

# Google Developer Essentials

Introductory 5 Steps 5 hours 26 Credits

This introductory-level quest shows application developers how the Google Cloud ecosystem could help them build secure, scalable, and intelligent cloud native applications. You learn how to develop and scale applications without setting up infrastructure, run data analytics, gain insights from data, and develop with pre-trained ML APIs to leverage machine learning even if you are not a Machine Learning expert. You will also experience seamless integration between various Google services and APIs to create intelligent apps.

Application Development

## Prerequisites:

Recommended that students without prior Google Cloud Platform experience take the [Google Cloud Essentials Quest](#) as a prerequisite.

## Quest Outline

### [Weather Data in BigQuery](#)

In this lab you analyze historical weather observations using BigQuery and use weather data in conjunction with other datasets. This lab is part of a series of labs on processing scientific data.

35 minutes

Fundamental

5 Credits

### [Classify Images of Clouds in the Cloud with AutoML Vision](#)

AutoML Vision helps developers with limited ML expertise train high quality image recognition models. In this hands-on lab, you will learn how to train a custom model to recognize different types of clouds (cumulus, cumulonimbus, etc.).

2 hours

Advanced

7 Credits

### [Entity and Sentiment Analysis with the Natural Language API](#)

The Cloud Natural Language API lets you extract entities, and perform sentiment and syntactic analysis on a block of text. In this hands-on lab you'll learn how to extract entities and sentiment from text using the Cloud Natural Language API.

40 minutes

Fundamental

5 Credits

### [Google Assistant: Build a Restaurant Locator with the Places API](#)

In this lab you will build an Assistant application that takes in a user's location and preferences and passes them to the Places API via a Cloud Function to generate the ideal spot to eat.

1 hour

Advanced

7 Credits

### [App Engine: Qwik Start - Java](#)

This hands-on lab shows you how to create a small App Engine application that displays a short message. Watch the short video [Build Apps at Scale with Google App Engine](#).

30 minutes

Introductory

1 Credit

### [App Engine: Qwik Start - Python](#)

This hands-on lab shows you how to create a small App Engine application that displays a short message. Watch the short video [Build Apps at Scale with Google App Engine](#).

20 minutes

Introductory

1 Credit

### [Autoscaling an Instance Group with Custom Cloud Monitoring Metrics](#)

This lab describes how to deploy an autoscaling Compute Engine instance group that is automatically scaled using a custom Cloud monitoring metric

1 hour

Advanced

7 Credits

## Quest Complete!

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

