

Unit 3 - Week 1: What's the cloud anyway? Start with a solid platform

Course outline
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Week 1: What's the cloud anyway? Start with a solid platform
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Assignment 1

The due date for submitting this assignment has passed. **Due on 2020-03-04, 23:59 IST.**
 As per our records you have not submitted this assignment.

- Google Cloud Platform (GCP) provides a variety of service choices. Which of the following services is infrastructure as a service (IaaS)? **1 point**

 - App Engine
 - Cloud Function
 - Compute Engine
 - Google Kubernetes Engine

No, the answer is incorrect.
Score: 0
Feedback:
Compute Engine is the correct answer. With IaaS, only the underlying architecture is provided. The user still has to select and care for an operating system and install the required applications.
Accepted Answers:
 Compute Engine
- The Google Cloud Platform (GCP) hierarchy helps you manage resources across multiple departments and multiple teams within an organization. Which of the following is at the top level of this hierarchy? **1 point**

 - Folder
 - Organization
 - Project
 - Resource

No, the answer is incorrect.
Score: 0
Feedback:
The top level of a GCP hierarchy is an organization. Permissions set on the organization will be inherited by all child resources.
Accepted Answers:
 Organization
- Cloud Identity and Access Management (Cloud IAM) allows you to manage privileges. What do these privileges apply to? **1 point**

 - Applications.
 - Operating systems
 - Google Cloud Platform (GCP) resources
 - Applications, GCP, and operating systems

No, the answer is incorrect.
Score: 0
Feedback:
IAM only applies to the GCP resources you use. Application and operating system security must be handled separately.
Accepted Answers:
 Google Cloud Platform (GCP) resources
- Projects form part of the Google Cloud Platform (GCP) resources hierarchy. Which of the following is true concerning projects? **1 point**

 - Projects are only used for billing
 - You can nest projects inside projects
 - Projects are allocated a changeable Project ID
 - All resources must be associated with a project

No, the answer is incorrect.
Score: 0
Feedback:
The GCP resources you use, no matter where they reside, must belong to a project
Accepted Answers:
 All resources must be associated with a project
- Google Cloud provides resources in multi-regions, regions, and zones. What best describes a zone? **1 point**

 - An edge location
 - One or more data centers.
 - A point of presence (PoP)
 - Geographic location to leverage services

No, the answer is incorrect.
Score: 0
Feedback:
Regions are made up of zones. Each Region will have at least 3 data centers or zones to provide high availability.
Accepted Answers:
 One or more data centers.
- What type of service best describes Google Kubernetes Engine? **1 point**

 - Hybrid
 - IaaS
 - PaaS
 - SaaS

No, the answer is incorrect.
Score: 0
Feedback:
GKE is a hybrid service. On the one hand, the infrastructure is managed for Kubernetes. But you still have to run Kubernetes to build your applications
Accepted Answers:
 Hybrid
- Which of the following best describes a major advantage GCP has over other cloud providers? **1 point**

 - Google uses satellite links as a way of interconnecting Regions, Zones, and POPS
 - Google leverages traditional networking gear from commercial vendors
 - Google leases fiber from multiple vendors. In the event of a vendor's fiber failing, another vendor's network can be used as a backup
 - Google owns one of the largest networks in the world. All regions and zones are connected on the same network

No, the answer is incorrect.
Score: 0
Feedback:
Google owns one of the world's largest networks with 100,000s of kilometers of fiber and over 100 POPs all interconnecting regions and zones. The network also leverages multiple intercontinental fiber connections
Accepted Answers:
 Google owns one of the largest networks in the world. All regions and zones are connected on the same network
- Regions are independent geographic areas on the same continent. Which of the following is a regional service? **1 point**

 - Cloud Datastore
 - HTTPS Load Balancer
 - Network
 - Virtual machine

No, the answer is incorrect.
Score: 0
Feedback:
Cloud Datastore is an example of a service that is regional. HTTPS load balancers and networks are global, and virtual machines are zonal
Accepted Answers:
 Cloud Datastore
- What is the purpose of a folder? **1 point**

 - Used to organize projects
 - Used to organize instances
 - Used to organize users
 - Folders are not part of the hierarchy

No, the answer is incorrect.
Score: 0
Feedback:
Folders are used to organize projects. You can put projects or other folders into a folder
Accepted Answers:
 Used to organize projects
- What does it mean for a system to be elastic? **1 point**

 - The system is multi-cloud.
 - The system can bounce back after an outage.
 - The system can be moved from region to region.
 - The system can add and remove resources based on need

