



# Revolutionalizing Music Streaming

with Spotify

Team IIT Dhanbad

#### Problem Statement

Design a product solution for Spotify's AI DJ feature that:

- Provides a personalized music curation experience.
- Adapts dynamically to user preferences, themes, and moods.
- Increases user engagement and satisfaction while offering a seamless user journey

## Customer Insights

- The target users are digital-savvy individuals from younger age groups (19-28), balancing social, personal, and creative aspirations.
- They are deeply engaged with music and expect Spotify's Al DJ to offer hyper-personalized, mood-adaptive, and creative tools that simplify playlist management and amplify enjoyment.
- They demand for convenience, control, and creativity in music streaming.

#### Secondary User Research

# Is anyone else frustrated by how hard it is to find new music now on Spotify?

Long-time Spotify user here, premium member for 8 years at least. I remember when I used to find so much new music on Spotify. I realise that I'm getting less and less new music offered to me, and I'm getting tired of what I'm listening to on repeat.

- Discover Weekly doesn't seem to offer up as much good stuff anymore, I'll be lucky to get 1 keeper a week.
- The options on Home are "Made for Me" (songs/bands I have already listened to) "Top Mixes" (same) "Uniquely Yours" (more of the same) "Based on your recent listening" (saaaame) "Your favourite artists" (need I say more)
- "New Releases For You" ok it's new, but it's from artists I already know/have listened to?
- Even choosing "song radio", which used to be a solid bet, now seems to prioritise music from my playlists
- Somehow, all song radios eventually play "Sultans of Swing" please tell me I'm not the only one this happens to (only on one of my playlists, I'm not even a huge Dire Straits fan, honest).

Thanks for reading my rant

#### Is there away to make Spotify broaden it's recommendations?

When I first signed up to Spotify, Spotify's recommendations were usually interesting music that I'd never heard before from artists I'd never heard of.

Now, I get the same songs and artists recommended to me over and over. If I'm creating a playlist, it will sometimes only suggest songs from other playlists rather than anything new.

What is the best way to get more interesting recommendations?

EDIT: thanks for the suggestions. My issue isn't find new artists but rather that Spotify only ever suggests music by artists I have already listened to. If I listen to a new artist, Spotify will recommend that artist, not other similar artists.

#### The AI DJ would be a lot cooler if you could actually interact with it

I like the idea behind the DJ, but instead of it being a glorified Smart Shuffle it would be so much better if you could interact through voice or text.

#### Examples

"Hey DJ, play me some kind of popular Hip Hop tracks from around 2004"

"I want to listen to some jazz but something with not a lot plays"

"Play me a mix of Country and Ska-Punk"

"Play set of songs from from x, x, and x artist"

"I feeling like watching world burn, play some metal songs with that vibe."

These were just off the top of my head but being able to do any of that would be great

<u>Source</u>

Source

Source

#### User Personas



## The Party Host

Aarav Mehta Age: 27 Years

## Background

Event planner who delights on hosting high-energy parties where music is central.

#### Goals

- A dynamic playlist that adapts in real-time to party energy and crowd preferences.
- Tools to mix core song segments with smooth transitions for uninterrupted vibes.

#### Pain Points

- Struggles to identify the best parts of songs quickly during live sets.
- Finds it challenging to balance music management with engaging the crowd.
- Existing tools are too complex or time-consuming for real-time adjustments.



## The Mood Explorer

Riya Sharma Age: 21 Years

#### Background

Graduate student who uses music to complement her activities, whether studying, cooking, or unwinding.

#### Goals

- Find mood-based continous songs that align with her daily activities.
- Get new yet her kind of music with less efforts.
- Discover relaxing features like Lo-fi overlays to enhance her experience.

#### **Pain Points**

- Frustration with static playlists.
- Struggles to make quick adjustments to playlists.
- Finds it time-consuming to discover music that consistently fits her mood.

