

Architecture Diagram: React, FastAPI, Celery (Dockerized)

Overview

- **Frontend:** React (Single-Page Application)
- **Backend:** FastAPI (Python web framework)
- **Background Tasks:** Celery (Asynchronous task queue)
- **Message Broker:** Redis (Celery broker)
- **Database:** SQLite (File-based database)
- **Containerization:** Docker

Components

1. **Client (React)**
2. **Backend (FastAPI)**
 - Enqueues asynchronous tasks to Celery for background processing.
3. **Celery Worker**
 - Works on asynchronous audio file transcription jobs, in the background so that the API calls will not be blocked
4. **Redis**
 - Mainly for celery worker
5. **SQLite Database**
6. **Docker**