

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

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

f t p +

theHUSTLE

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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?

HAVE A NEWS TIP? NEWSLETTERS U.S. EDITION ▾

VARIETY

Film TV What To Watch Music Docs Tech Global Awards C

HOME > MUSIC > NEWS

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

NEWS MUSIC FILM TV GAMING FESTIVALS RADAR MAGAZINE RADIO DISCOUNT CODES

MUSIC | News Features Reviews Interviews Radar Album Releases

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 17, 2021 - Technology

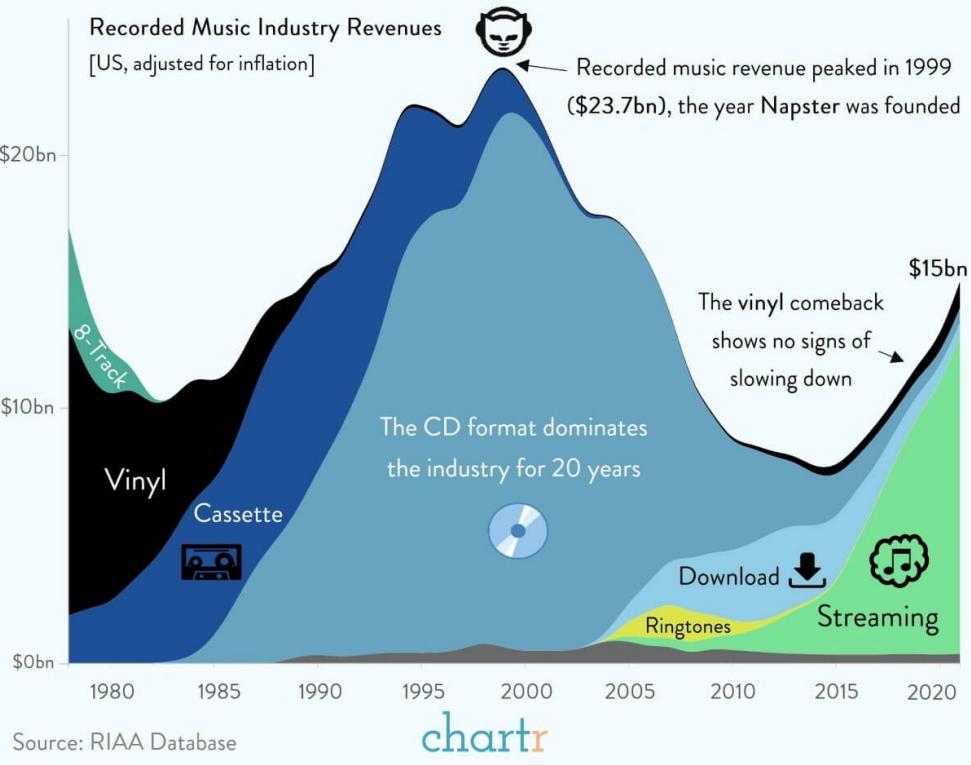
The future of music is (still) vinyl

Erica Pandey, author of *Finite Finite Line*



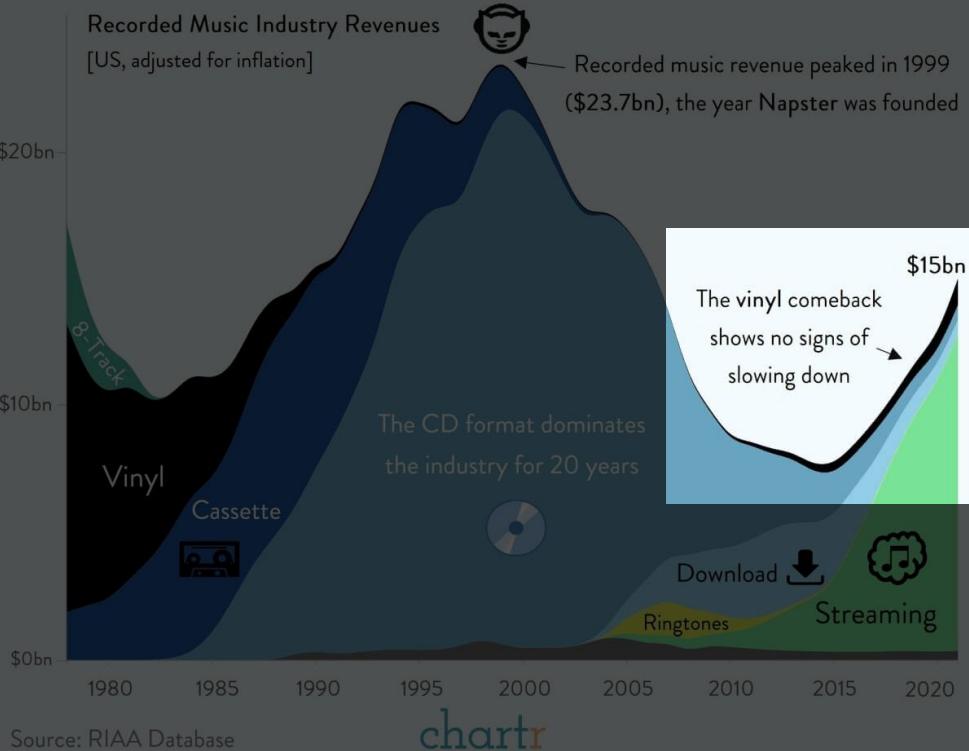
