

myAudiofiler



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my-Audio-filer



A personalized music management solution
For Audiophiles



audiophile

noun [C]

US /'aʊ.di.oʊ.fail/ UK /'ɔː.di.eʊ.fail/



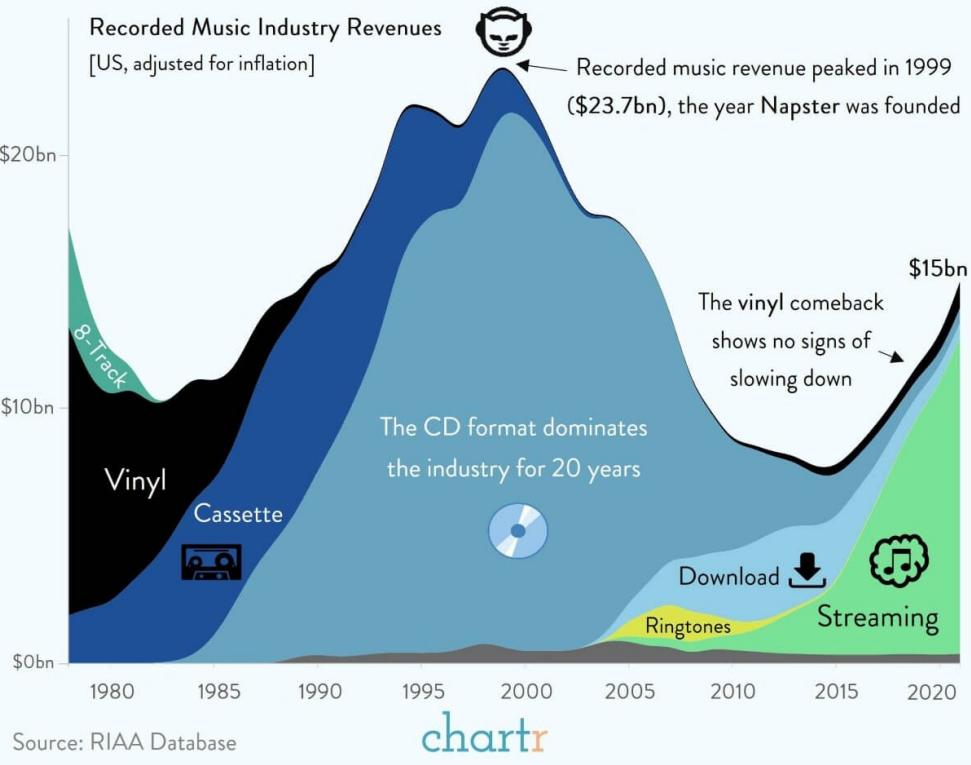
a person who is very interested in and enthusiastic about equipment for playing recorded sound, and its quality:

