Recommended Labs - PCD

Day1

1. Sign up for a free trial → <https://goo.gle/3yeCDIa>
2. Google cloud Tour

<https://partner.cloudskillsboost.google/catalog_lab/1281>

1. Google Cloud SDK <https://partner.cloudskillsboost.google/catalog_lab/918>
2. Developing with Cloud Shell and Cloud Code <https://codelabs.developers.google.com/cloudshell-cloudcode-deepdive#0>
3. IAM Quick start <https://partner.cloudskillsboost.google/catalog_lab/686>

Day2

1. [Introduction to APIs in Google Cloud](https://partner.cloudskillsboost.google/catalog_lab/1342)
2. [APIs Explorer: Cloud Storage](https://partner.cloudskillsboost.google/catalog_lab/1463)
3. [APIs Explorer: Compute Engine](https://partner.cloudskillsboost.google/catalog_lab/1416)
4. [Service Accounts and Roles: Fundamentals](https://partner.cloudskillsboost.google/catalog_lab/956)
5. [Implementing Least Privilege IAM Policy Bindings in Cloud Run](https://partner.cloudskillsboost.google/catalog_lab/3820)
6. [Authenticate to Google Cloud using a service account](https://cloud.google.com/kubernetes-engine/docs/tutorials/authenticating-to-cloud-platform#use_workload_identity)
   1. You will need your own Google Cloud account to do this, or use any of the labs in partner skillsboost lab for this practice

Day3

1. Lab: Build a Serverless Web App with Firebase  
   <https://partner.cloudskillsboost.google/focuses/11610?parent=catalog>
2. Configuring IAP to Protect a Project  
   <https://partner.cloudskillsboost.google/course_sessions/3594015/labs/348962>
3. User Authentication: Identity-Aware Proxy  
   <https://partner.cloudskillsboost.google/focuses/11642?parent=catalog>
4. Securing Compute Engine Applications and Resources using BeyondCorp Enterprise (BCE)  
   <https://partner.cloudskillsboost.google/focuses/41013?parent=catalog>
5. API Gateways

https://partner.cloudskillsboost.google/catalog\_lab/3670

Day4

1. [Autoscaling an Instance Group with Custom Cloud Monitoring Metrics](https://partner.cloudskillsboost.google/catalog_lab/756)
2. [Configuring blue-green Traffic Management with a Load Balancer](https://partner.cloudskillsboost.google/catalog_lab/5795)
3. [Eventarc for Cloud Run](https://partner.cloudskillsboost.google/focuses/42442?catalog_rank=%7B%22rank%22%3A2%2C%22num_filters%22%3A1%2C%22has_search%22%3Atrue%7D&parent=catalog&search_id=24615820)
4. [Deploy Your Website on Cloud Run](https://partner.cloudskillsboost.google/focuses/13347?catalog_rank=%7B%22rank%22%3A10%2C%22num_filters%22%3A1%2C%22has_search%22%3Atrue%7D&parent=catalog&search_id=24615820)
5. [Deploying a Containerized Application on Cloud Run](https://partner.cloudskillsboost.google/focuses/60092?catalog_rank=%7B%22rank%22%3A15%2C%22num_filters%22%3A1%2C%22has_search%22%3Atrue%7D&parent=catalog&search_id=24615835)
6. Orchestrating the Cloud with Kubernetes  
   <https://partner.cloudskillsboost.google/focuses/11556?parent=catalog>
7. Kubernetes Engine: Qwik Start  
   <https://partner.cloudskillsboost.google/focuses/11605?parent=catalog>
8. Configuring Google Kubernetes Engine (GKE) Networking  
   <https://partner.cloudskillsboost.google/focuses/14702?parent=catalog>
9. Deploy, Scale, and Update Your Website on Google Kubernetes Engine  
   <https://partner.cloudskillsboost.google/focuses/13348?parent=catalog>
10. Securing Your GKE Deployments with Binary Authorization  
    <https://partner.cloudskillsboost.google/focuses/42474?parent=catalog>
11. Migrating a Monolithic Website to Microservices on Google Kubernetes Engine  
    <https://partner.cloudskillsboost.google/focuses/13350?parent=catalog>

Day5

# **App Dev: Storing Image and Video Files in Cloud Storage - Python**

<https://partner.cloudskillsboost.google/catalog_lab/976>

1. Cloud Storage v1.5

<https://partner.cloudskillsboost.google/catalog_lab/1393>

1. Cloud Storage Code samples <https://cloud.google.com/storage/docs/samples>
2. **Cloud Filestore: Qwik Start**

<https://partner.cloudskillsboost.google/catalog_lab/1104>

1. [Cloud SQL for MySQL: Qwik Start](https://partner.cloudskillsboost.google/focuses/13423?parent=catalog)
2. [Cloud SQL for PostgreSQL: Qwik Start](https://partner.cloudskillsboost.google/focuses/13424?parent=catalog)
3. [Cloud SQL for SQL Server: Qwik Start](https://partner.cloudskillsboost.google/focuses/35948?parent=catalog)
4. Cloud Spanner - Database Fundamentals

<https://partner.cloudskillsboost.google/catalog_lab/5726>

1. Cloud Spanner - Defining Schemas and Understanding Query Plans

<https://partner.cloudskillsboost.google/catalog_lab/5728>

1. Firebase Emulator

<https://firebase.google.com/codelabs/firebase-emulator#0>

1. [Build a Serverless Web App with Firebase](https://partner.cloudskillsboost.google/catalog_lab/2166)
2. [Codelab using Firebase Authentication, Cloud Firestore in native-mode, Cloud Storage, Cloud Messaging, and Performance Monitoring](https://codelabs.developers.google.com/codelabs/firebase-web/)

# **Cloud Datastore v1.5**

<https://partner.cloudskillsboost.google/catalog_lab/1395>

1. App Dev: Storing Application Data in Cloud Datastore - Python

<https://partner.cloudskillsboost.google/catalog_lab/975>

# [**Exploring NCAA Data with BigQuery**](https://partner.cloudskillsboost.google/catalog_lab/815)

* + In this lab you will use a dataset for NCAA Basketball games, teams, and players to learn more about SQL queries
  + Corresponding [Youtube video](https://www.youtube.com/watch?v=xDZjcfMm-t8)

1. [Weather Data in BigQuery](https://partner.cloudskillsboost.google/catalog_lab/476)
   * This lab uses two public datasets in BigQuery: weather data from NOAA and citizen complaints data from New York City.

Day6