Overview

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



Overview

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

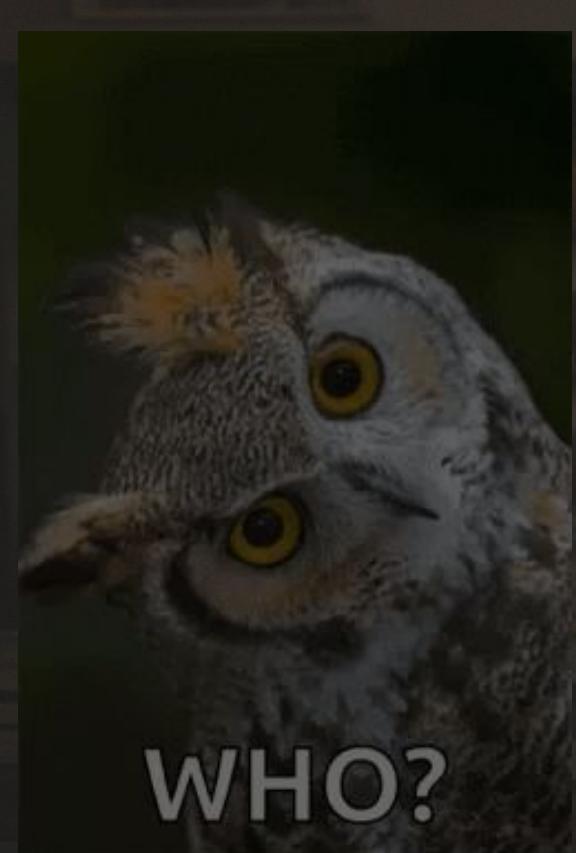


Overview

web
application



record
collection
tracker



record
collectors
new + old



record
stores

Overview



lessons
learned

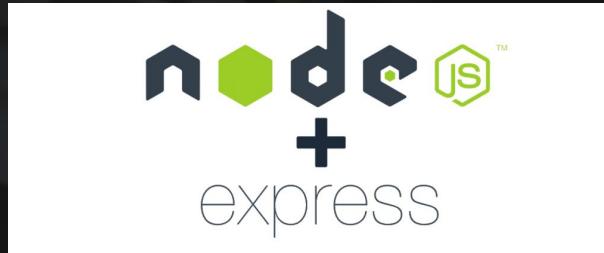
limited
demo

future
work

Today

Lessons Learned





Architectural Design



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

HTTP requests



Database server



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

Queries

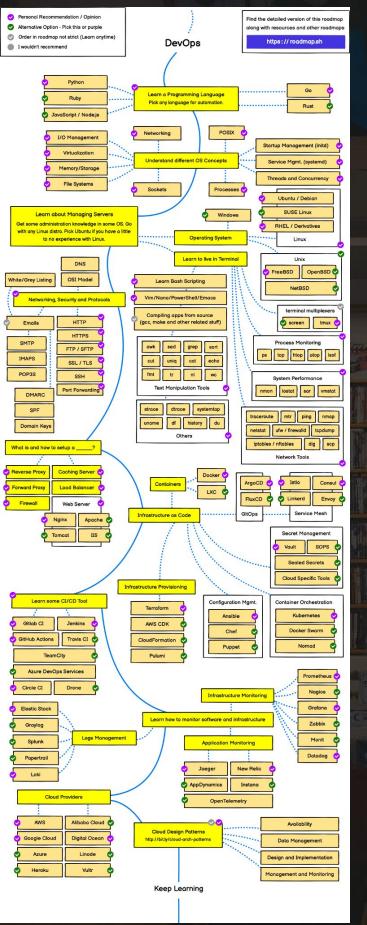


UI

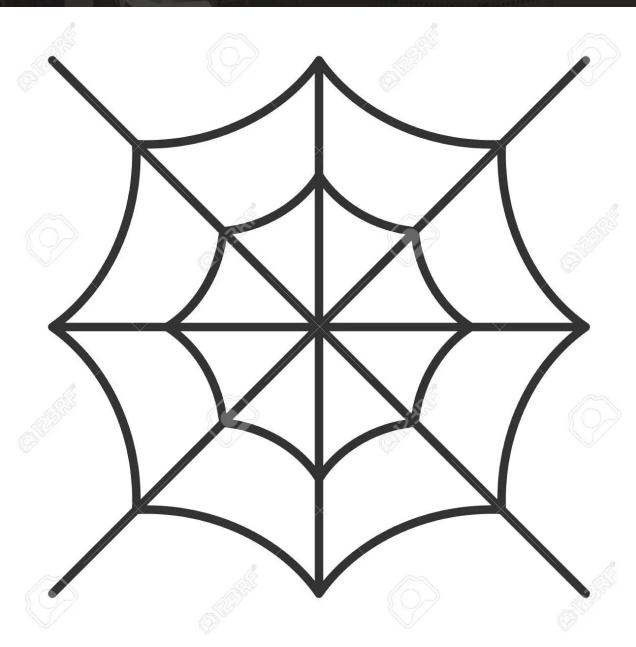
A client-side web browser to render the user interface.

- 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.