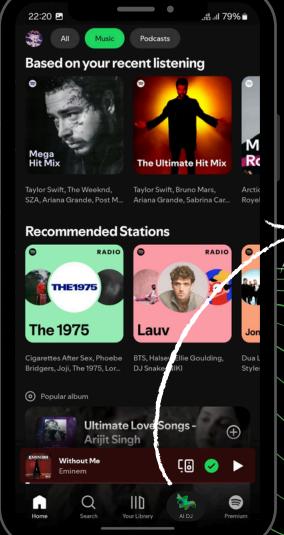
## AI DJ Section

## About the feature:

- In the AI DJ section, users can choose to play favorites or discover new songs.
- Users can select options for a curated theme and mood-based experience.
- A demand prompt can be input via text or voice to get the perfect music for the listeners.
  - (Ex: "Play chill vibes for dinner", "Play hyped up beats for gym")/
- Users can choose to have seamless DJ-style transitions with only most-listened parts, tempo syncing, and smooth crossfades for a nonstop music experience.

## **Success Metrics:**

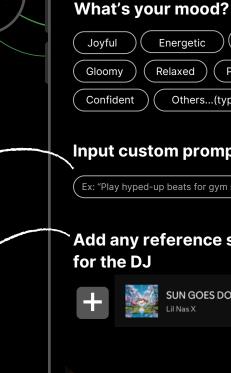
- Daily Active Users: (No. of users accessing Al DJ daily)/ (Total no. of users)
- Session Duration: (Total time spent on Al DJ by all users)/ (Total no. of sessions)
- Retention Rate: (No. of users returning to Al DJ after first session)/(No. of first time users)

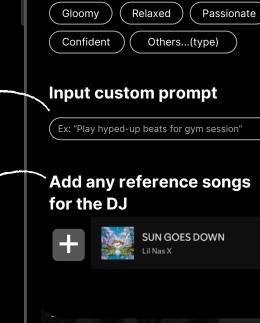


Smart DJ mashup button to instantly access the feature

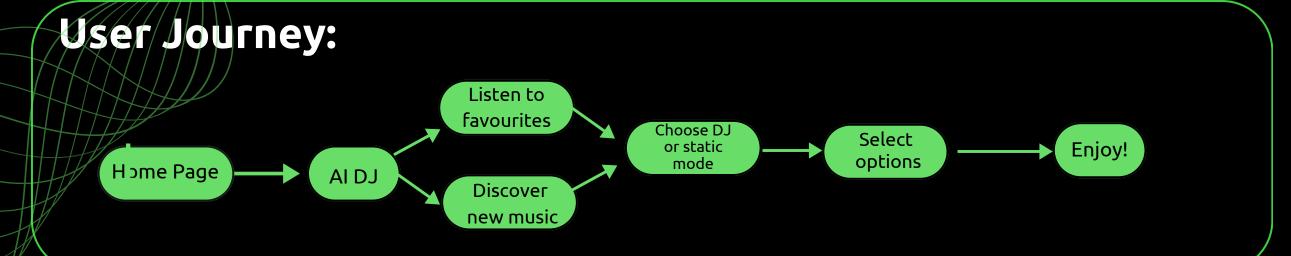
Input the mood prompt for AI to generate personalized track

Reference song addition (optional)





× DJ Mode



## Playlist Integration

## About the feature:

- Users will be presented with an AI DJ mashup button at the top in every playlist.
- This feature will pick up the most listened part of the songs through user data in the playlist and create a DJ like mashup by adjusting the temps/synths for a dynamic music experience.
- Songs similar to those in the playlist will continue playing in the DJ after all the songs of the playlist are finished.

