RIKESH SHERPA

PROJECTS

VideoFlow | Scalable Video Processing Platform Link

Tech Stack: Next.js, Docker, Redis Streams, FFmpeg, MinIO, Firebase

- Architected a distributed video processing pipeline using Docker to containerize and horizontally scale worker services, enabling the system to handle 10+ concurrent video uploads.
- Decoupled pub/sub architecture with Redis Streams and consumer groups to create a resilient job queue, ensuring reliable video transcoding by worker instances..
- Implemented secure media storage and delivery using MinIO (S3-compatible) object storage, serving video content to the frontend via time-sensitive signed URLs.

GamIt | Competitive Gaming Hub Link

Tech Stack: Next.js (Server Components), Prisma, PostgreSQL, JWT

- Developed two interactive games featuring real-time leaderboards and automated scoring, leveraging Next.js Server Actions for efficient, secure data mutations.
- Designed a reward system that grants exclusive avatars to top players, successfully enhancing user engagement and retention.

Blind Assistant | Hackathon Project Link

Tech Stack: React, TensorFlow.js, Web Speech API, Tailwind CSS

- Developed two interactive games featuring real-time leaderboards and automated scoring, leveraging Next.js Server Actions for efficient, secure data mutations.
- Designed a reward system that grants exclusive avatars to top players, successfully enhancing user engagement and retention.

WORK EXPERIENCE

Frontend Developer | Tuki Logic

August 2023 - January 2024

- Developed a responsive web application using Next.js and Tailwind CSS, integrating RESTful APIs to render dynamic content from a headless CMS..
- Restructured the admin panel's complex forms into a tabbed, multi-section layout with controlled components, streamlining data entry and reducing input time by an estimated 30%.
- Collaborated directly with the backend team to integrate new API endpoints, ensuring smooth data flow and resolving bugs across production applications.

LEADERSHIP & COMMUNITY ENGAGEMENT

Creative Director | Prime IT Club

- Conducted a hands-on workshop on Git/GitHub and version control for 30+ students, improving the technical proficiency of club members
- Volunteered community outreach programs, teaching HTML, CSS, and JavaScript fundamentals to local school students of various age groups.
- Currently mentoring 6 students in a focused course on web design principles and modern web development practices.

Technical Writing Link

• Authored a blog post explaining multi-worker concurrency and distributed processing based on the video-pipeline project.

SKILLS

- Languages: JavaScript (ES6+), TypeScript
- Frontend: React, Next.js (App Router, Server Actions), Redux Toolkit, Tailwind CSS, Cypress
- Backend: Node.js, Express.js, RESTful APIs, Prisma ORM
- Databases & Storage: PostgreSQL, Firebase, MinIO (S3)
- Tools: Docker, Redis (Streams), Git/GitHub, Postman, FFmpeg