

DevOps Specialist – Test

Scenario

Kubernetes clusters are very dynamic since pods can be ephemeral and could be removed or destroyed anytime so sometimes companies want to test the resilience of workloads in advance by killing these pods on purpose.

As a DevOps Specialist, you are being asked to create an application called "ChaosMonkeyPod" that runs within a Kubernetes cluster and interacts with the Kubernetes API server by deleting a random pod in the namespace "testing" on a schedule.

Requirements

- Source code implemented in Java (you can use whatever framework you can, for example Spring Boot).
- Dockerfile to build the image for the application
- Kubernetes manifests to run this in a cluster
- Dummy workloads in the "testing" namespace as target (you can use public nginx image or similar).

Notes

Please note that the application does not need to be production-ready and that the task should not take more than 3 hours to complete. Evaluation will be based on functionality, understanding of Kubernetes, unit tests, code quality and readability, Dockerfile, and the README.

Be careful to target your implementation against the "testing" namespace. You can submit your code by sharing a link to a Github repository.

Bonus

If you have extra time, consider adding an option that allows the application to kill pods only if they have a specific label and document how a user would configure it.