



Motion Design System

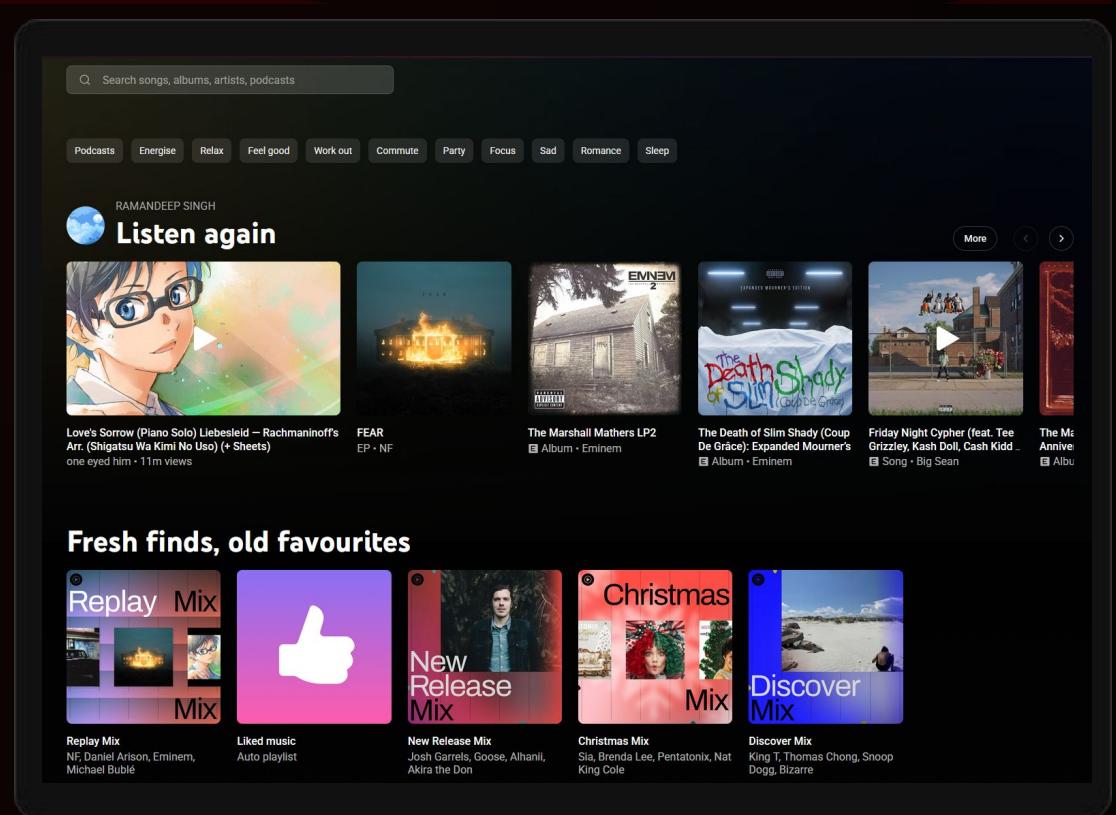
Ramandeep Singh | Motion Design

Brand Identity

The "Listening" Experience

YouTube Music has the biggest music, audiobook and podcasts. So, the interface must feel as continuous and rhythmic as the music itself.

- 🎵 **Immersive:** Dark mode focus to let album art pop.
- 🎵 **Rhythmic:** Transitions that feel timed and snappy.
- 🎵 **Continuous:** Elements morph rather than disappear.



Motion Principles



Fluid Morphing

Objects shouldn't just cut in and out. They should reshape. The logo becomes the header; the card becomes the player.



Staged Disclosure

Don't overwhelm the user. Reveal content sequentially (choreography) to guide the eye through the hierarchy.



Tactile Feedback

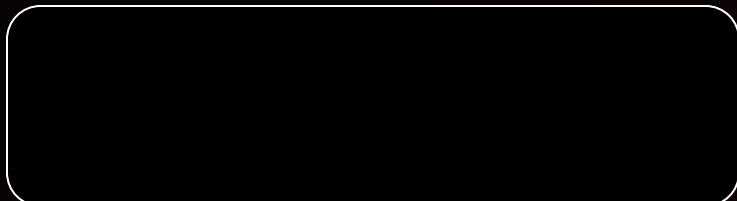
Every click yields a physical response. Bars expand, navigation activation and Log In animation.

