Day 42

DIY

DIY Questions:

1.You are analyzing the timeline and stages of development and deployment of software to trigger a notification for every error. Into which stage will you categorize the staging process?

a) Source

b) Build

c)Test

d)Deploy

Ans:

c)Test

2.In which of the following stages of CICD pipelines a change in code triggers a notification to a Ci/CD tool that runs the corresponding pipeline?

a) Build

b) Test

c)Source

d)Deploy

Ans:

c)Source

3.What will be the correct sequence/approach to implement a project in DevOps?

a) Assess project, Create POC and Implement project.

b) Create POC, Develop the project, and Deploy.

c)Create POC, Create Infrastructure, and Deploy the project.

d)Assess project, Test project implementation and Deploy the project.

Ans:

1. Assess project, Create POC and Implement project.

4.Before running the actual tests in a company with a CI/CD pipeline, an automated code review of inspection is conducted on the code. The reviewing part includes checking the coding “grammar” standards, architectural layering adherence, code duplication, and many others. In which of the following step in CI/CD Pipeline is this process performed

a) Continuous Integration

b) Continuous Testing

c) Continuous Delivery

d)Continuous Inspection

Ans:

d)Continuous Inspection

5.An organization uses CI/CD Pipeline to improve its software development process. One of the key aspects of Continuous Integration in the CI/ CD Pipeline is to see how the builds are performing, gather important metrics, document those outcomes, and generate continuous feedback through continuous builds? What are the benefits of having these metrics in place?

1.Investigate and improve any infrastructure resources to reduce the build duration.

2.Evaluating and improving the performance of these tests can dramatically reduce build duration.

3.If developers do not frequently commit code to a version control repository, perform a high-level analysis of the integration build environment to determine the bottlenecks.

Choices

a)1 and 2

b)2 and 3

c)1 and 3

d) All of these

Ans:

d)All of these

6.Explain a use case where DevOps can be used in industry/real life?

Ans:

Before adopting the DevOps model, Netflix faced several challenges in their software development and delivery processes. They struggled with slow and infrequent releases, often taking months to deploy new features and updates. This led to a lack of agility and responsiveness to customer demands. Additionally, the traditional siloed approach between development and operations teams resulted in communication gaps and delays in resolving issues. These issues hindered Netflix's ability to innovate, scale their infrastructure, and provide a seamless streaming experience to their users.

However, with the implementation of DevOps, Netflix experienced significant benefits. They were able to achieve faster time to market by automating their build, test, and deployment processes. Continuous integration and delivery allowed them to release updates frequently and reliably, ensuring a rapid delivery of new features and bug fixes. This improved responsiveness to customer needs and provided a competitive edge in the market. Additionally, by fostering collaboration and breaking down silos between teams, Netflix was able to improve communication, enhance efficiency, and reduce time spent on resolving issues. The scalability and resilience of their infrastructure were also improved, enabling them to handle the massive scale of streaming traffic efficiently. Overall, DevOps transformed Netflix's software development and delivery practices, enabling them to innovate rapidly, deliver high-quality experiences, and maintain their position as a leader in the streaming industry.

7.Mention some of the core benefits of DevOps?

Ans:

- Faster and more frequent software releases

- Improved collaboration and communication between teams

- Higher software quality and fewer defects

- Increased stability and reliability of applications

- Scalability and flexibility to meet changing demands

- Continuous feedback and improvement through monitoring and analytics

- Alignment with agile and iterative development methodologies

- Enhanced efficiency and productivity

- Reduced time-to-market

- Cost optimization through automation and resource management

-Customer satisfaction is enhanced