STP Worship Vue.js/Python System



Project Description

A Python/Flask-based backend solution powering a theatre company's synchronized lyric and chord chart display system. This project addressed critical workflow challenges at Spiritual Twist Productions (STP) by replacing their unreliable, ad-filled Google searches.

Project Objectives

The system utilizes a Python backend server with Socket.IO to orchestrate real-time communication between devices, enabling synchronized page flips, song changes, and lyric updates across multiple displays. Additionally, it provides dedicated views for lyrics and chord charts alongside a streamlined mobile control interface, allowing worship leaders to concentrate on performance while other volunteers manage lyrics.

Highlights

- Built with Python/Flask backend and Vue.js frontend
- Self-contained WiFi network via Raspberry Pi
- Real-time device synchronization using Socket.IO
- Offline-capable system eliminating internet dependency
- Secure lockdown browser implementation on Android devices
- Custom control interface for remote lyric/page management
- Scalable solution adaptable to similar environments

Frontend Repo Backend Repo