

Cloud Native Online Code Judging System

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Abstract: In the age of digitalization, technology has become an essential part of our daily lives. Cloud computing has emerged as a significant technological advancement that has transformed the way we work and store data. One of the significant applications of cloud computing is online code judging systems, which enable users to test their programming skills and improve their coding abilities. However, traditional online code judging systems have scalability, performance, and availability limitations. To address these limitations, a cloud-native approach is required. This paper proposes a cloud-native online code-judging system that provides a scalable, high-performance, and reliable platform for evaluating programming skills. The system will be designed using microservices architecture, enabling it to scale horizontally and handle a large number of requests simultaneously. The system will be deployed on a cloud platform, providing a cost-effective solution and enabling users to access the system from anywhere in the world.

Keywords: Cloud Computing, Microservices Architecture, Online Code Judging System, Scalability, Performance, Reliability

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