Exploring APIs

Advanced 8 Steps 7 hours 34 Credits

Google Cloud Application Programming Interfaces are the mechanism to interact with Google Cloud Services programmatically. This quest will give you hands-on practice with a variety of GCP APIs, which you will learn through working with Google's APIs Explorer, a tool that allows you to browse APIs and run their methods interactively. By learning how to transfer data between Cloud Storage buckets, deploy Compute Engine instances, configure Dataproc clusters and much more, Exploring APIs will show you how powerful APIs are and why they are used almost exclusively by proficient GCP users. Enroll in this quest today.

Infrastructure Application Development

Prerequisites:

This quest will teach you the basics of GCP APIs, but you will need prior experience with core GCP tools and services, as well as programming experience, preferably in Python or C#. It is recommended that the student have at least earned a Badge by completing the GCP Essentials and/or the Baseline: Infrastructure Quests before beginning.

Quest Outline

Introduction to APIs in Google

This lab will teach you about the architecture and basic functioning of Application Programming Interfaces (APIs). This will be supplemented with hands-on practice, where you will configure and run Cloud Storage API methods in Cloud Shell.

45 minutes	Introductory	1 Credit

APIs Explorer: Qwik Start

In this lab you'll upload an image to Cloud Storage then make a request to the Vision API with APIs Explorer.

30 minutes	Introductory	1 Credit

APIs Explorer: Cloud Storage

In this lab you will use the APIs Explorer tool to create Cloud Storage buckets, upload data to the bucket, and remove content from buckets.

45 minutes	Fundamental	5 Credits

APIs Explorer: Create and Update a Cluster

In this lab you'll learn how to use an inline Google APIs Explorer template to call the Cloud Dataproc API to create a cluster, run a simple Spark job in the cluster, and update the cluster.

1 hour	Fundamental	5 Credits

APIs Explorer: Compute Engine

Use the APIs Explorer to create a Compute Engine instance, then use Cloud monitoring to monitor the CPU usage.

45 minutes	Fundamental	3 Credits

APIs Explorer: App Engine

In this lab, you will get hands-on practice configuring and deploying an App Engine instance with the APIs Explorer tool.

| 45 minutes | Fundamental | 5 Credits |

APIs Explorer: Cloud SQL

In this lab, you will get hands-on practice with the Cloud SQL API and its associated methods by making calls through the APIs Explorer tool.

| 45 minutes | Fundamental | 5 Credits |

Cloud Natural Language API: Qwik Start

The Cloud Natural Language API lets you extract entities and perform sentiment and syntactic analysis on text. Watch these short videos Gain Valuable Insights from Text with Cloud Natural Language and Cloud Natural Language: Qwik Start - Qwiklabs Preview.

| 40 minutes | Introductory | 1 Credit |

APIs Explorer: PubSub and IoT

In this lab you will provision Cloud IoT and Pub/Sub services using the APIs explorer. These will be used to create a temperature telemetry steam.

| 1 hour | Advanced | 7 Credits |

Google Cloud Speech API: Qwik Start

The Google Cloud Speech API integrates speech recognition into dev apps; you can now send audio/receive a text transcription. Watch these short videos Powerful Speech Recognition Using Google Machine Learning and Google Cloud Speech: Qwik Start - Qwiklabs Preview

| 15 minutes | Introductory | 1 Credit |

Quest Complete!
Congrats! You completed this quest and earned a badge. Become a cloud expert and start another.