Visual Style Guide

Palette



Primary: #FF0000



Background: #000000

Typography

Aa

Montserrat Alternates

Geometric, playful, modern.



Icons

Motion Instance 01: Onboarding

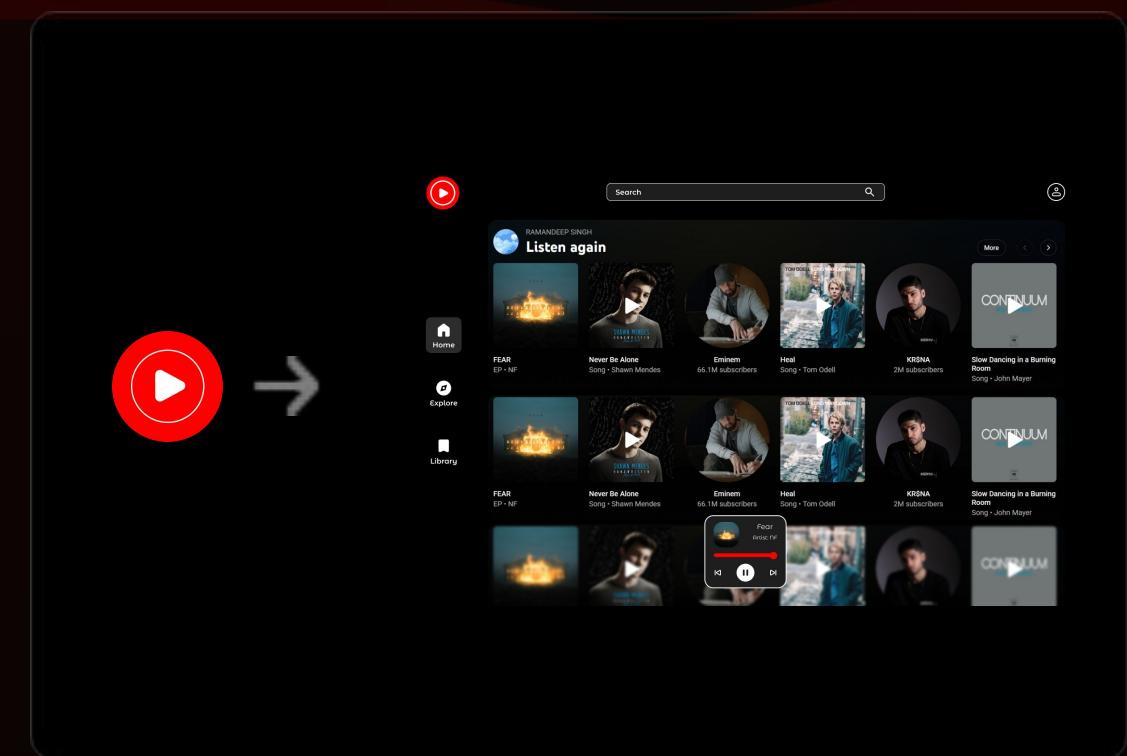
The Problem

Login screens often feel disconnected from the app experience, creating a harsh "cut" when entering.

The Solution

Morphing Continuity. The central logo button physically stretches and moves to become the top navigation bar.

