

Resources and Next Steps

Debrief



This slide is used for Q&A during the Instructor Led version of this class.
<https://pixabay.com/en/question-question-mark-response-1015308/>

Quiz



Sample Exam Questions

The questions with solutions are provided to you in module 7.

<https://pixabay.com/en/quiz-exam-questionnaire-2137664/>

Preparation resources

Storage and Database Documentation

Disks: <https://cloud.google.com/compute/docs/disks/> | <https://cloud.google.com/bigtable/docs/choosing-ssd-hdd>

Cloud Storage: World-wide storage and retrieval of any amount of data at any time
<https://cloud.google.com/storage/docs/>

Cloud Memorystore: Fully managed in-memory data store service. <https://cloud.google.com/memorystore/docs/redis/>

Cloud SQL: MySQL and PostgreSQL database service. <https://cloud.google.com/sql/docs/>

Cloud Datastore: NoSQL document database service. <https://cloud.google.com/datastore/docs/>

Cloud Firestore: Store mobile and web app data at global scale. <https://cloud.google.com/firestore/docs/>

Firebase Realtime Database: Store and sync data in real time. <https://firebase.google.com/docs/database/>

Cloud Bigtable: NoSQL wide-column database service. <https://cloud.google.com/bigtable/docs/>

Cloud Spanner: Mission-critical, scalable, relational database service. <https://cloud.google.com/spanner/docs/>

Preparation resources

Data Analytics Documentation

BigQuery: A fully managed, highly scalable data warehouse with built-in ML. <https://cloud.google.com/bigquery/docs/>

Cloud Dataproc: Managed Spark and Hadoop service. <https://cloud.google.com/dataproc/docs/>

Cloud Dataflow: Real-time batch and stream data processing. <https://cloud.google.com/dataflow/docs/>

Cloud Datalab: Explore, analyze, and visualize large datasets. <https://cloud.google.com/datalab/docs/>

Cloud Dataprep: Cloud data service to explore, clean, and prepare data for analysis. <https://cloud.google.com/dataprep/docs/>

Cloud Pub/Sub: Ingest event streams from anywhere, at any scale. <https://cloud.google.com/pubsub/docs/>

Google Data Studio: Tell great data stories to support better business decisions.
<https://marketingplatform.google.com/about/data-studio/> | Videos and tutorials are built into the interface of the product.

Cloud Composer: A fully managed workflow orchestration service built on Apache Airflow.
<https://cloud.google.com/composer/docs/>

Preparation resources

Machine Learning Documentation

Cloud Machine Learning Engine: Build superior models and deploy them into production.
<https://cloud.google.com/ml-engine/docs/>

Cloud TPU: Train and run ML models faster than ever. <https://cloud.google.com/tpu/docs/>

Cloud AutoML BETA: Easily train high-quality, custom ML models.
<https://cloud.google.com/automl/docs/>

Cloud Natural Language: Derive insights from unstructured text.

Cloud Speech-to-Text: Speech-to-text conversion powered by ML.

Cloud Translation: Dynamically translate between languages.

Cloud Text-to-Speech: Text-to-speech conversion powered by ML.

Dialogflow Enterprise Edition: Create conversational experiences across devices and platforms.

Cloud Vision: Derive insight from images powered by ML.

Cloud Video Intelligence: Extract metadata from videos.

Preparation resources

Infrastructure Documentation

Stackdriver: Monitoring and management for services, containers, applications, and infrastructure.

Monitoring: Monitoring for applications on GCP and AWS.

Logging: Logging for applications on GCP and AWS.

Error Reporting: Identifies and helps you understand application errors.

Trace: Find performance bottlenecks in production.

Debugger: Investigate code behavior in production.

Transparent Service Level Indicators: Monitor Google Cloud services and their effects on your workloads.

Cloud Deployment Manager: Manage cloud resources with simple templates.

Cloud Console: GCP's integrated management console. **Cloud Shell:** Command-line management from any browser.

Training resources

<https://cloud.google.com/training/>

<https://cloud.google.com/training/data-ml>

<https://qwiklabs.com/>

<https://qwiklabs.com/catalog>

<https://www.coursera.org/programs/google-specialization?browseProductType=COURSE>

<https://www.coursera.org/courses?query=google%20cloud>

All sections of the exam are covered in the Data Engineering and Machine Learning curriculum

Instructor Led Training

Data Engineer Track

coursera for **Google**

Data Engineering on Google
Cloud Platform Specialization

Classes

Google Cloud Platform
Fundamentals: Big Data
and Machine Learning

Data Engineering on
Google Cloud Platform

Courses

Google Cloud Platform Big Data and Machine Learning Fundamentals
Leveraging Unstructured Data with Cloud Dataproc on Google Cloud Platform
Serverless Data Analysis with Google BigQuery and Cloud Dataflow
Serverless Machine Learning with Tensorflow on Google Cloud Platform
Building Resilient Streaming Systems on Google Cloud Platform

Data Engineer Practice Exam

<https://cloud.google.com/certification/practice-exam/data-engineer>



Professional Data Engineer

LAUNCH THE EXAM

The Data Engineer practice exam will familiarize you with types of questions you may encounter on the certification exam and help you determine your readiness or if you need more preparation and/or experience.

Successful completion of the practice exam does not guarantee you will pass the certification exam as the actual exam is longer and covers a wider range of topics.

For a full list of the topics you could be tested on, see the Exam Guide.

There is no limit to the number of times you can take this practice exam.

You can't save your progress. If you close the practice exam window, you must start from the beginning.

There is no time limit for the practice exam, but we recommend completion in 45 minutes or less.



Data Engineer Quest



Weather Data in BigQuery

Analyzing Natality Data Using Datalab and BigQuery

Bigtable: Qwik Start - Hbase Shell

Cloud TPU: Qwik Start

Query BigQuery with Python Using Ibis

Predict Housing Prices with Tensorflow and Cloud ML Engine

Run a Big Data Text Processing Pipeline in Cloud Dataflow

ETL Processing on GCP Using Dataflow and BigQuery

Launching Dataproc Jobs with Cloud Composer

Building an IoT Analytics Pipeline on Google Cloud Platform

Working with Google Cloud Dataprep

Simulating a Data Warehouse in the Cloud Using BigQuery and Dataflow

Predict Visitor Purchases with a Classification Model in BQML

Predict Taxi Fare with a BigQuery ML Forecasting Model

https://www.qwiklabs.com/quests/25?catalog_rank=%7B%22rank%22%3A1%2C%22num_filters%22%3A2%2C%22has_search%22%3Atrue%7D&search_id=2141616

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g.co/CloudTrainEval

Any suggestions? Write to us.



