

Quiz 10 - DevOps in Practice - Results



Attempt 1 of 2

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Attempt Score 4.42 / 5 - 88.34 %

Overall Grade (Highest Attempt) 4.42 / 5 - 88.34 %

Question 1

1 / 1 point

According to the authors (Christof Ebert and Lorin Hochstein), DevOps may be seen as multiple things. Mark all the options that they assert that DevOps is.

Select 3 correct answer(s)

- ☐ It is a culture of returning to the origins of past developers from the 1950s, that were both skilled in IT operations and software development.
- ☐ It is the technology that allows storing different software versions in different branches of version control systems.
- ☒ It is a mix of culture, process and technology to foster collaboration between software developers and IT operations people.
- ☒ It is an agile method to facilitate collaboration between development, delivery and operations.
- ☒ It is related to heavy technology changes, but it is mainly a paradigm shift.
- ☐ It is an agile process that came to replace existing processes such as Scrum and Kanban.

Question 2

1 / 1 point

According to the authors (Christof Ebert and Lorin Hochstein), in the main text of the paper they systematize DevOps' best practices from their consulting experience. Mark all the options that describe this set of best practices.

Select 3 correct answer(s)

- ☐ DevOps does not handle cybersecurity, being this task a specialty field for cybersecurity engineers.
- ☐ DevOps only works well with cloud computing systems due to the nature of deployment that it proposes.
- ☒ DevOps may be tailored to different types of systems such as cloud computing, critical systems and embedded systems.
- ☒ In DevOps, software developers build an additional set of skills related to the testing and release environment.
- ☐ In DevOps, software developers periodically change their roles, spending, for instance, an year as developer and another year as IT operations.
- ☒ DevOps optimizes for velocity, but doing this may have some negative consequences such as the increase of technical debt.

Question 3

0.75 / 1 point

According to the authors (Christof Ebert and Lorin Hochstein), in the case study, they show how DevOps works in a company like Netflix. Mark all the options that describe the set of DevOps' best practices at Netflix.

Select 4 correct answer(s)

- ☒ There is a tradeoff between velocity and stability that is handled by the same group of people, since they now handle together development and operations.
- ☒ They use a mix of different tools for CI and CD, most of them open source. Whenever needed, they develop their own tools.
- ☐ Experiences in operations is only shared during an incident. No later discussions are needed since all the team that owns a given service fixes the issues happened during the incident.
- ☒ CI/CD is facilitated by the use of integrated tools such as GitLab or GitHub.
- ☐ Part of the application follows a client-server architecture, while the other part is based on microservices.
- ☐ The use of a microservices architecture where each service is owned by a team.
- ☒ They provide observation of their operations by means of tools that provide telemetry and dashboards.

Question 4

1 / 1 point

According to the authors (Christof Ebert and Lorin Hochstein), they attribute the success of DevOps in Netflix to multiple factors. Mark all the options that describe this set of factors that led to their DevOps success.

Select 3 correct answer(s)

- ☒ The choice of a software architecture based on microservices, each one owned by one team.
- ☐ A combination of different DevOps processes for the embedded systems software and the cloud computing software.
- ☐ Separating the role of microservice architect from the regular software developers, which allows some people in the team to develop an expertise of the combined development and operations.
- ☒ The fact that each team that builds a service is responsible for running it.
- ☒ Developers learn new skills related to troubleshooting operations and coordinating their work during incidents.
- ☐ The use of tools from Atlassian such as Jira, Trello and Bitbucket makes their DevOps process reliable.

Question 5

0.667 / 1 point

The authors (Christof Ebert and Lorin Hochstein) derive a set of recommendations for successful DevOps' adoption in software companies. Mark all the options that describe those recommendations.

Select 3 correct answer(s)

- ☐ Break complex software into chunks that can be developed by the whole set of developers in the company, since agile processes like DevOps require collective code property.
- ☐ Reuse existing standards and software as building blocks of the DevOps process, focusing on the differentiating features.
- ☒ Bridge the cultures of development and operations.
- ☒ Top management must support the effort to transition the company into using DevOps.
- ☒ Set a distributed organization in the company to allow testing different DevOps configurations, feature-based development and safety.
- ☐ Reengineer all the legacy systems existent in the company.

Done