*A personalized music management solution
For Audiophiles*

Overview

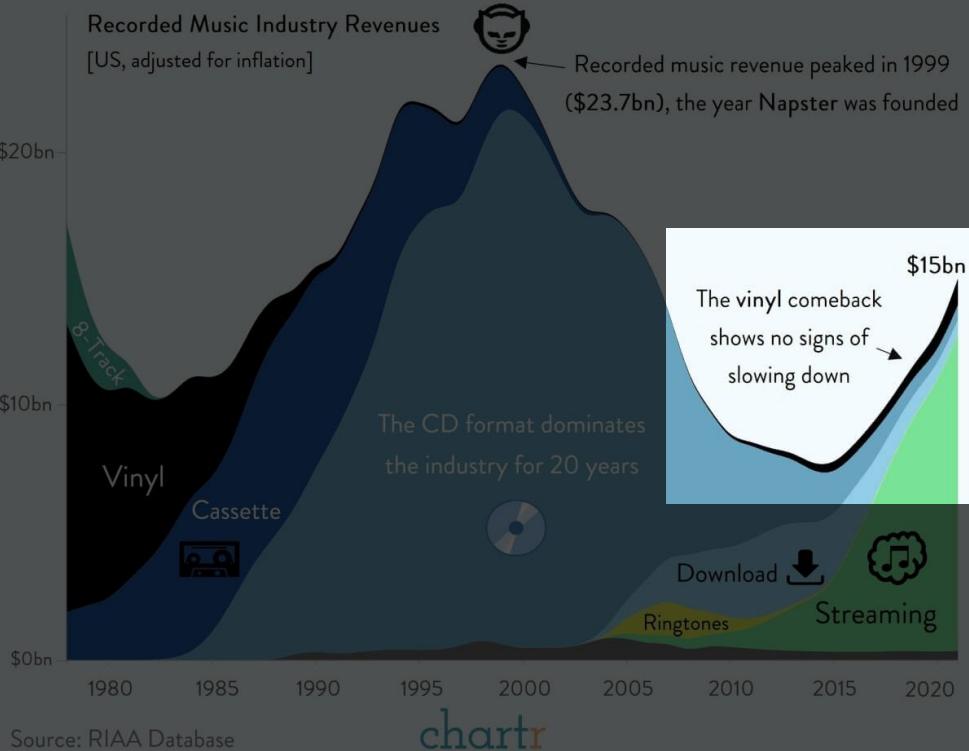


As It Was: A Brief History Of The Recorded Music Industry



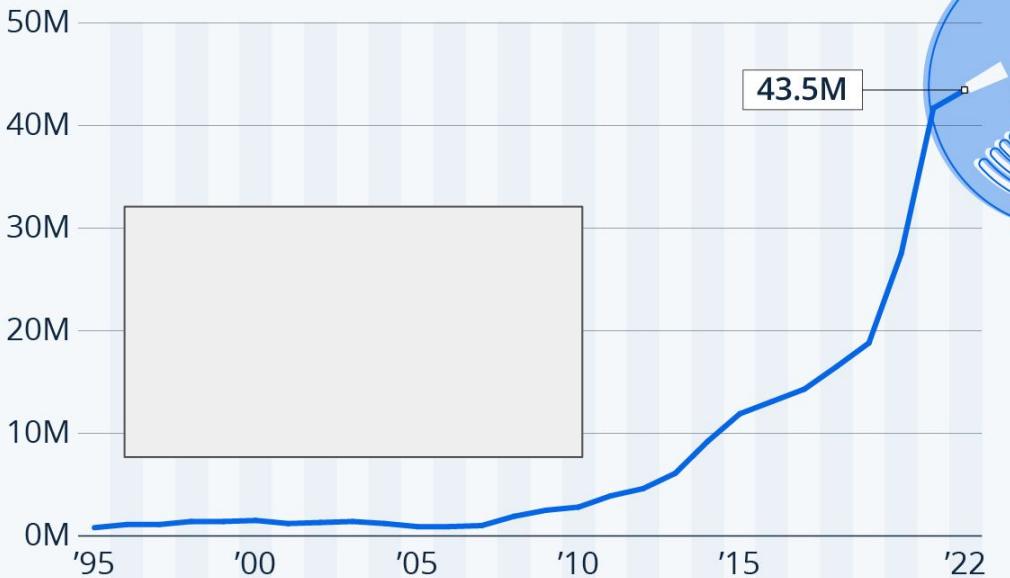
Overview

As It Was: A Brief History Of The Recorded Music Industry



The Vinyl Comeback Continues

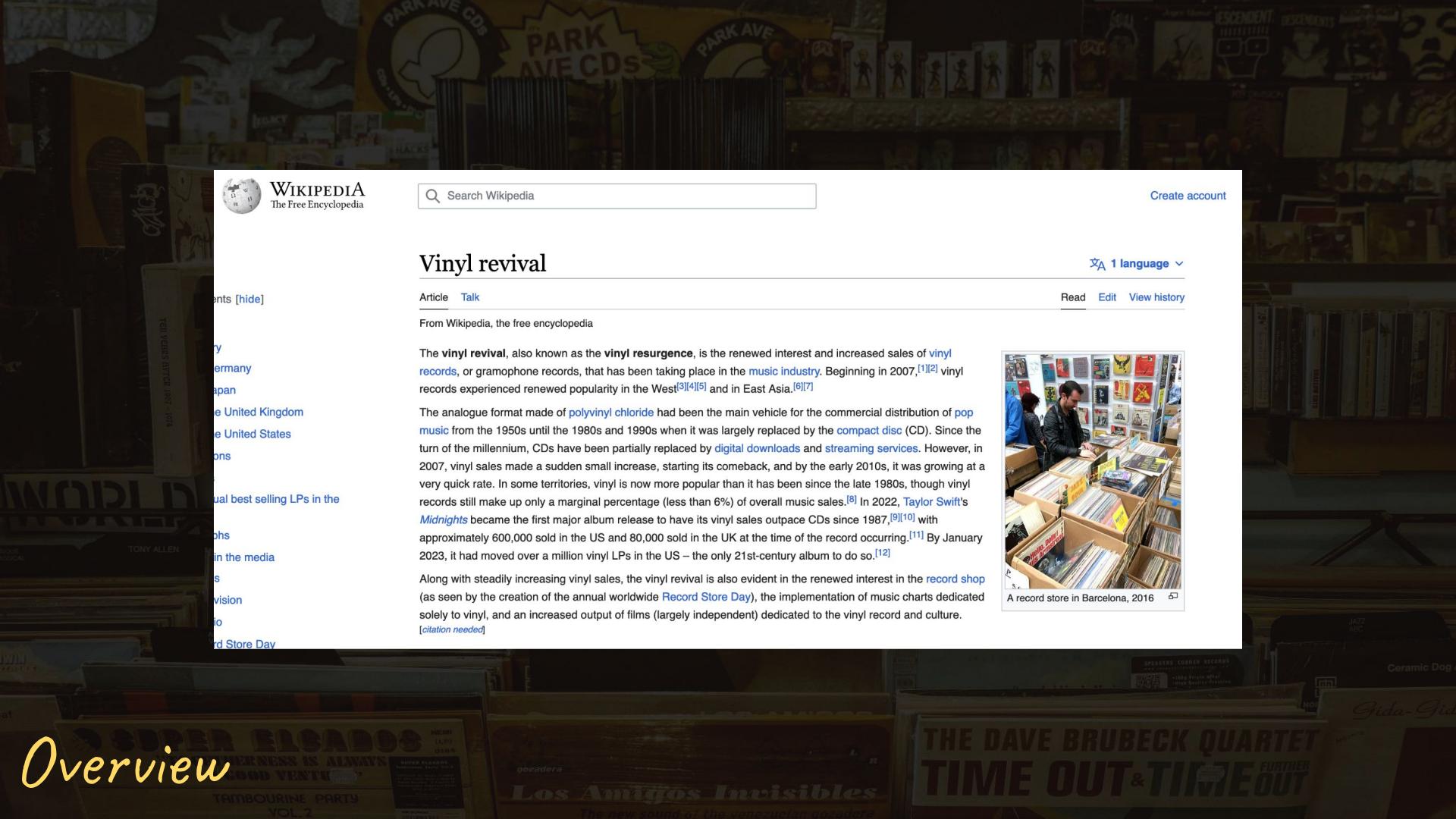
Vinyl LP unit sales in the United States from 1995 to 2022



