Workspace: Integrations

Advanced 8 Steps 6 hours 21 Credits

This Quest of hands-on labs demonstrates the power of integrating Google Cloud services and tools with Workspace (formerly G Suite) applications. With integration technologies like the Clasp Command Line environment, you will create and publish web apps and add-ons for Workspace products: Sheets, Docs, Forms, and Slides. In other labs you'll create direct connections to Google Cloud data sources using the BigQuery API, Sheets, and Slides to collect, analyze and present data.

Application Development Data Google Workspace

Prerequisites:

This Quest assumes familiarity with Workspace apps (Docs, Sheets, Calendar, Gmail, Hangouts Chat) as a power user. Before taking the labs in this Quest, you should have developed a familiarity with basic Google Cloud Platform services and tools by also taking the labs and earning a badge for the Google Cloud Essentials Quest.

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

Creating a Gmail Add-on

In this hands-on lab you create a Gmail Add-on that allows you to quickly change the labels of an email thread.

30 minutes	Fundamental	5 Credits

Google Apps Script: Access Google Sheets, Maps & Gmail in 4 Lines of Code

In this lab, we'll introduce you to one of the easiest ways to write code that accesses Google developer technologies, all by leveraging one of the mainstream web development languages, JavaScript.

20 minutes	Introductory	1 Credit

The Apps Script CLI - clasp

The Apps Script CLI, or clasp, is a tool that lets you to create, edit, and deploy Apps Script projects locally and create and publish web apps and add-ons for products like Sheets, Docs, Forms, and Slides from the command line.

30 minutes	Introductory	Free

Hangouts Chat bot - Apps Script

Learn how to create a simple Hangouts Chat bot—"Attendance Bot"—using Google Apps Script. The bot integrates with Gmail to set a user's vacation responder and integrates with Calendar to put a meeting on the user's calendar.

40 minutes	Advanced	7 Credits

[Google Sheets as a Reporting Tool: Sheets API](#)

In this lab, you'll learn how you can use Google Sheets as a custom reporting tool for your users. You'll be modifying a sample order tracking application to export to spreadsheet and build visualizations using the Google Sheets API.

| 1 hour 15 minutes | Introductory | Free |

[Big Data Analysis to a Slide Presentation](#)

This lab leverages two Google developer platforms: G Suite and Google Cloud Platform (GCP). It uses GCP's BigQuery API, Sheets, and Slides to collect, analyze and present data.

| 1 hour | Advanced | Free |

[Using the Natural Language API from Google Docs](#)

In this hands-on lab, you will use Apps Script to call the Natural Language API from Google Docs to analyze the sentiment of selected text in the document.

| 45 minutes | Advanced | 7 Credits |

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