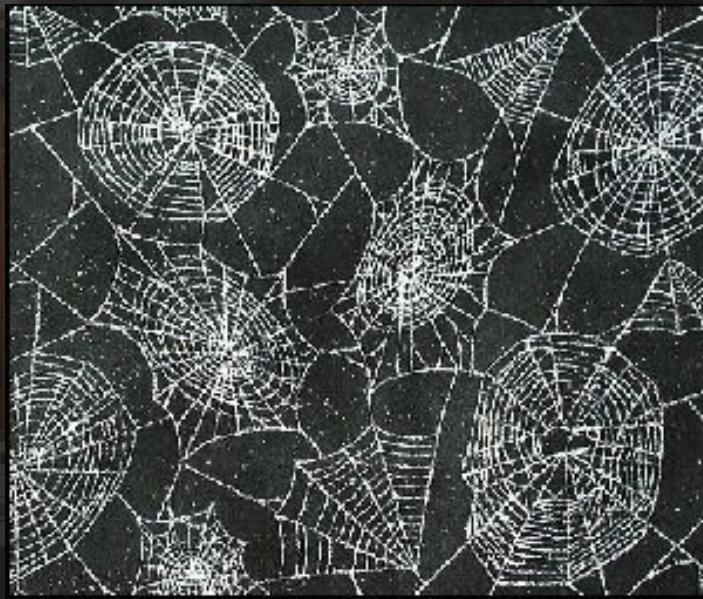
Architectural Design



Lesson 1: Daunting World of Web Dev



VS



Lesson 1: Daunting World of Web Dev

```
const { createCDN } = require('crypto')
const { errorMonitor } = require('events')
const express = require('express')
const { request } = require('http')
const router = express.Router()

const multer = require('multer')
const path = require('path')
const uploadPath = path.join('public', 'Album.coverImagebasePath')
const imageMimeTypes = ['image/jpeg', 'image/png', 'image/gif']
const fs = require('fs')

const upload = multer({
  dest: uploadPath,
  fileFilter: (req, file, callback) => {
    callback(null, imageMimeTypes.includes(file.mimetype))
  }
})

// all albums route
router.get('/', async (req, res) => {
  res.send('All Albums')
})

// new album route
router.get('/new', async (req, res) => {
  // try{
  //   const artists = await Artist.find()
  //   const album = new Album()
  //   res.render('albums/new', {
  //     artists: artists,
  //   })
  // }

  searchOptions is not defined
  at eval (/Users/bvasanth/Desktop/odin/myaudiofiler/newArtist/index.ejs:19:26)
  at Function (/Users/bvasanth/Desktop/odin/myaudiofiler/node_modules/ejs/lib/ejs.js:15:23:17)
  at tryRender (/Users/bvasanth/Desktop/odin/myaudiofiler/node_modules/ejs/lib/ejs.js:274:36)
  at exports.renderfile [as engine] (/Users/bvasanth/Desktop/odin/myaudiofiler/node_modules/ejs/lib/ejs.js:49:10)
  at View.render (/Users/bvasanth/Desktop/odin/myaudiofiler/node_modules/express/lib/view.js:135:8)
  at tryRender (/Users/bvasanth/Desktop/odin/myaudiofiler/node_modules/express/lib/application.js:77:18)
  at Function.render (/Users/bvasanth/Desktop/odin/myaudiofiler/node_modules/express/lib/application.js:69:3)
  at ServerResponse.render (/Users/bvasanth/Desktop/odin/myaudiofiler/node_modules/express/lib/response.js:1039:7)
  at res.render (/Users/bvasanth/Desktop/odin/myaudiofiler/node_modules/express-ejs-layouts/lib/express-layouts.js:77:18)
  at /Users/bvasanth/Desktop/odin/myaudiofiler/routes/artists.js:29:9
```

```
{
  "name": "myaudiofiler",
  "version": "1.0.0",
  "description": "",
  "main": "server.js",
  ▷ Debug
  "scripts": {
    "start": "node server.js",
    "devStart": "nodemon server.js"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "dependencies": {
    "body-parser": "^1.20.2",
    "ejs": "^3.1.9",
    "express": "^4.18.2",
    "express-ejs-layouts": "^2.5.1",
    "mongoose": "^7.0.3",
    "multer": "^1.4.5-lts.1"
  },
  "devDependencies": [
    "dotenv": "^16.0.3",
    "nodemon": "^2.0.22"
  ]
}
```