Sources: Luminate, Billboard



statista



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Vinyl revival

1 language

Article Talk

From Wikipedia, the free encyclopedia

The **vinyl revival**, also known as the **vinyl resurgence**, is the renewed interest and increased sales of **vinyl records**, or gramophone records, that has been taking place in the **music industry**. Beginning in 2007,^{[1][2]} vinyl records experienced renewed popularity in the West^{[3][4][5]} and in East Asia.^{[6][7]}

The analogue format made of **polyvinyl chloride** had been the main vehicle for the commercial distribution of **pop music** from the 1950s until the 1980s and 1990s when it was largely replaced by the **compact disc** (CD). Since the turn of the millennium, CDs have been partially replaced by **digital downloads** and **streaming services**. However, in 2007, vinyl sales made a sudden small increase, starting its comeback, and by the early 2010s, it was growing at a very quick rate. In some territories, vinyl is now more popular than it has been since the late 1980s, though vinyl records still make up only a marginal percentage (less than 6%) of overall music sales.^[8] In 2022, Taylor Swift's *Midnights* became the first major album release to have its vinyl sales outpace CDs since 1987.^{[9][10]} with approximately 600,000 sold in the US and 80,000 sold in the UK at the time of the record occurring.^[11] By January 2023, it had moved over a million vinyl LPs in the US – the only 21st-century album to do so.^[12]

Along with steadily increasing vinyl sales, the vinyl revival is also evident in the renewed interest in the **record shop** (as seen by the creation of the annual worldwide **Record Store Day**), the implementation of music charts dedicated solely to vinyl, and an increased output of films (largely independent) dedicated to the vinyl record and culture.
[citation needed]

A record store in Barcelona, 2016

Overview

billboard pro

LOG

RESOURCES DEEP DIVE PRO CHARTS

TRENDING TOPICS ► WOMEN IN MUSIC 2023 | TIKTOK BANS | EARNINGS |

Waleen's 'One Thing at a Time' Blasts to Over 1... + Are Older Listeners the Key to Unlocking Streaming's Growth... + Amazon Pauses Construction on Second Head...

CHART BEAT 01/11/2023

U.S. Vinyl Album Sales Rise for 17th Straight Year — But Growth Is Slowing

Forty-three percent of all albums sold in the U.S. in 2022 were vinyl LPs, led by Taylor Swift's *Midnights* — but the format's growth curve is starting to level out.

BY KEITH CAULFIELD

4 LOCAL WEATHER U.S. & WORLD THE SCENE ENTERTAINMENT NEWSLETTERS STREAM NBC LA NEWS 24/7

LA River Flood Mountain Snow Super Nintendo World I-Team Tips Watch: The Rundown

MUSIC

Vinyl Record Sales are Booming, Study Says

Needle scratch — could it be true? Vinyl record sales have been booming since the start of the pandemic in 2019, with the biggest consumers being Gen Z, according to a new study.

By Lesley Rodriguez • Published August 1, 2022 • Updated on August 1, 2022 at 2:17 pm

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Home ▸ The insane resurgence of vinyl records

The insane resurgence of vinyl records

Vinyl has reclaimed its throne as the most-popular physical music format. But can the industry meet the demand?

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Sep 21, 2022 9:44am PT

Vinyl Sales Soared 22% in First Half of 2022, Per RIAA Mid-Year Report

By Jem Aswad ▾

The New York Times

Vinyl Is Selling So Well That It's Getting Hard to Sell Vinyl

Left for dead in the 1980s, vinyl records are now the music industry's most popular and highest-grossing physical format. Getting them manufactured, however, is increasingly a challenge.

NME

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NEWS > MUSIC NEWS

Vinyl record sales in 2021 at highest level for 30 years

23 per cent of all albums bought this year were on vinyl, with ABBA's 'Voyage' the biggest seller

