



# PlayWave: Video Streaming App

A MERN STACK VIDEO STREAMING WEBSITE WITH  
FFMPEG

# Project Overview

- ▶ Objective: Develop a scalable and efficient video streaming platform using MERN stack and FFmpeg.

# Scope of Work

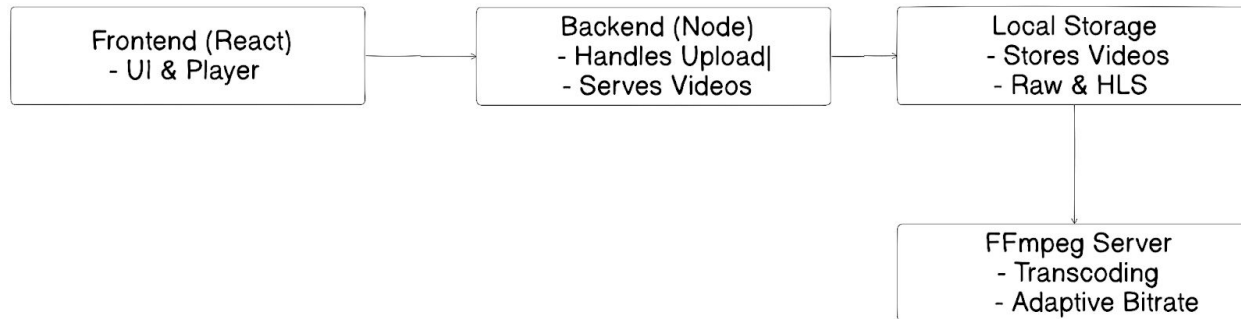
- ▶ - Video upload and storage (Local)
- ▶ - FFmpeg integration for video encoding
- ▶ - Real-time video streaming
- ▶ - Responsive UI using React.js

# Technology Stack

- ▶ - Frontend: React.js, TailwindCSS
- ▶ - Backend: Node.js, Express.js
- ▶ - Streaming: FFmpeg, HLS/DASH
- ▶ - Deployment: Vercel, Netlify

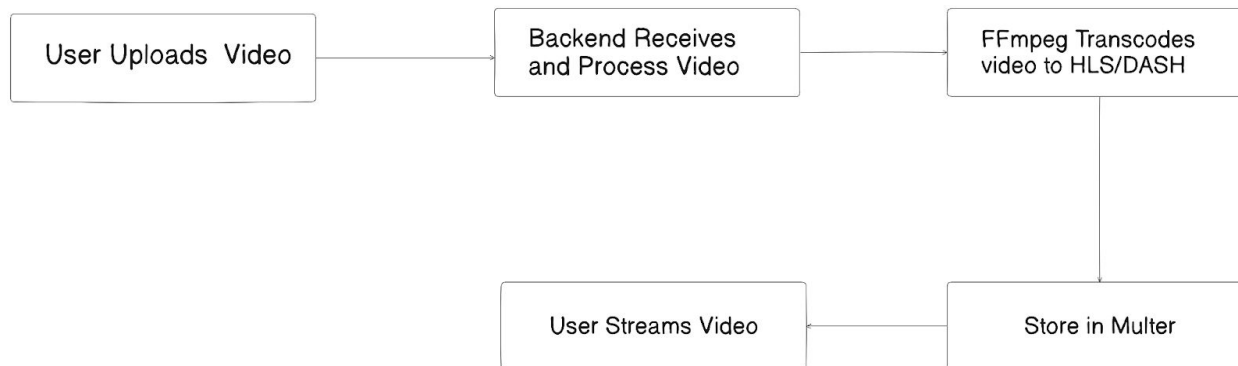
# System Architecture

- ▶ - Frontend (React.js): Handles UI and interactions
- ▶ - Backend (Node.js, Express.js): Manages video processing
- ▶ - FFmpeg Server: Transcodes video for streaming



# Data Flow

- ▶ 1. User uploads video
- ▶ 2. Server processes video using FFmpeg
- ▶ 3. Video is stored locally
- ▶ 4. User streams video via React Player



# Project Milestone

- ▶ Day 1 milestone: Requirement Gathering
- ▶ Day 2 milestone: UI/UX Design
- ▶ Day 3 milestone: Backend Development
- ▶ Day 4 milestone: FFmpeg Integration
- ▶ Day 5 milestone: Frontend Development
- ▶ Day 6 milestone: Testing & Deployment

# Conclusion

- ▶ PlayWave enables seamless video streaming with adaptive bitrate capabilities, providing a scalable and efficient solution.