Code: GSAP Timeline technique / Layout animation



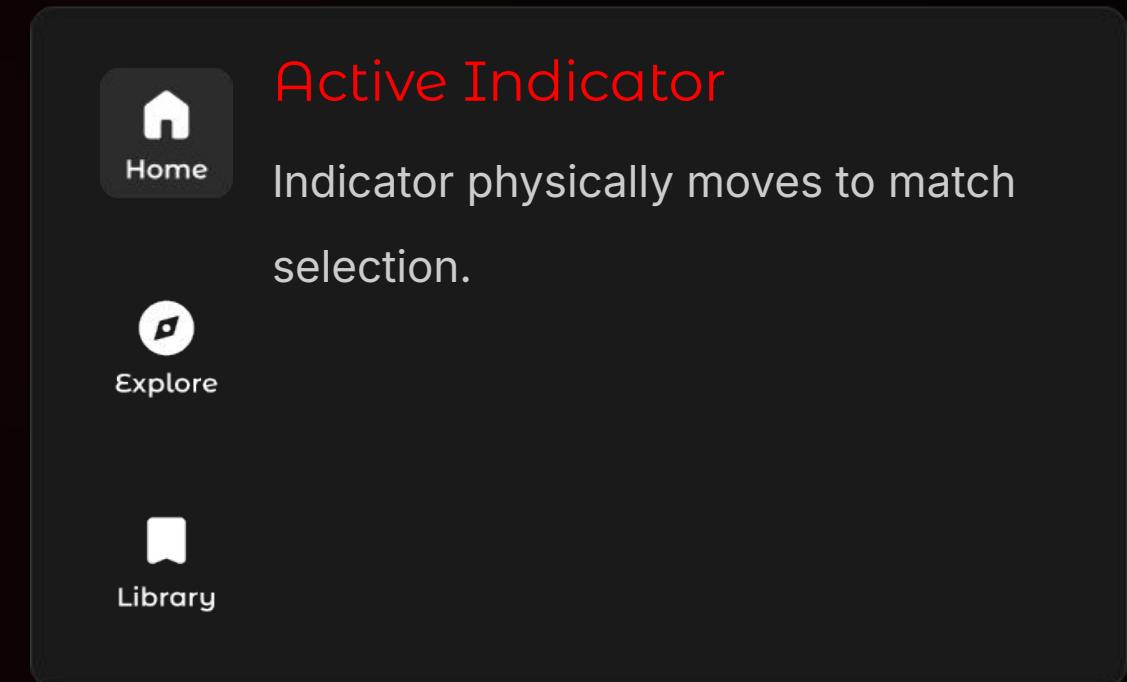
Motion Instance 02: Navigation

The Problem

Static "active states" (just changing color) can be boring and don't guide the eye to the new location.

The Solution

Sliding Indicator. A physical "pill" shape slides vertically to the clicked item. It uses an elastic ease to feel like a physical slider on a mixing console.



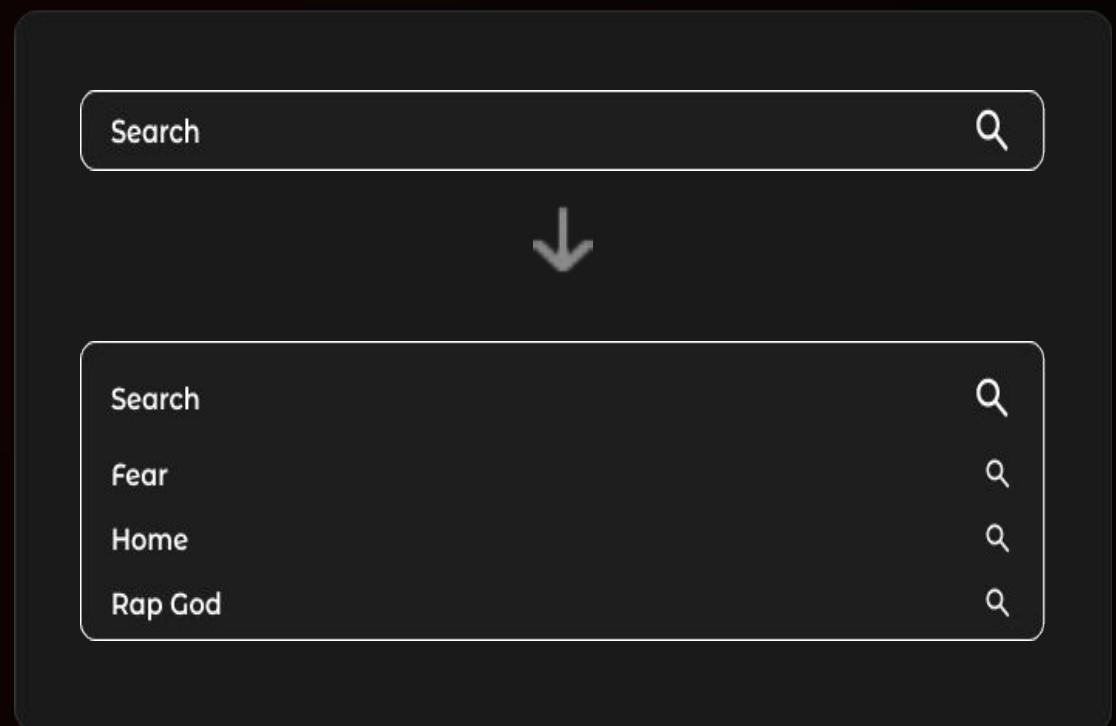
Motion Instance 03: Search Active

The Problem

The default search bar doesn't have an animation, it just expands on click on the input field. (without animation)