By Will Richards | 29th December 2021

AXIOS

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Sep 12, 2021 - Technology

The future of music is (still) vinyl

Erica Pandey, author of *Finite Finite Line*



Overview

Overview

bonus content

escape from
overstimulation of
technology

supporting artist
directly

album art appreciation

pass on, trade, resell
records

connected listening
experience

physical shopping
experience

nostalgia

owning music

vinyl record culture



Overview

web
application



record
collection
tracker

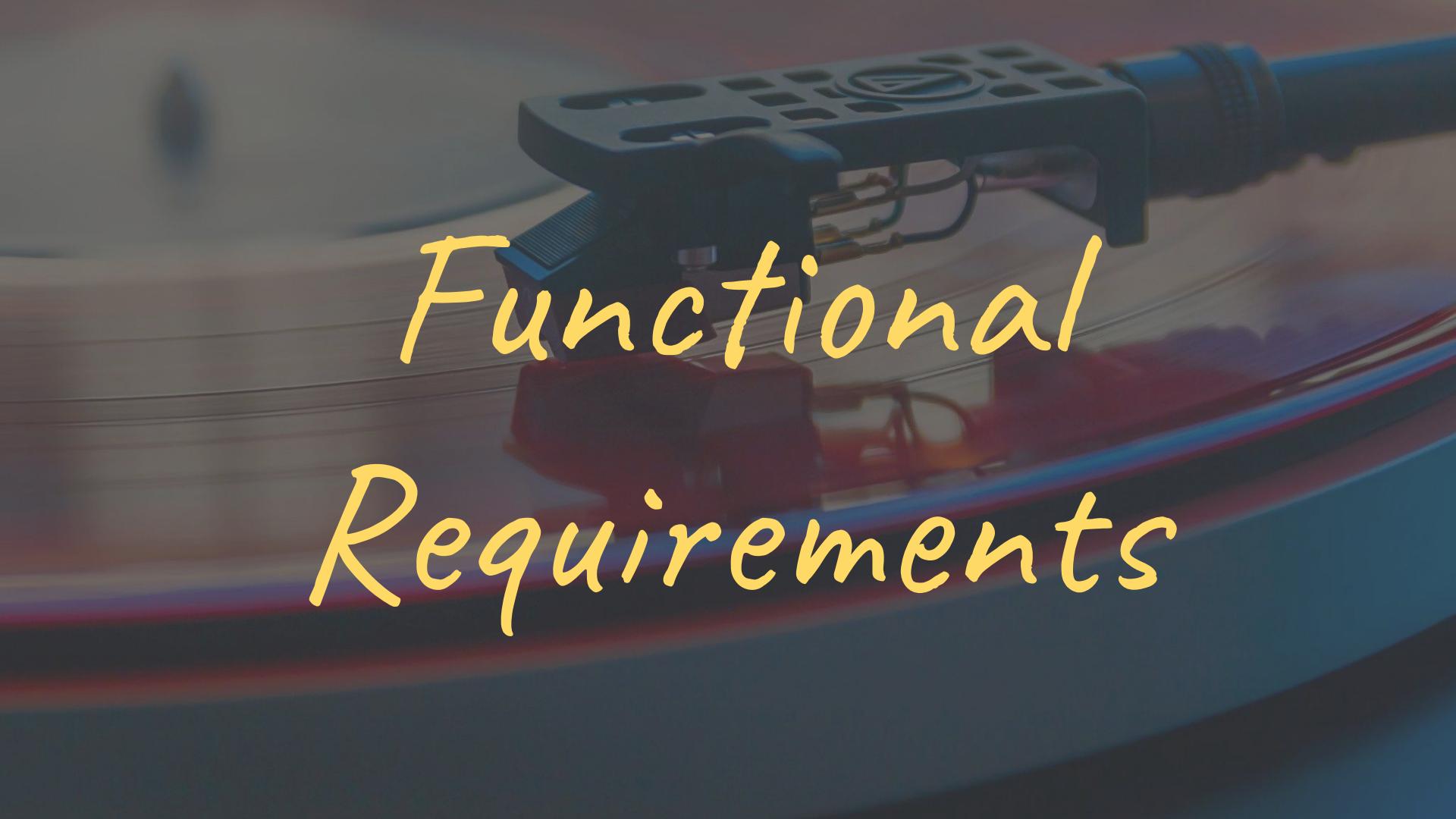


record
collectors
new + old



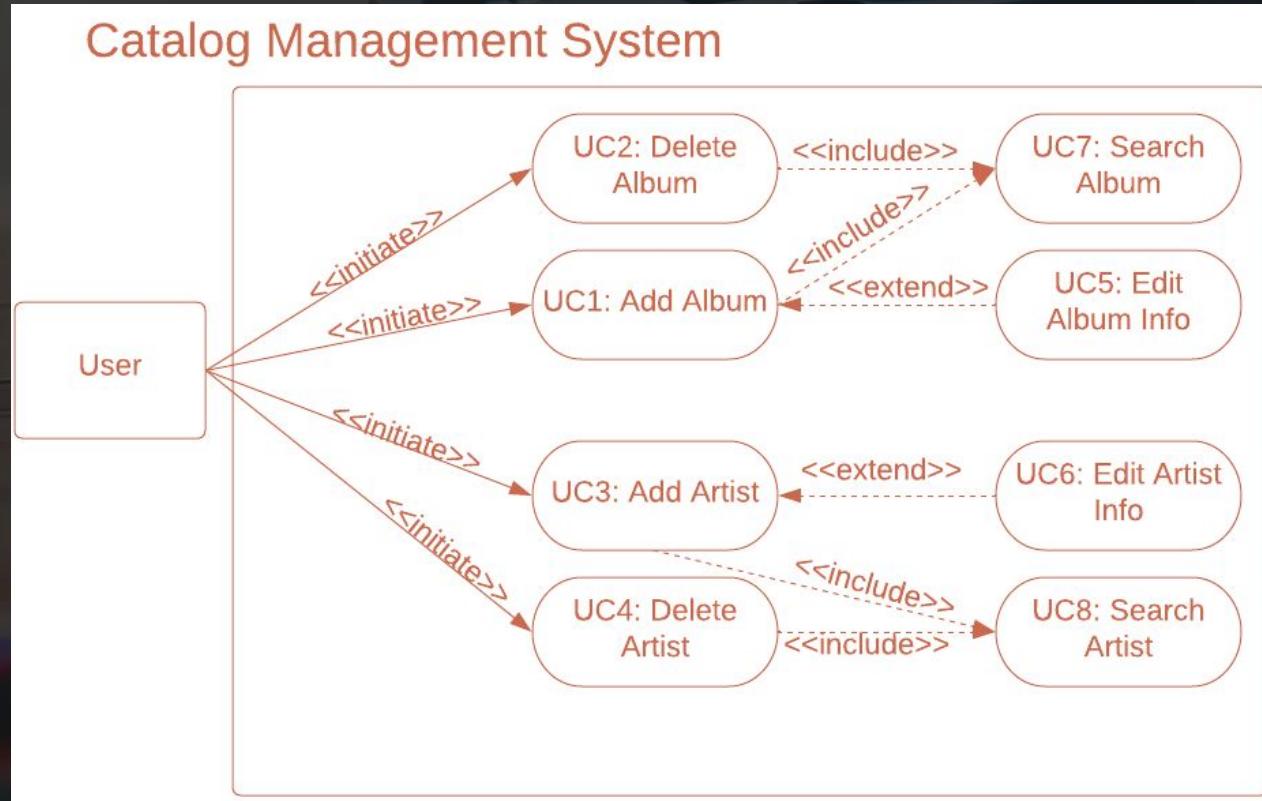
record
stores

Overview



Functional Requirements

Use Case Model



Functional Requirements

Use Case #1 & #2: Add Album & Delete Album

Purpose: To allow a user to add an album and its corresponding information to their personal catalog; to allow the user to delete an existing album from their catalog



