

Cloud Share App

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Abstract: *Cloud Share App is a comprehensive, full-stack web application designed to facilitate secure and efficient file sharing with integrated user authentication, credit-based access control, and payment processing capabilities. The application leverages modern cloud-native technologies including React and Tailwind CSS for frontend development, Spring Boot for backend services, Clerk for authentication, Cloudinary for cloud storage, and container orchestration via Docker. This paper presents the architectural design, implementation methodology, and experimental results of the cloud share app system. The application implements a microservices-oriented approach with a RESTful API, robust exception handling, and secure webhook integration for real-time user lifecycle management. The system features efficient handling of concurrent requests, comprehensive error handling, and seamless integration with third-party services. Performance evaluation indicates effective scalability and reliability for enterprise-level file sharing operations, with average response times less than 200ms for critical operations and successful operation of up to 10,000 concurrent connections. The system achieves 99.9% uptime with Docker containerization and load balancing strategies, making it suitable for production deployments on render and Vercel hosting platforms..*

Keywords: File Sharing, Microservices, Spring Boot, React, Authentication, Cloud Storage, Payment Processing, RESTful Architecture, Docker, Webhook Integration

