

EchoDAT

Subtitle

Enhanching Collaboration in the Musical Communities.

Team Members

Olawumi Damilola and Ayodele Ayomidotun

Together, Ayomidotun and I took charge of UI/UX, graphics, and frontend development. We worked closely to design user-friendly interfaces and ensure a smooth, interactive experience for users. Our combined skills in graphic design and coding helped bring the project to life, making it both functional and visually appealing.

Emmanuel Ayobami

Emmanuel, took the lead on our project as the Technical Lead and Backend Developer. He ensured that our database management was top-notch and that the backend ran smoothly. Emmanuel's technical skills helped in solving complex issues, and his contributions were key to making EchoDAT function seamlessly.

Project Description

- Overview: EchoDAT is a web application designed to enhance collaboration within music groups, choirs, and musical ensembles by providing a platform for project management, audio sharing, and real-time communication.
- Goal: Streamline the creative process and foster a collaborative environment for musical projects.

Learning Objectives

- Technical Skills: Develop proficiency in frontend and backend development, and implement real-time communication features.
- Project Management: Enhance skills in project planning, team collaboration, and use of agile methodologies.
- User Experience: Learn to create user-centric designs and interfaces.

Technologies Used

- Frontend: HTML,CSS and JAVASCRIPT
 - Backend: FLASK/PYTHON3
 - Database: MYSQL
 - Authentication: FLASK and Google OAUTH2
 - Real-Time Communication: FLASK/AJAX
 - Storage: MYSQL

Third-Party Services

- Cloud Storage: AWS S3 for audio file storage and
- management
 Authentication: AuthO for secure user authentication and authorization
 - Email Services: SendGrid for sendingnotifications and password reset emails

Challenges Identified

- Real-Time Functionality: Implementing real-time chat and notifications seamlessly • Audio Processing: Efficiently handling audio uploads and streaming
 - User Experience: Designing an intuitive and userfriendly interface for diverse user groups

Schedule of Work

Week 1: Initial Setup and Basic Functionality -User registration and authentication - Basic project and group creation Week 2: Core Features Development - Audio upload and sharing - Realtime chat and notifications Week 3: Testing and Refinement - Unit and integration testing - User feedback incorporation Week 4: Final Touches and Deployment - UI/UX enhancements -Deployment and final testing

Mock-ups

- Login and Registration: Visuals of the login and registration pages
 - Dashboard: User dashboard showing project and group management features
 - and group management features
 Project Page: Interface for creating and managing projects, uploading audio files, and real-time chat