Red Hat DevOps Pipelines and Processes: CI/CD with Jenkins, Git, and Test Driven Development

Kód kurzu: DO400

Build essential skills to implement agile and DevOps development processes and workflows.DevOps practices have enabled organizations to undergo a digital transformation, moving from a monolithic waterfall approach to a rapidly deploying cloud-based agile process. This transformation requires a team of developers trained to use tools that enable them to spend more time coding and testing and less time troubleshooting. Red Hat DevOps Pipelines and Processes: CI/CD with Jenkins, Git, and Test-Driven Development (TDD) is a practical introduction to DevOps for developers that teaches students the necessary skills and technologies for automated building and deploying of cloud-native applications.

Pro koho je kurz určen

This course is designed for application developers.

Co Vás naučíme

- Version control with Git
- Build and execute Jenkins pipelines
- Release strategies
- Build applications with Test Driven Development
- Security scanning and code analysis of applications
- Monitor applications and pipelines
- Consume and troubleshoot pipelines

Požadované vstupní znalosti

- Experience with application development or Red Hat Application Development I: Programming in Java EE (AD183)
- Proficiency in using an IDE such as Red Hat® Developer Studio or VSCode
- Introduction to OpenShift Applications (DO101) (Recommended, not required)
- Take our free assessment to gauge whether this offering is the best fit for your skills.

Studijní materiály

Studijní materiál Red Hat

Osnova kurzu

Introduction to continuous integration and continuous deployment (CI/CD)
- Describe the principles of DevOps and the role of Jenkins.

Integrate source code with version control
- Manage source code changes with Git version control.

Test applications
- Describe the foundational principles behind comprehensive application testing and implement unit, integration, and functional testing.

Build applications with test-driven development
- Implement and build application features with TDD.

Author pipelines
- Create basic pipelines to run Jenkins jobs.

Deploy applications with pipelines
- Safely and automatically deploy applications to Red Hat OpenShift Container Platform.

Implement pipeline security and monitoring
- Manage the security and monitor the performance of pipelines.

Consume pipelines
- Work with (or ¨Use¨) and troubleshoot CI/CD pipelines for automated deployment and automated testing.

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