Album Title: Take Me Apart
Artist: Kelela
Release date: October 6, 2017
Genre: Electro-R&B, electronica
Rating: 5/5

Functional Requirements

Use Case #3 & #4: Add Artist & Delete Artist

Purpose: To allow a user to add an artist and their corresponding information to the user's personal catalog; to allow the user to delete an existing artist from their catalog



Artist: Wu-Tang Clan
Genre: Hip hop, Rap
Albums: Enter the Wu-Tang,
Wu-Tang Forever, ...
Rating: 5/5

Functional Requirements

Use Case #5 & #6: Edit Album Info & Edit Artist Info

Purpose: To allow a user to edit the information pertaining to a selected album; to allow a user to edit the information pertaining to a selected artist



Album Title: enter the Wu-Tang
Artist: wu-Tang clan
Release date: 1993
Genre: Hip hop, Rap
Rating: 4.5/5



Album Title: Enter the Wu-Tang
Artist: Wu-Tang Clan
Release date: Nov 9, 1993
Genre: Hip hop, Rap
Rating: 5/5

Functional Requirements

Use Case #7 & #8: Search Album & Search Artist

Purpose: To allow a user to search for an album within their catalog; to allow a user to search for an artist within their catalog



Functional Requirements

Non-Functional Requirements



Performance:

App should be reasonably fast no matter the size of Library



Non-Functional Requirements

Safety and Security:

Backing up database to ensure no lost data.
(Full back up and Differential backup)



Non-Functional Requirements

Software Quality Attributes:

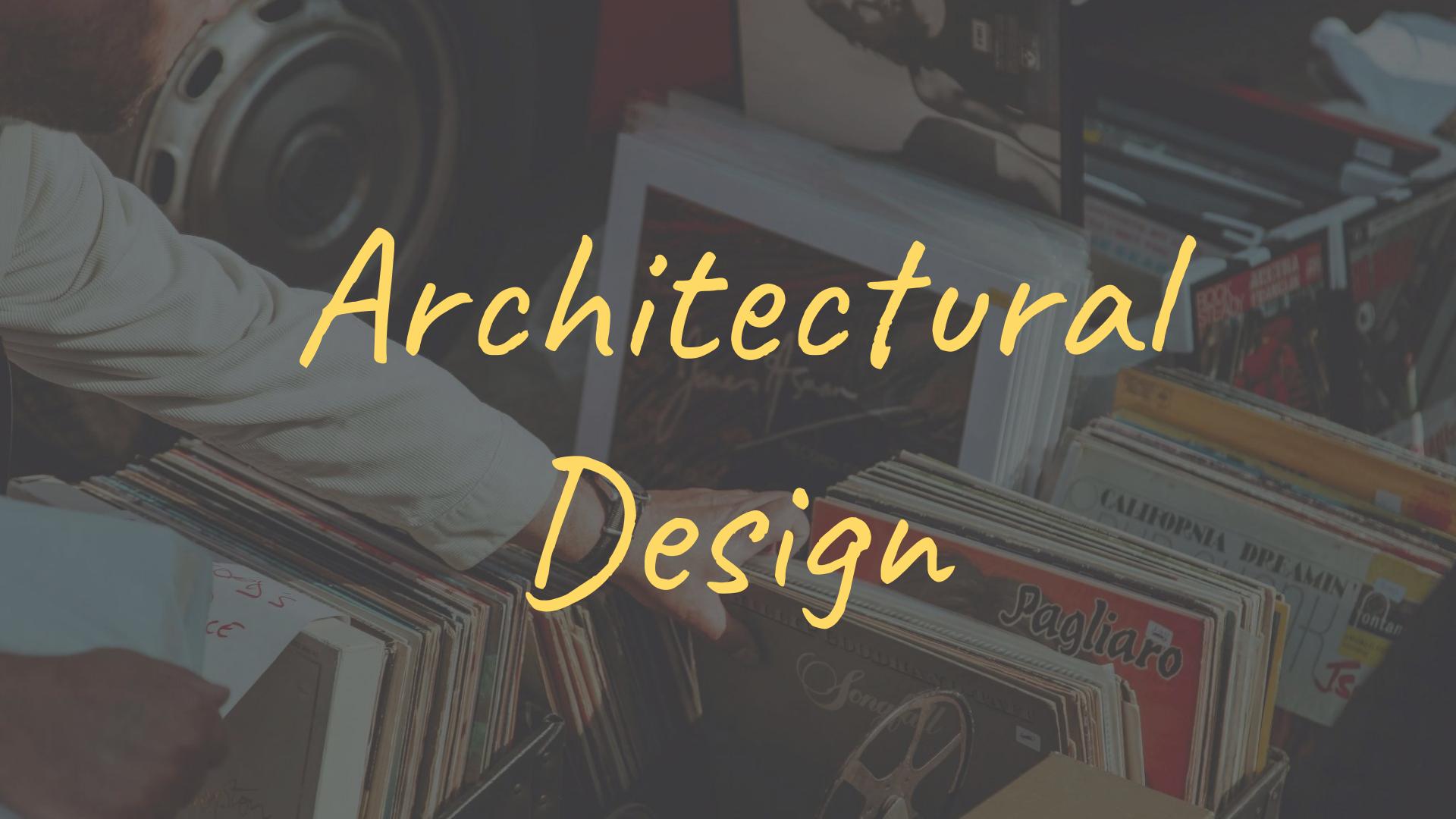
Performance: The speed of searching, adding and deleting albums.