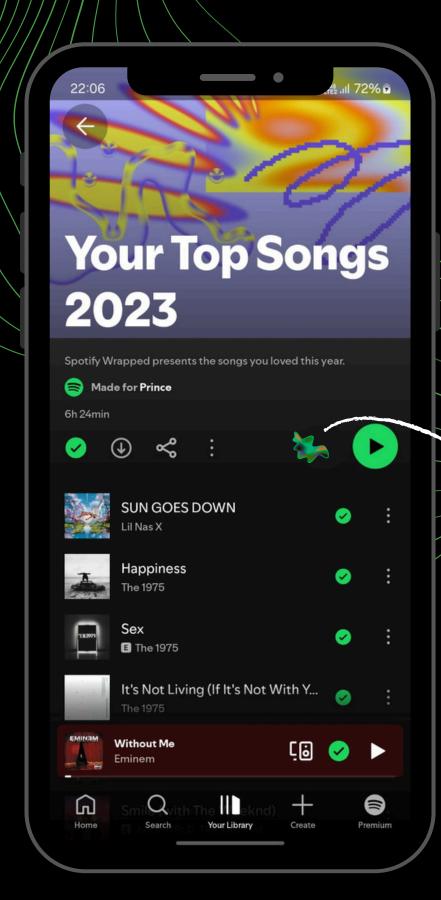
## **Success Metrics:**

- Daily Active Users:

   (No. of users accessing AI DJ daily)/ (Total no. of users)
- Session Duration:

  (Total time spent on AI DJ by all users)/ (Total no. of sessions)
- Retention Rate:
  (No. of users returning to AI DJ after first session)/(No. of

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Smart DJ mashup button to instantly access the feature





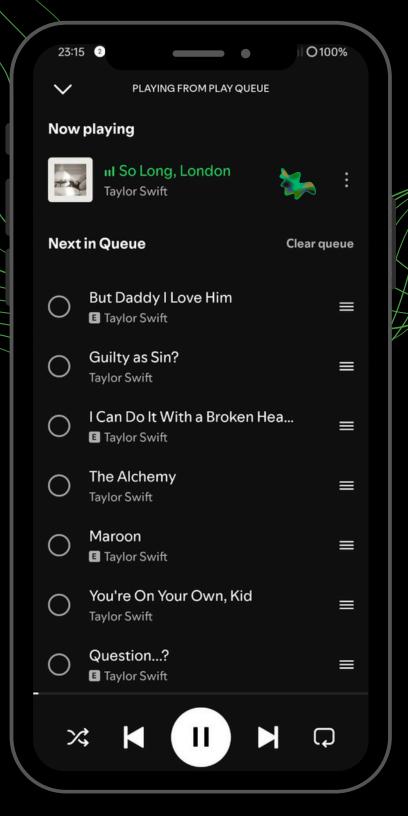
## Dynamic Queue

## About the feature:

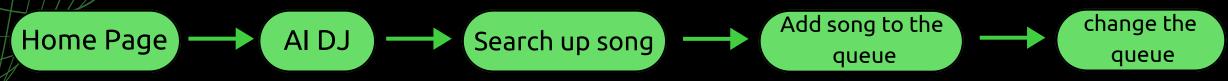
- Any song added to the queue is automatically trimmed to its most popular segment (hook) for consistent energy.
- Users can reorder songs in the queue, with instant adjustments to transitions and playback.
- DJ-like transitions ensure no pauses between queued songs, with crossfades and beat-matching.
- Users can override the system to play a full track or customize hook lengths for queued songs.

## **Success Metrics:**

- 1. **User Engagement:**Average Session Duration=
  Total time spent on D I mode
  - Total time spent on DJ mode/ No. of DJ mode sessions
- 2. Queue Interaction Rate:
  Interaction Rate (%)=
  Number of Users using Queue/
  Total no. of DJ mode users
- 3. Feature Retention:
  Interaction Rate (%)=
  Number of Users Returning
  to DJ Mode/
  Number of Initial Users







# Pricing Structure

Plan	Features	Target Audience	Price	Goal
Freemium	Basic AI DJ (mood playlists, limited skips)	Free users	Free	Attract new users and upsell.
Premium Add-On	Full Al DJ access (dynamic queue, mashups)	Existing Premium users	₹149/month (Total)	Boost premium engagement.
FamilylDuo	Full AI DJ access for all linked accounts	Families, couples	₹249/month (bundle)	Drive family plan adoption.
Event	24-hour full access during parties/events	Event planners, casual users	₹49/event	Increase revenue during peak use.
Business Licensing	Unlimited AI DJ for public spaces	Cafes, gyms, events	₹1,000/ month	Tap into B2B markets.



Prince Arya

- **Anupam Anand**
- Himanshi Vaidya in Shagun Agarwal