Lesson 1: Daunting World of Web Dev

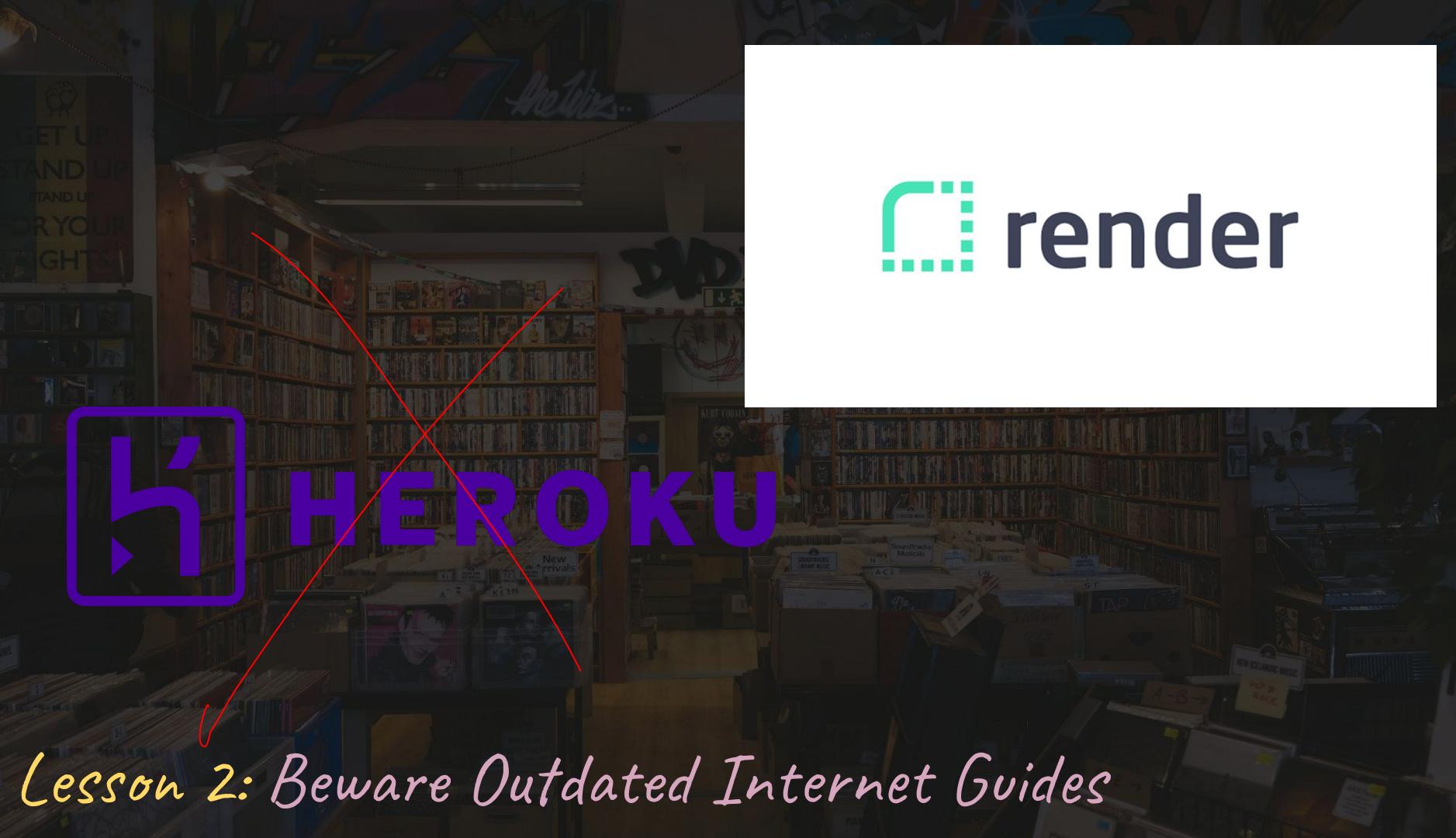


Lesson 2: Beware Outdated Internet Guides



HEROKU

Lesson 2: Beware Outdated Internet Guides



Lesson 2: Beware Outdated Internet Guides

HOW RENDER WORKS

Instant Deploys For All Your Apps

1 Select a service type

SERVICE TYPE

Web |

- ✓ Web servers
- ✓ Static sites
- ✓ Docker containers
- ✓ Cron jobs
- ✓ Background workers
- ...