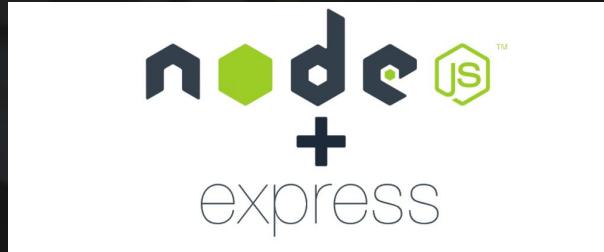
Usability: App has simple operations and controls.

Compatibility: Compatible with any device with internet access using a web browser.

Non-Functional Requirements

Architectural Design





Architectural Design



HTTP requests



Database server



Queries



UI

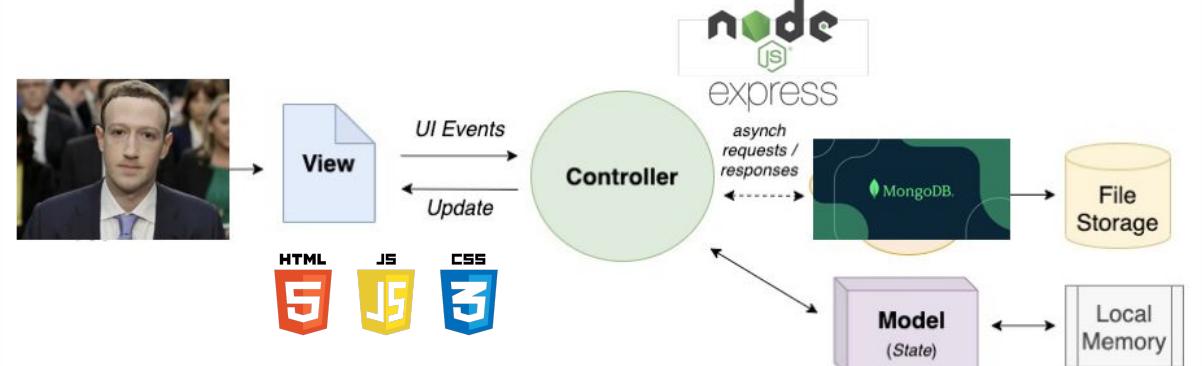
A web server running Node.js and Express to handle HTTP requests and responses.

A MongoDB database server to store and retrieve data for the application.

A client-side web browser to render the user interface.

- The user initiates a search request by entering keywords into a search box on the application's user interface.
- The client-side JavaScript code sends the search query to the Node.js server using an HTTP request.
- The Node.js server handles the request by querying the MongoDB database for albums that match the search query.
- The server returns the search results to the client-side JavaScript code, which updates the user interface to display the search results.

Architectural Design



Model-View-Controller (MVC)

architectural style

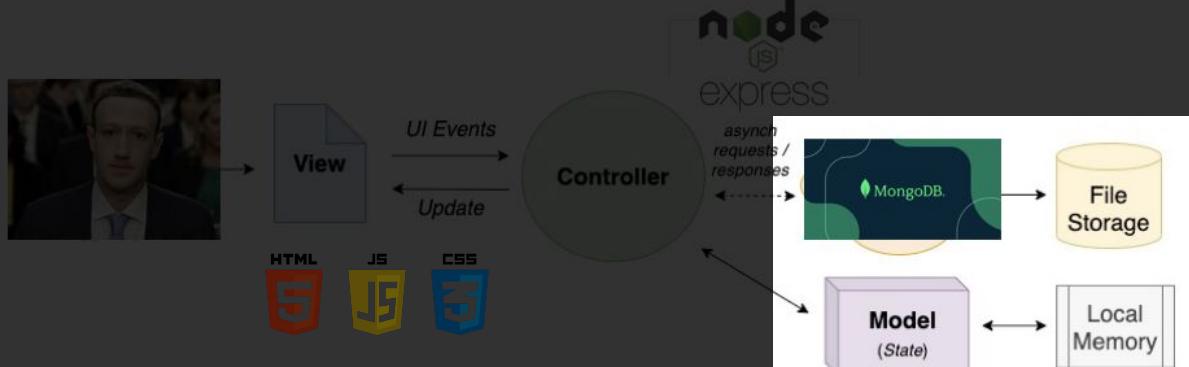
frequently used in webdev

allows multiples developers to
organize programming

separates functionality, logic, and
interface

different implementations that
vary based on framework

Architectural Design



Model-View-Controller (MVC)

data related logic

directly interacts with database

communicates with controller

The model is implemented as a MongoDB collection that stores documents representing vinyl records, with fields for album title, artist, release date, and rating.

Also included is a Node.js module that defines functions for adding, updating, deleting, and searching for records using the MongoDB driver for Node.js.

Architectural Design



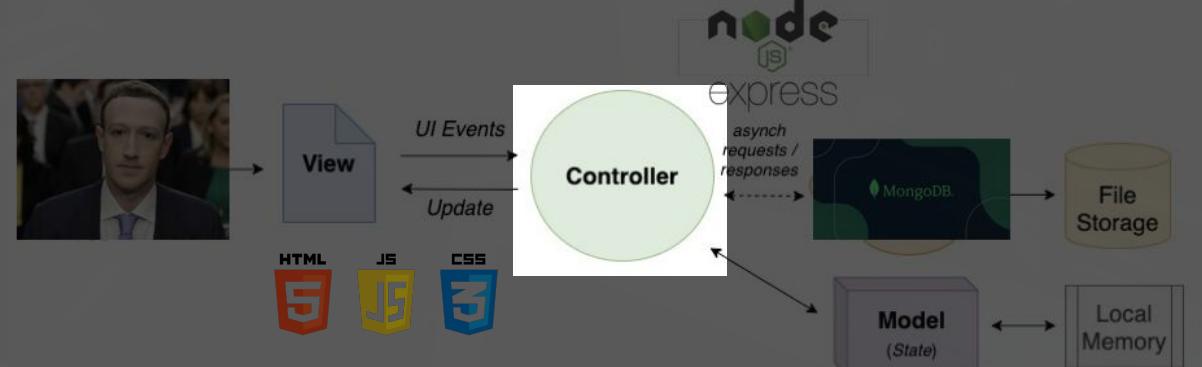
Model-View-Controller (MVC)

UI

communicates
with controller

The view is implemented using HTML templates and a templating engine, which would render the dynamic data from the model.

