Ensuring Quality in DevOps Culture

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Abstract : Integrating quality assurance (QA) practices into DevOps culture has become increasingly important in modern software development environments. Collaboration, automation and continuous feedback characterize the seamless integration of DevOps development and operations teams to achieve rapid and reliable software delivery. In this context, quality assurance plays a key role in ensuring that software products meet the highest quality, performance and reliability standards throughout the development life cycle. This brief explores key principles, challenges, and best practices related to quality assurance in a DevOps culture. This emphasizes the importance of quality transfer in the development process, as quality control processes are integrated in every step of the DevOps process. Automation is the cornerstone of DevOps quality assurance, enabling continuous testing, integration and deployment and providing rapid feedback for early problem identification and resolution. In addition, the summary addresses the cultural and organizational challenges of implementing quality assurance in DevOps, emphasizing the need to foster collaboration, break down silos, and promote a culture of continuous improvement. It also discusses the importance of toolchain integration and capability development to support effective QA practices in DevOps environments. Moreover, the abstract discusses the cultural and organizational challenges in implementing QA within DevOps, emphasizing the need for fostering collaboration, breaking down silos, and nurturing a culture of continuous improvement. It also addresses the importance of toolchain integration and skills development to support effective QA practices within DevOps environments. Overall, this collection works at the intersection of QA and DevOps culture, providing insights into how organizations can use DevOps principles to improve software quality, accelerate delivery, and meet the changing demands of today's dynamic software. landscape.

Keywords : quality engineer, devops, automation, tool

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