

Kanishk Singh



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Personal Portfolio



[linkedin.com/in/kanishk18044/](https://www.linkedin.com/in/kanishk18044/)



github.com/kanishkIIITD

Education

Indraprastha Institute of Information Technology, Delhi

B.Tech. in Computer Science

The Air Force School

CBSE

Graduated Jan 2024

Delhi, New Delhi

Graduated Mar 2018

Delhi, New Delhi

Experience

FREELANCE - LIVE STREAMER STATUS | [LINK](#)

Aug 2024 – Oct 2024

Full Stack Developer

Remote

- Developed a real-time web application for tracking live streamers, improving user engagement for around 100 daily users.
- Implemented a **100% automated monitoring system** with a cron job to check and update live statuses, eliminating manual monitoring and enhancing data accuracy.
- Integrated Twitch and YouTube APIs to fetch real-time data on streamers, including their live status and content, leading to a significant increase in user interaction.
- Utilized **Redis for caching** API requests, improving performance by 40%, reducing server response times, and cutting down API costs through rate limiting.
- Added a **dark mode feature** based on user feedback, which improved the overall user experience and increased retention.

Tech Stack: ReactJS, Node.js, Express.js, MongoDB, Redis, YouTube API, Twitch API

Projects

REMOTE CODE EXECUTION PLATFORM ([LINK](#)) | *ReactJS, Node.js, Express.js, Docker, Redis, Bull, Nginx*

- Built a scalable remote code execution platform supporting multiple languages (JavaScript, Python, Java, C++), allowing users to submit and execute code in isolated environments.
- Improved job processing efficiency by 40% by leveraging **Docker containerization** and **Redis-backed Bull queues** for managing asynchronous tasks.
- Scaled the system horizontally by deploying **Nginx load balancing**, enabling the platform to handle concurrent requests seamlessly and manage multiple app instances.
- Secured the execution environment with **seccomp profiles**, which confined potential harmful attacks within containers, safeguarding the host system.
- Achieved fast execution times, with most code submissions processed in **less than 2 seconds**, ensuring a quick response for users.
- Used **dynamically generated language-specific Docker containers** to achieve secure and isolated code execution environments.

EDTECH PLATFORM – STUDYNOTION ([LINK](#)) | *ReactJS, Node.js, Express.js, MongoDB, Razorpay API, Cloudinary, JWT, Bcrypt*

- Developed a fully functional ed-tech platform for creating and consuming educational content.
- Integrated Razorpay** for payment processing, increasing purchase success rates by 30%.
- Implemented **OTP-based user authentication**, along with **JWT-based session management** and **role-based access control**, enhancing security across the platform.
- Reduced media load times by 20% through optimized storage with **Cloudinary**.

Technical Skills

Languages & Programming: C++, JavaScript (ES6+), Java

Web Development: React.js, TailwindCSS, Node.js, Express.js, Redux, JWT, Bcrypt, REST APIs

Tools & DevOps: Docker, Dockerode, Nginx, BullMQ, Git, Postman, PM2, Linux

Databases & Others: MongoDB, Redis, Mongoose, Arduino, Raspberry Pi, Vercel, Render, Netlify, SCRUM

Certificates

Web Development Bootcamp[Mern Stack] by Codehelp | [CERTIFICATE](#)

- Completed a 4.5-month intensive MERN stack bootcamp focused on real-world applications, deployment best practices, and Git workflows.