Architectural Design



Model-View-Controller (MVC)

receives user input

processes requests

gets data from model

->

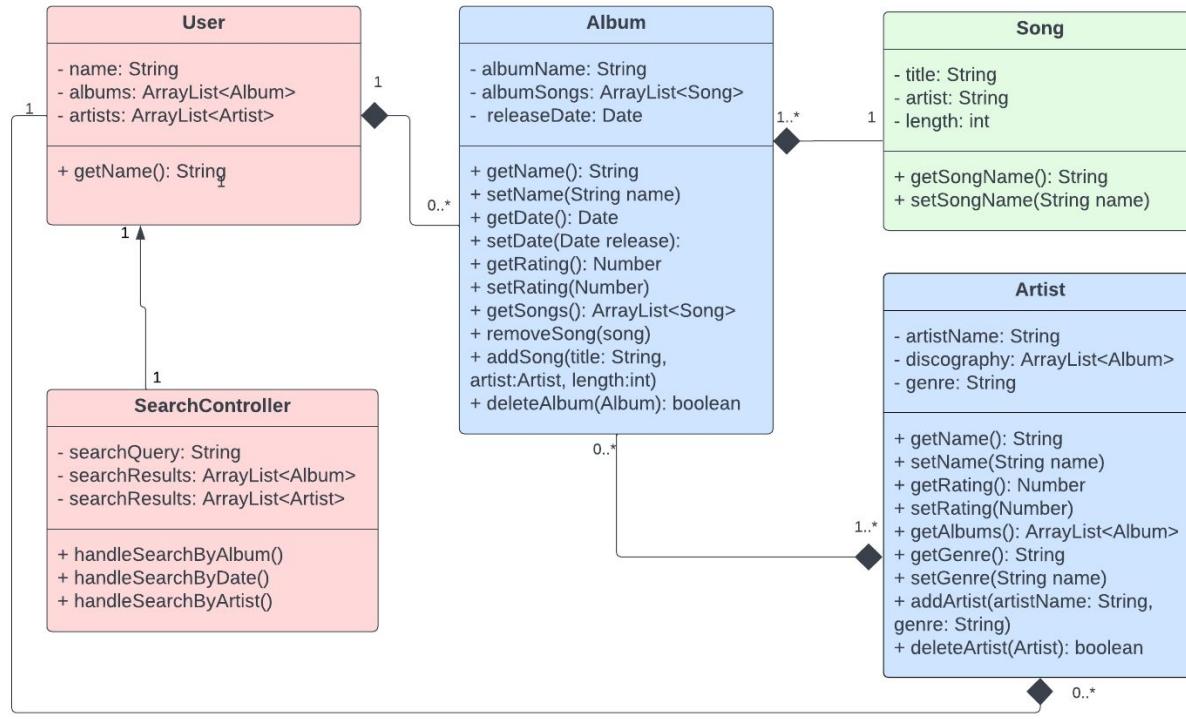
passes data to view

The controller is implemented as an Express router that handles HTTP requests and responses using a combination of middleware functions and route handlers.

Architectural Design

Component-Level Design





myAudiofiler

Component-Level Design

UI Design



State Machine Diagram

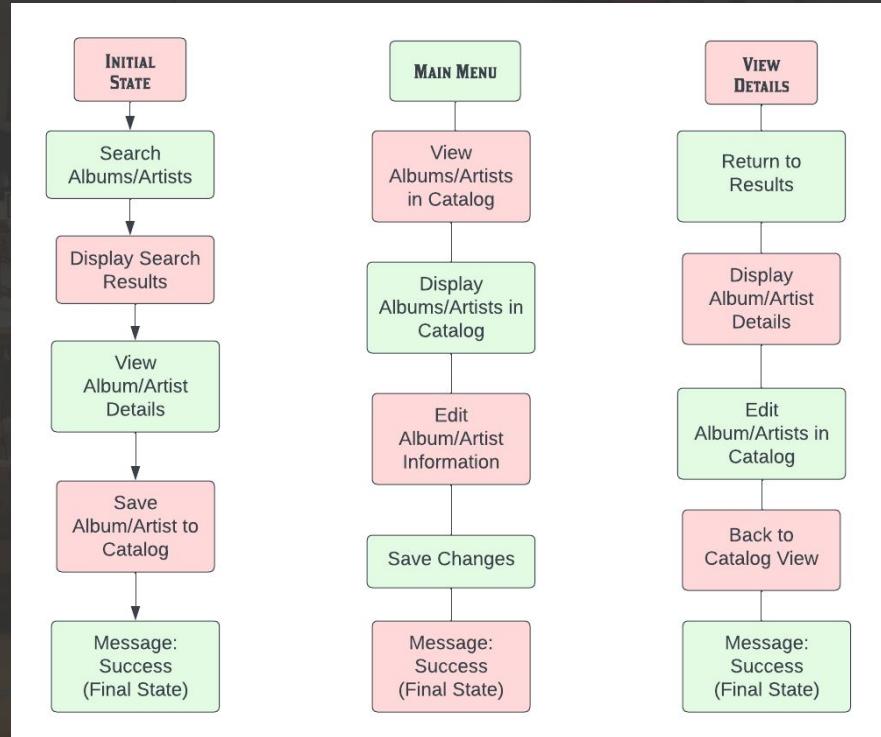
The 'Initial State' is begun by the user accessing the web application.