2 Deploy in seconds

BRANCH

master ✓

BUILD COMMAND

yarn build ✓

START COMMAND

yarn start ✓

DEPLOY

3 Update automatically

GIT PUSH

https://yoursite.com ✓ Live

Automatic Deploy live for 53a83: 1:20:50 PM

Automatic Deploy for 53a83: 1:20:47 PM

Manual Deploy live for 64a83: 11:40:15 AM

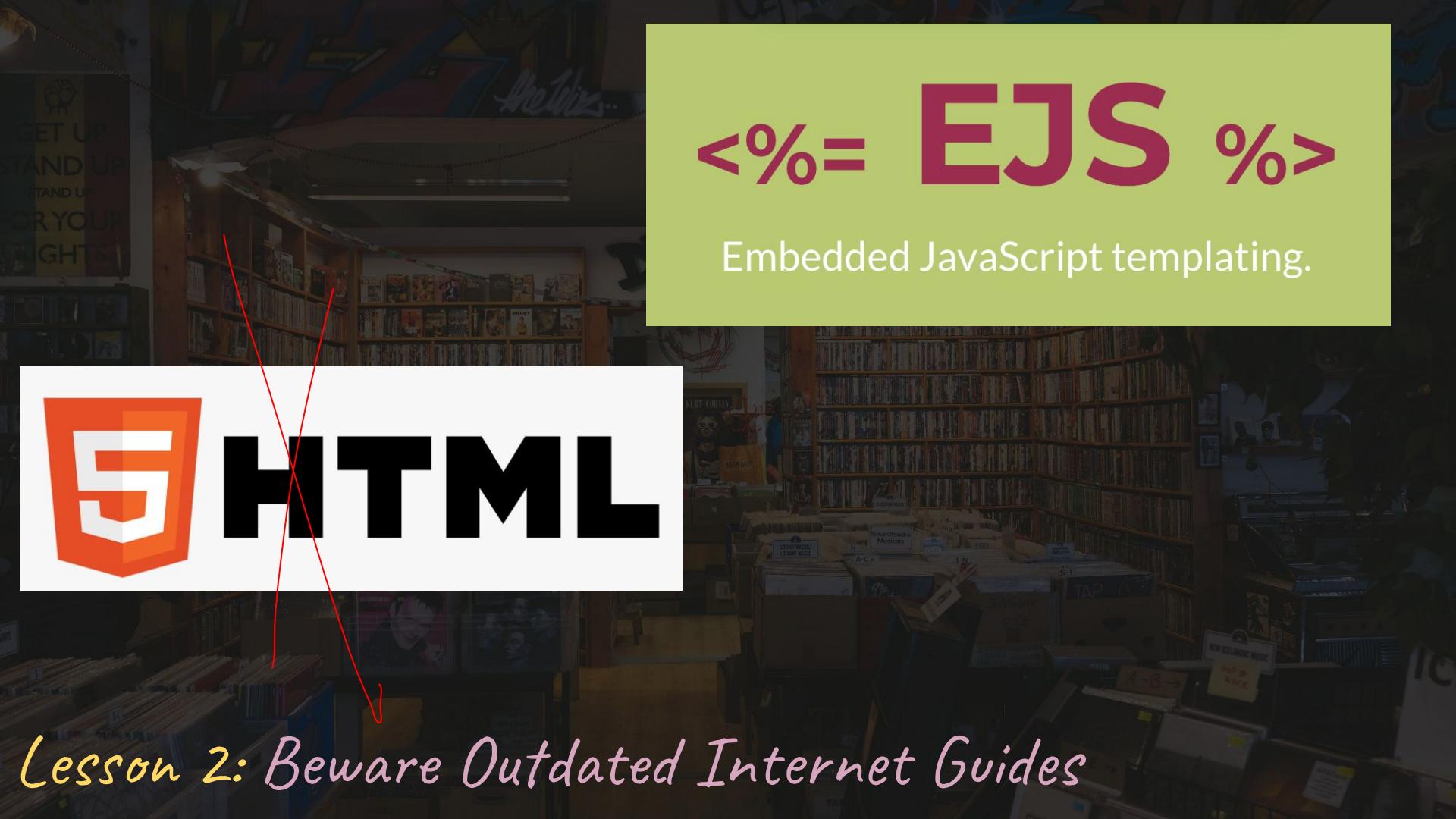


Lesson 2: Beware Outdated Internet Guides



HTML

Lesson 2: Beware Outdated Internet Guides



`<%= EJS %>`

Embedded JavaScript templating.



Lesson 2: Beware Outdated Internet Guides

What is EJS?

What is the "E" for? "Embedded?" Could be. How about "Effective," "Elegant," or just "Easy"? EJS is a simple templating language that lets you generate HTML markup with plain JavaScript. No religiousness about how to organize things. No reinvention of iteration and control-flow. It's just plain JavaScript.

<%= EJS %>

Embedded JavaScript templating.

♥ Use plain JavaScript

We love JavaScript. It's a totally friendly language. All templating languages grow to be Turing-complete. Just cut out the middle-man, and use JS!

⌚ Fast development time

Don't waste time and attention figuring out arcane new syntax because 'elegance' — or how to preprocess your data so it will actually render right.

✈ Speedy execution

We all know how fast V8 and the other JavaScript runtimes have gotten. EJS caches the intermediate JS functions for fast execution.

👍 Easy debugging

It's easy to debug EJS errors: your errors are plain JavaScript exceptions, with template line-numbers included.

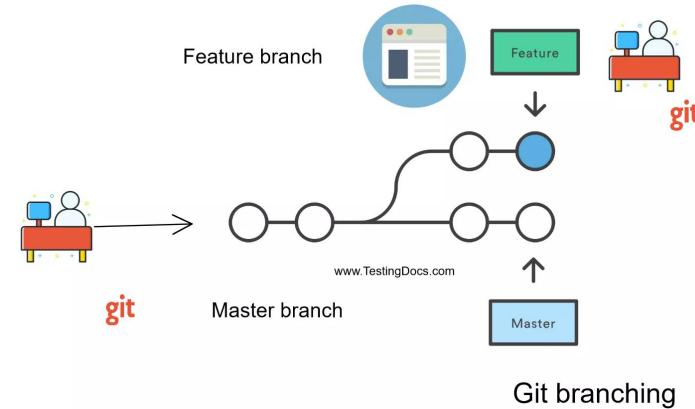
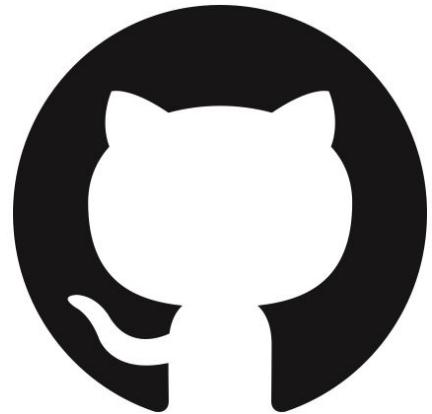
</> Simple syntax

JavaScript code in simple, straightforward scriptlet tags. Just write JavaScript that emits the HTML you want, and get the job done!

⚠ Active development

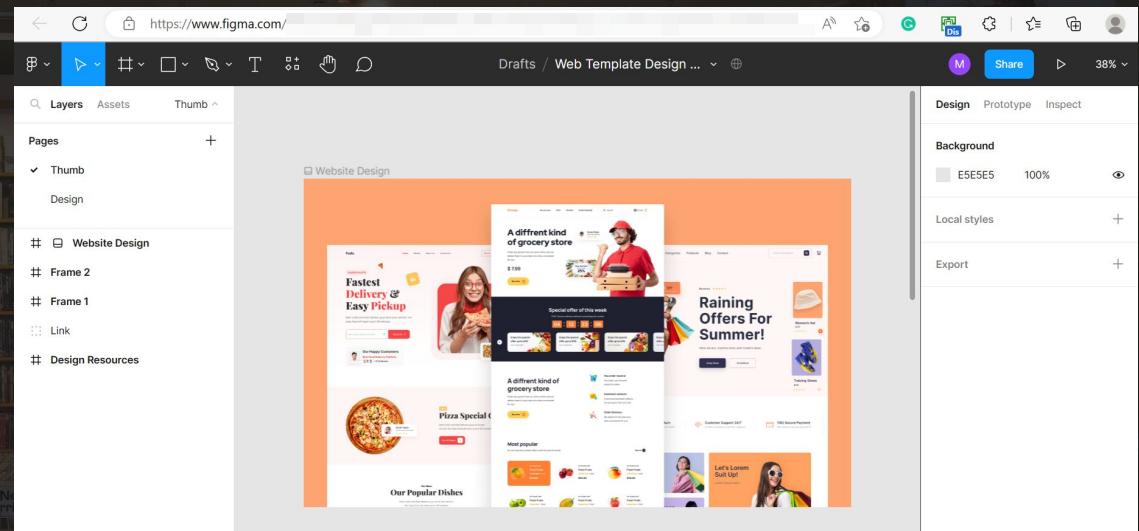
EJS has a large community of active users, and the library is under active development. We're happy to answer your questions or give you help.