No, the answer is incorrect.
Score: 0
Feedback:
Elastic systems can add or remove resources based on performance needs
Accepted Answers:
 The system can add and remove resources based on need
- How would you configure the Cloud SDK to work on your laptop? **1 point**

 - Edit the .profile file of the SDK
 - Run the gcloud init command
 - Sync your laptop with Cloud Shell
 - Download the config file from https://cloud.google.com

No, the answer is incorrect.
Score: 0
Feedback:
The gcloud init command sets your login, your default project, and your default region and zone
Accepted Answers:
 Run the gcloud init command
- Which command line tool can be used to manage Cloud Storage? **1 point**

 - bq
 - Cloud Shell
 - gcloud
 - gsutil

No, the answer is incorrect.
Score: 0
Feedback:
The gsutil CLI tool is used for managing Cloud Storage
Accepted Answers:
 gsutil
- When using Cloud Shell you must also install the Cloud SDK locally to manage your projects and resources **1 point**

 - True
 - False

No, the answer is incorrect.
Score: 0
Feedback:
The answer is False. s3config is not a command-line option. gcloud (all), gsutil (Cloud Storage), and bq (BigQuery) are the command-line options that are part of the Cloud SDK
Accepted Answers:
 False
- Cloud Shell code editor is one of the developer tools built into the GCP console **1 point**

 - True
 - False

No, the answer is incorrect.
Score: 0
Feedback:
The answer is True. Cloud Shell, Cloud Shell code editor, and Cloud Source Repositories are all examples of developer tools built into the GCP console.
Accepted Answers:
 True
- Every GCP service you use is associated with a project. Which of the following statements regarding projects are correct? **1 point**

 - Projects have a single owner.
 - A project cannot be restored once deleted
 - Projects are billed and managed collectively
 - Projects are the basis for enabling and using GCP services
 - Each project is a separate account, and each resource belongs to exactly one

No, the answer is incorrect.
Score: 0
Feedback:
Projects are the basis for enabling and using GCP services, like managing APIs, enabling billing, adding and removing collaborators, and enabling other Google services. Each project is a separate account, and each resource belongs to exactly one. Projects can have different owners and users. They're billed separately, and they're managed separately
Accepted Answers:
 Projects are the basis for enabling and using GCP services
 Each project is a separate account, and each resource belongs to exactly one
- How would you configure billing notifications in GCP? **1 point**

 - Configure budgets and alerts.
 - Set up a billing alert in Stackdriver
 - Use Cloud Functions to fire off an email with daily budget totals
 - Enable a script using cron to kick off when a threshold is reached

No, the answer is incorrect.
Score: 0
Feedback:
To be notified when costs approach your budget limit, you can define a budget and create an alert
Accepted Answers:
 Configure budgets and alerts.
- What best describes the purpose of quotas? **1 point**

 - Quotas are used to send billing alerts
 - Configuration used to prevent billing surprises.
 - Configuration used by Google to prevent building large systems
 - Configuration used to prevent over consumption due to malicious attacks.
 - Quotas can automatically build infrastructure based on Stackdriver metrics

No, the answer is incorrect.
Score: 0
Feedback:
Google Cloud Platform (GCP) enforces quotas on resource usage, setting a hard limit on how much of a particular GCP resource a project can use. Quotas are designed to help prevent billing surprises and to prevent overconsumption of resources due to malicious attacks
Accepted Answers:
 Configuration used to prevent billing surprises.
 Configuration used to prevent over consumption due to malicious attacks.
- s3config is a command-line option for the Cloud SDK? **1 point**

 - True
 - False

No, the answer is incorrect.
Score: 0
Feedback:
The answer is False. s3config is not a command-line option. gcloud (all), gsutil (Cloud Storage), and bq (BigQuery) are the command-line options that are part of the Cloud SDK
Accepted Answers:
 False
- How would you test a Google API and learn how it works? **1 point**

 - Use the help files in Cloud Shell
 - Use the gcloud command in the Cloud SDK
 - Use the APIs Explorer that is part of the GCP console
 - Use the console to get the directions on how to build the api by service

No, the answer is incorrect.
Score: 0
Feedback:
APIs Explorer helps you learn about the APIs interactively. It lets you see what APIs are available, in what versions, as well as how they work
Accepted Answers:
 Use the APIs Explorer that is part of the GCP console
- In what format will a majority of the APIs return data in? **1 point**

 - JSON
 - TEXT
 - XML
 - YAML

No, the answer is incorrect.
Score: 0
Feedback:
The format an API will return data in is JSON.
Accepted Answers:
 JSON