Google Cloud

Partner Certification Academy

Professional Cloud Developer

v2309

Quiz questions: Kubernetes Engine*

** These are for practice only and are not actual exam questions*

A large mobility company is using Google Kubernetes Engine (GKE) to scale its application to reach new markets and serve more users. Which of the following are benefits of using GKE for this purpose?

A. GKE is a managed Kubernetes service that makes it easy to deploy and manage containerized applications.
B. GKE is highly scalable and can easily handle increases in traffic.
C. GKE is secure and reliable, with built-in features like auto-healing and load balancing.
D. All of the above.

How does per-pod billing in GKE Autopilot ensure that you only pay for your running pods?

A. GKE Autopilot automatically scales your pods up and down based on demand, so you only pay for the pods that you are actually using.
B. GKE Autopilot charges you for system components, such as the Kubernetes control plane or the node operating system.
C. GKE Autopilot charges you for unallocated capacity, which is the capacity that is not being used by your pods.
D. Because you can control everything like clusters, pods, nodes and containers by yourself

You are a developer who is deploying an application on Google Kubernetes Engine (GKE). You are considering whether to use a single-zone cluster or a multi-zonal cluster. Which of the following factors should you consider when making your decision?

A. The availability requirements for your application.
B. The cost of the cluster.
C. The latency requirements for your application.
D. The number of nodes in the cluster.

You are a developer who is deploying a stateful application on Kubernetes. Which of the following statements are false about stateful applications?

A. Stateful applications store data or application state to the cluster or to persistent storage.

B. Kubernetes uses the StatefulSet controller to deploy stateful applications as Pods with unique identities.
C. The desired state of a stateful application can be changed dynamically through updates to the StatefulSet's Pod specification.
D. Stateful applications are in contrast to stateless applications, which do not store data or application state to the cluster or to persistent storage.

Answers

A large mobility company is using Google Kubernetes Engine (GKE) to scale its application to reach new markets and serve more users. Which of the following are benefits of using GKE for this purpose?

(D) All of the answers are benefits of using GKE for scaling applications.
https://cloud.google.com/customers/acciona-mobility/
https://cloud.google.com/kubernetes-engine/docs/concepts/kubernetes-engine-overview

How does per-pod billing in GKE Autopilot ensure that you only pay for your running pods?

(A) Per-pod billing: In GKE Autopilot, you are billed for each pod that is running.
Automatic scaling: GKE Autopilot automatically scales your pods up and down based on demand. B GKE Autopilot does not charge you for system components, such as the Kubernetes control plane or the node operating system. C

GKE Autopilot does not charge you for unallocated capacity, which is the capacity that is not being used by your pods. D GKE Autopilot is a managed service, which means that Google manages the underlying infrastructure for you. https://cloud.google.com/kubernetes-engine/docs/concepts/autopilot-overview

You are a developer who is deploying an application on Google Kubernetes Engine (GKE). You are considering whether to use a single-zone cluster or a multi-zonal cluster. Which of the following factors should you consider when making your decision?

(A). The availability requirements for your application are the most important factor to consider when choosing between a single-zone cluster and a multi-zonal cluster. A single-zone cluster is more vulnerable to outages than a multi-zonal cluster because it is only running in one zone. If the zone where the single-zone cluster is running experiences an outage, then your application will be unavailable. A multi-zonal cluster is more resilient to outages because it is running in multiple zones. If one zone experiences an outage, then your application will continue to run in the other zones.
https://cloud.google.com/kubernetes-engine/docs/how-to/creating-a-zonal-cluster

You are a developer who is deploying a stateful application on Kubernetes. Which of the following statements are false about stateful applications?

(D) is true about stateless applications, but not stateful applications.
https://cloud.google.com/kubernetes-engine/docs/how-to/stateless-apps