Lesson 2: Beware Outdated Internet Guides



Lesson 3: Necessity Of Organization

Lesson 3: Necessity Of Organization



Create New Cluster

Global Cluster Configuration

Cloud Provider & Region



AWS, N. Virginia (us-east-1) ▾

Select Multi-Region, Workload Isolation, and Replication Options (M10+ clusters)

Increase region availability, configure tagged analytics nodes, and optimize for local service areas. [Read more](#)

NO

Create a free tier cluster by selecting a region with [FREE TIER AVAILABLE](#) and choosing the M0 cluster tier below.

★ Recommended region

NORTH AMERICA

N. Virginia (us-east-1) ★
[FREE TIER AVAILABLE](#)

Ohio (us-east-2) ★

N. California (us-west-1)

Oregon (us-west-2) ★
[FREE TIER AVAILABLE](#)

Montreal (ca-central-1)

SOUTH AMERICA
Sao Paulo (sa-east-1)

EUROPE

Stockholm (eu-north-1) ★
[FREE TIER AVAILABLE](#)

Ireland (eu-west-1) ★
[FREE TIER AVAILABLE](#)

London (eu-west-2) ★

Paris (eu-west-3) ★
[FREE TIER AVAILABLE](#)

Frankfurt (eu-central-1) ★
[FREE TIER AVAILABLE](#)

MIDDLE EAST
Bahrain (me-south-1) ★
[FREE TIER AVAILABLE](#)

ASIA

Hong Kong (ap-east-1) ★
[FREE TIER AVAILABLE](#)

Tokyo (ap-northeast-1) ★

Seoul (ap-northeast-2)

Singapore (ap-southeast-1) ★
[FREE TIER AVAILABLE](#)

Mumbai (ap-south-1)
[FREE TIER AVAILABLE](#)

AUSTRALIA
Sydney (ap-southeast-2) ★
[FREE TIER AVAILABLE](#)

MONGODB ATLAS

Choose a path. Adjust anytime.

Available as a fully managed service across 60+ regions on AWS, Azure, and Google Cloud

Shared Clusters

For teams learning MongoDB or developing small applications.

- ✓ Highly available auto-healing cluster
- ✓ End-to-end encryption
- ✓ Role-based access control

[Create a cluster](#)

Starting at
FREE

Dedicated Clusters

For teams building applications that need advanced development and production-ready environments.

- ✓ Includes all features from Shared Clusters
- ✓ Auto-scaling
- ✓ Network isolation
- ✓ Realtime performance metrics

[Create a cluster](#)

Starting at
\$0.08/hr*
*estimated cost \$86.94/month

Dedicated Multi-Region Clusters

For teams developing world-class applications that require multi-region resiliency or ultra-low latency.

- ✓ Includes all features from Shared and Dedicated Clusters
- ✓ Replicate data across multiple regions
- ✓ Globally distributed read and write operations
- ✓ Control data residency at the document level

[Create a cluster](#)

Starting at
\$0.13/hr*
*estimated cost \$281.94/month

[Skip](#) [Advanced Configuration Options](#)



mongoDB® Atlas

Lesson 4: Convenience of MongoDB

Atlas Vasanth's Org Access Manager Billing All Clusters Get Help Vasantha

Project 0 Data Services App Services Charts

DEPLOYMENT Database Data Lake PREVIEW

SERVICES Triggers Data API Data Federation Search

SECURITY Backup Database Access Network Access Advanced

New On Atlas 1 Goto

VASANTH'S ORG - 2023-04-15 > PROJECT 0

Database Deployments

Find a database deployment... + Create

Load sample datasets to myAudiofiler.

Atlas provides sample data you can load into your Atlas clusters. You can use this data to quickly get started exploring with data in MongoDB.

Load sample dataset Dismiss

myAudiofiler Connect View Monitoring Browse Collections ...

Enhance Your Experience

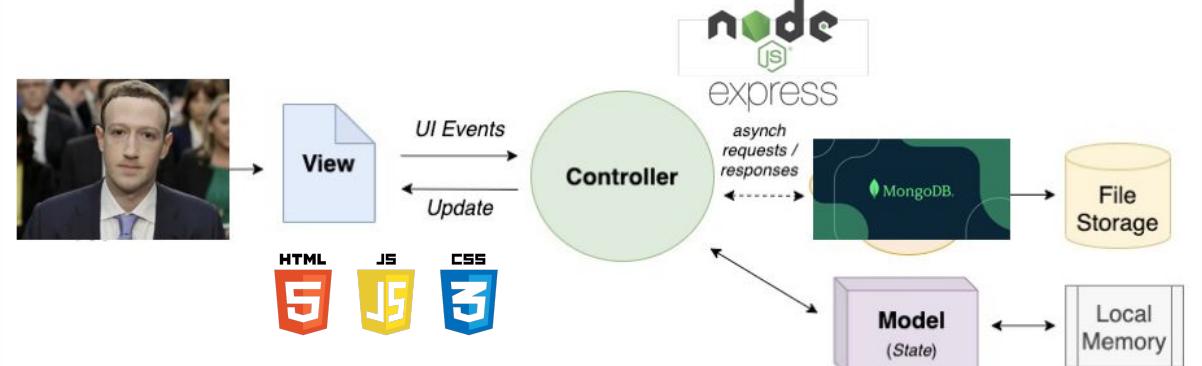
For production throughput and richer metrics, upgrade to a dedicated cluster now!