The user is presented with the 'Main Menu' where they can choose to add album/artist, search for album/artist, or edit information for album/artist.

The user is then brought to the subsequent page for their respective choice, where they either are prompted to input information for an addition or search query, or to edit existing information.

The user is then able to save any changes and is returned to the main page, which displays the updated catalog.

The final state for the user for all options is a 'Message of Success.'



Sequence Diagram

The user begins by adding an album or an artist to their personal catalog.

After an album or artist has been inducted into the catalog, the user has the option to search for the artist or album within their catalog, or to edit the information associated with an artist or album within their catalog.

The server subsequently retrieves the search results for the user.

Additionally, the user can delete an album or an artist from their catalog.

The server will subsequently remove the artist or album from the database.

Finally, the user is able to save any changes made to their catalog.

UI Design



Artists (+) Music

enter album, artist, or year

SEARCH



Artists (+) Music

Blondie



My Albums



Artists (+) Music

Parallel Lines



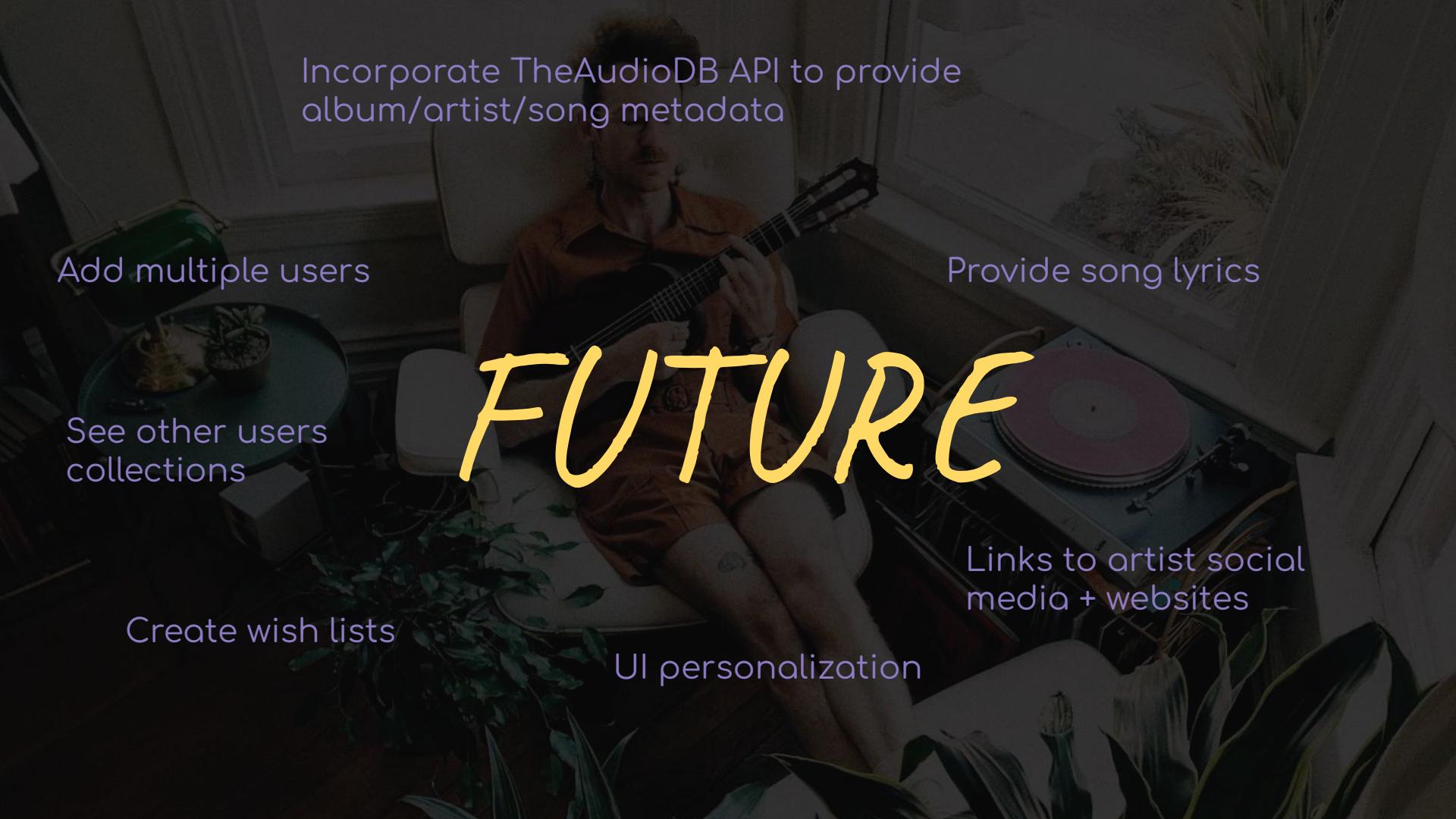
Edit Delete
View Artist

Artist: Blondie
Release: 1978

Length: 39:06

Genre: pop rock, power pop, new wave, disco

UI Design

A photograph of a man with short hair and a beard, wearing an orange t-shirt, sitting on a chair and playing a black acoustic guitar. He is looking down at the guitar. The background is a room with light-colored walls. In the foreground, there are several green plants, including a large one on the left and some smaller ones on the right. On the far right, a red turntable with a vinyl record on it is visible. The overall atmosphere is relaxed and musical.

Incorporate TheAudioDB API to provide
album/artist/song metadata

Add multiple users

See other users
collections

Create wish lists

FUTURE

Provide song lyrics

Links to artist social
media + websites

UI personalization



COMING
SOON

myAudiofiler

Samantha Ames

Vasanth Banumurthy

Henry Chau