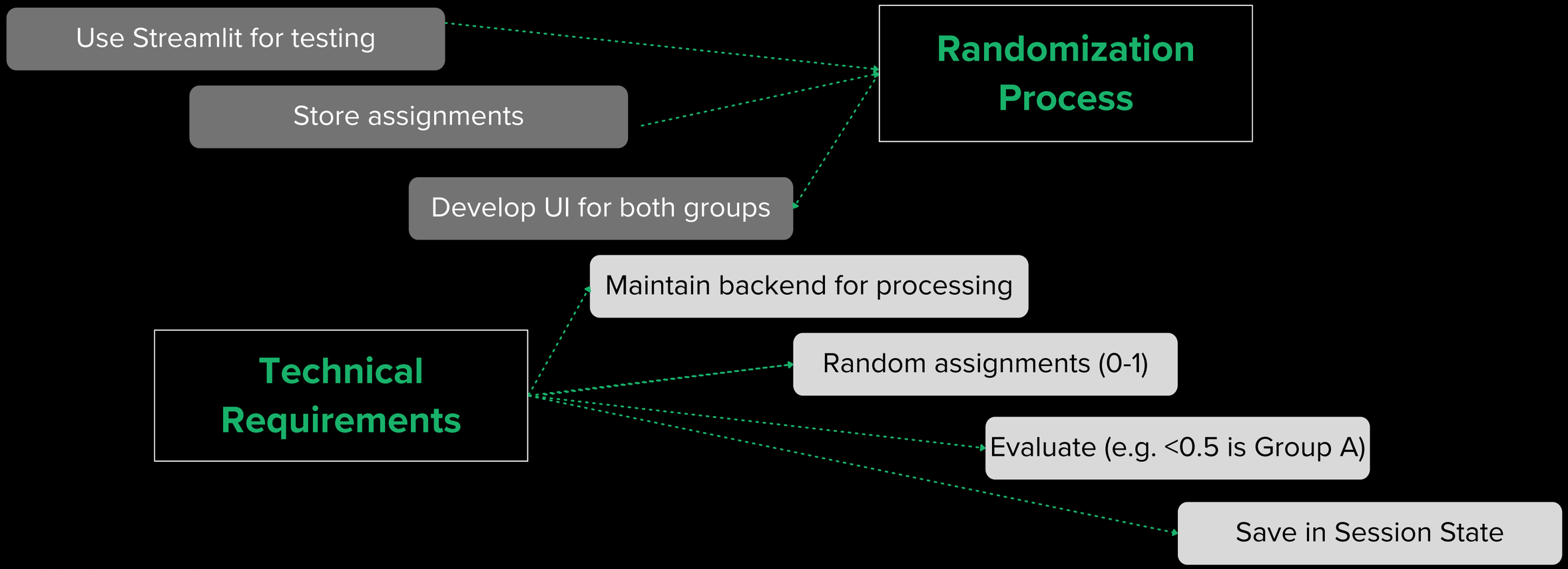
Visit Frequency	Unique Visits	Completion Time	Number of Conversions	Conversion Rate

Use Randomization to Reduce Bias and Mention Testing in *PP**



**PP: Privacy Policy*

Use Randomization to Reduce Bias and Mention Testing in *PP**



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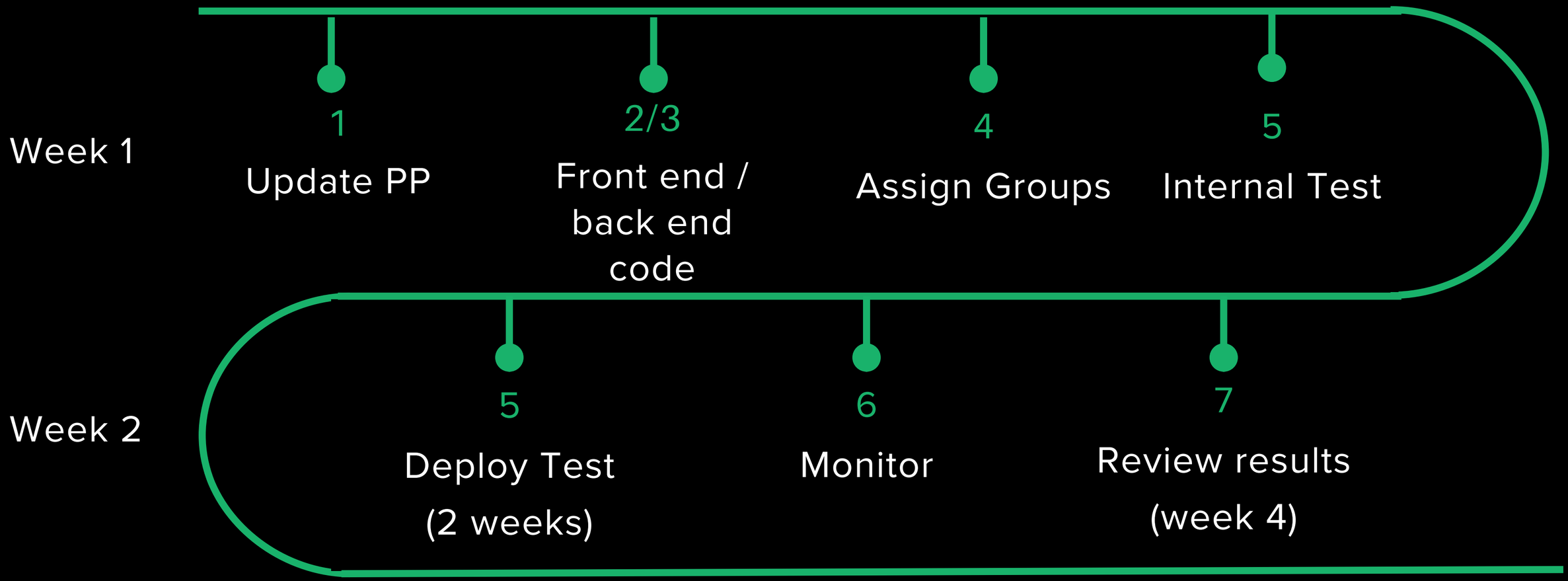
Analyze Results Using Streamlit & AB+ Test Calculator by CXL

1. Collect Data
2. Organize and Clean Data
3. Key Performanace Metrics (conversions, completion time, visit frequency, etc.)
4. Input data into AB+ Test Calculator by CXL to determine the significance

Test Deployed in Week 2 and Results Reviewed by Week 4



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Follow the secret sauce and maybe you can be as big as one of these used to be small artist