Upgrade

R 0 W 0 Last 6 hours 0.04/s Connections 1.0 Last 6 hours 14.0 In 0.0 B/s Out 110.2 B/s Last 6 hours 986.3 B/s

VERSION	REGION	CLUSTER TIER	TYPE	BACKUPS	LINKED APP SERVICES
6.0.5	AWS / N. Virginia (us-east-1)	M0 Sandbox (General)	Replica Set - 3 nodes	Inactive	None Linked

Lesson 4: Convenience of MongoDB



Model-View-Controller (MVC)

architectural style

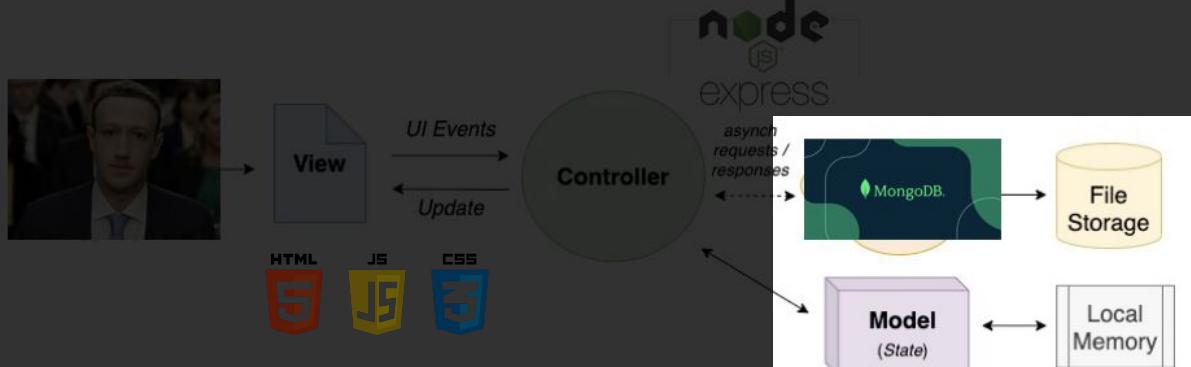
frequently used in webdev

allows multiple developers to organize programming

separates functionality, logic, and interface

different implementations that vary based on framework

Lesson 5: Power of MVC



Model-View-Controller (MVC)

data related logic

directly interacts with database

communicates with controller

models

JS album.js

JS artist.js

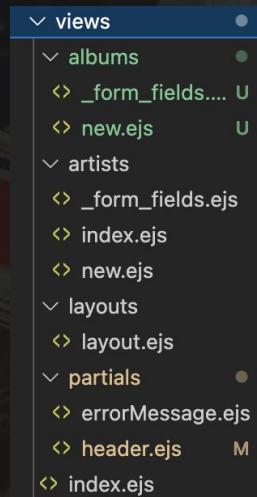
Lesson 5: Power of MVC



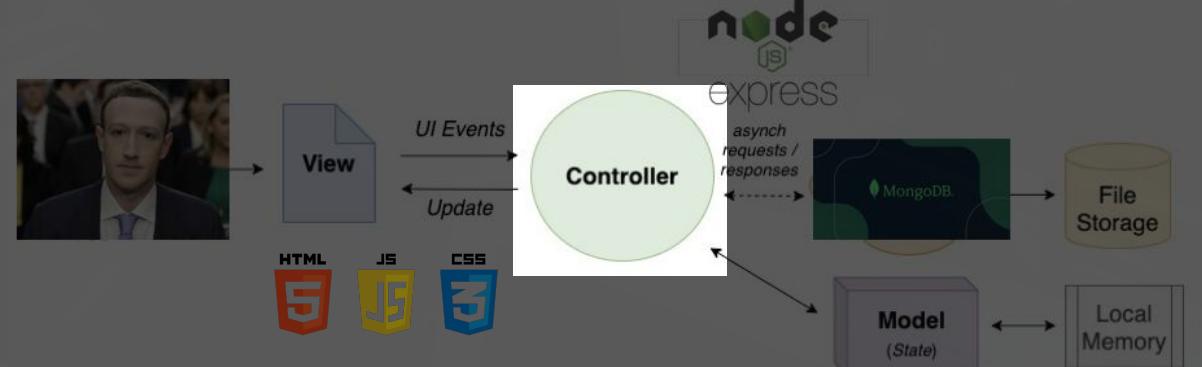
Model-View-Controller (MVC)

UI

communicates
with controller



Lesson 5: Power of MVC



Model-View-Controller (MVC)

receives user input

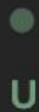
processes requests

gets data from model

->

passes data to view

✓ routes
JS albums.js
JS artists.js
JS index.js



Lesson 5: Power of MVC

Syllabus

- Software Requirement
 - Requirement Types
 - Requirement Analysis
 - Requirement Modeling
- Software Architecture
 - Architectural Styles and Patterns
 - Architecture Design
- Software Design
 - Design Principles
 - Design Patterns
- Software Testing
 - Testing Types
 - Testing Coverage
- Software Maintenance
 - Maintenance Types
 - Reverse Engineering
 - Reengineering
- Program Analysis
 - Control Flow Graph
 - Static Analysis
 - Dynamic Analysis
- Artificial Intelligence
 - Basic Concepts
 - Computer Vision
 - Natural Language Processing
- Intelligence in Software Engineering
 - Bug Detection Using AI Techniques
 - Software Maintenance Using AI Techniques
- Software Engineering for Intelligent Software
 - Deep Learning Model Debugging Using SE Techniques
 - Deep Learning Framework Debugging Using SE Techniques

Lesson 6: Why this class matters?