The Solution

Reactive Expansion. The search bar remains an input field until interaction. Upon clicking, it expands with a linear animation to reveal search results, prioritizing content first.



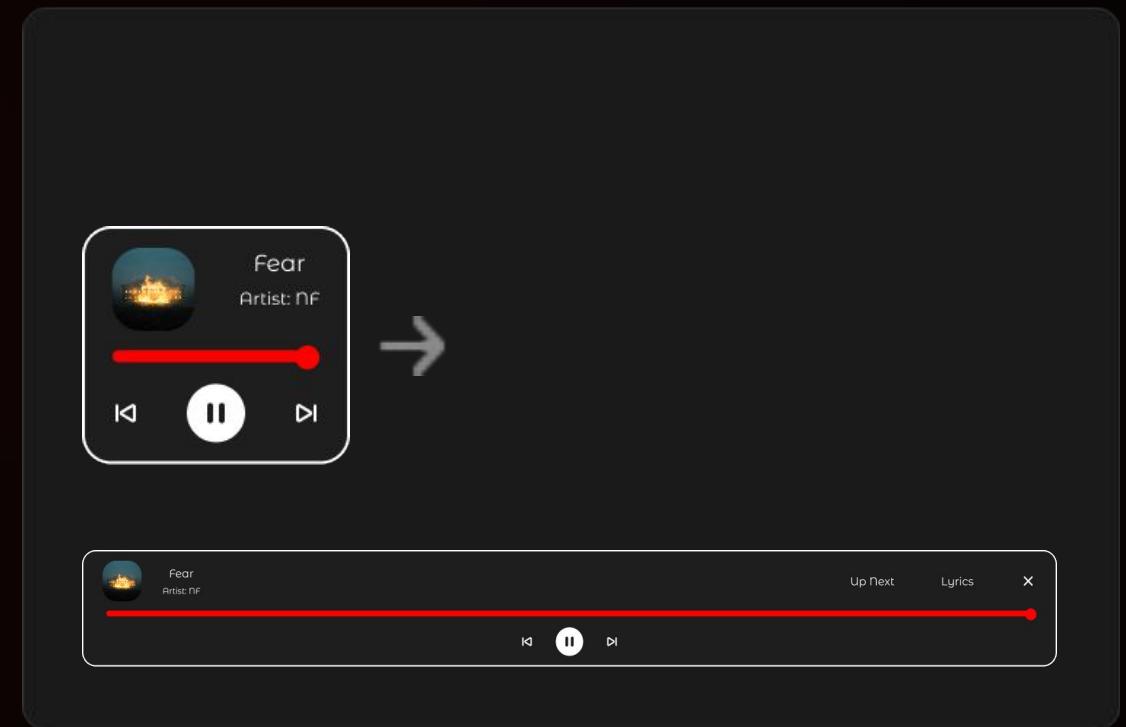
Motion Instance 04: Play Music Card

The Problem

The default music player is static, it just appears when the user clicks to play any music.

The Solution

Reactive Expansion. The play card now has an active state which expands with an animation to reveal more options like lyrics links and up-next songs.



Technical Implementation

Core Stack

- 🎵 **HTML5:** Semantic structure for accessibility.
- 🎵 **CSS3:** CSS Variables for theming (Dark Mode).
Flexbox/Grid for layouts.
- 🎵 **Vanilla JS:** Event handling and DOM manipulation.

Animation Engine

- 🎵 **GSAP (GreenSock):** Used for complex timelines.
- 🎵 **Why GSAP?** It handles SVG morphing and complex easing curves (like `elastic.out`) better than native CSS transitions.
- 🎵 **Performance:** Optimizes `transform` and `opacity` changes to run at 60fps.



Thank
You
Questions
?

Project built for Interaction Design Course