Syllabus

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 - Maintenance Types
 - Reverse Engineering
 - Reengineering
- Program Analysis
 - Control Flow Graph
 - Static Analysis
 - Dynamic Analysis
- Artificial Intelligence
 - Basic Concepts
 - Computer Vision
 - Natural Language Processing
- Intelligence in Software Engineering
 - Bug Detection Using AI Techniques
 - Software Maintenance Using AI Techniques
- Software Engineering for Intelligent Software
 - Deep Learning Model Debugging Using SE Techniques
 - Deep Learning Framework Debugging Using SE Techniques

- Encourages collaborative development
- Organization
- Less code
- Easier to scale
- Guidelines for how to maintain and test to ensure future

Lesson 6: Why this class matters?

Limited Demo

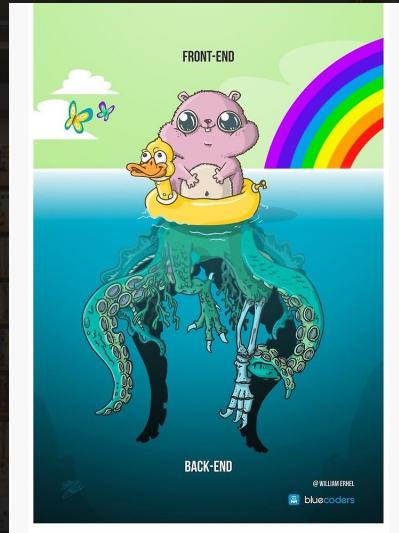
<https://myaudiofiler.onrender.com>

Future Work



backend

- Storing files on database instead of server
- Edit and delete artist and album routes
- Ability to show albums and artists on their own pages



frontend

- Add general CSS styling
- Add styling to forms
- Formatting images

Future Work

Artists (+) Music

enter album, artist, or year

SEARCH



Artists (+) Music

Blondie



My Albums



Artists (+) Music

Parallel Lines



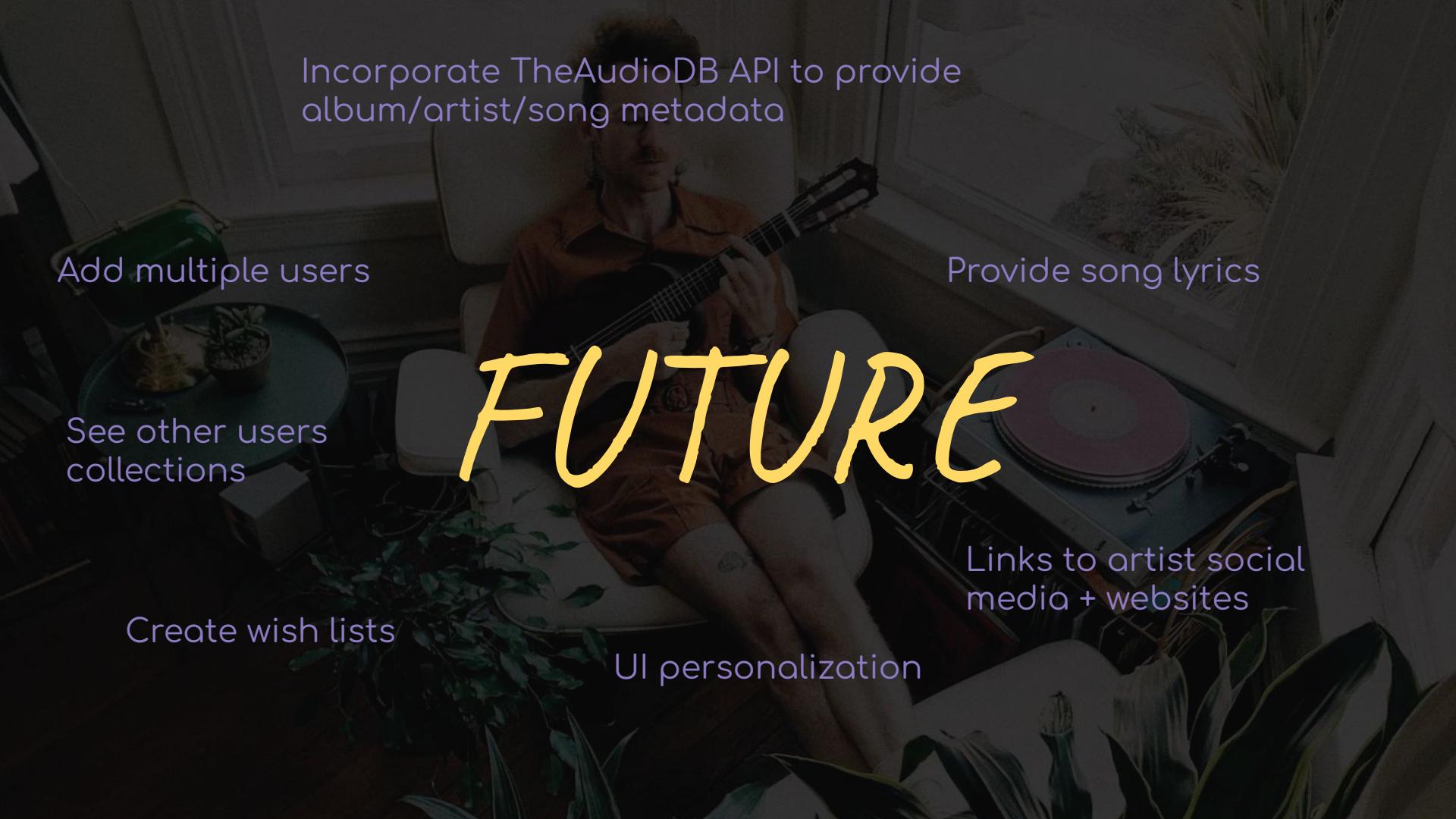
Edit Delete
View Artist

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