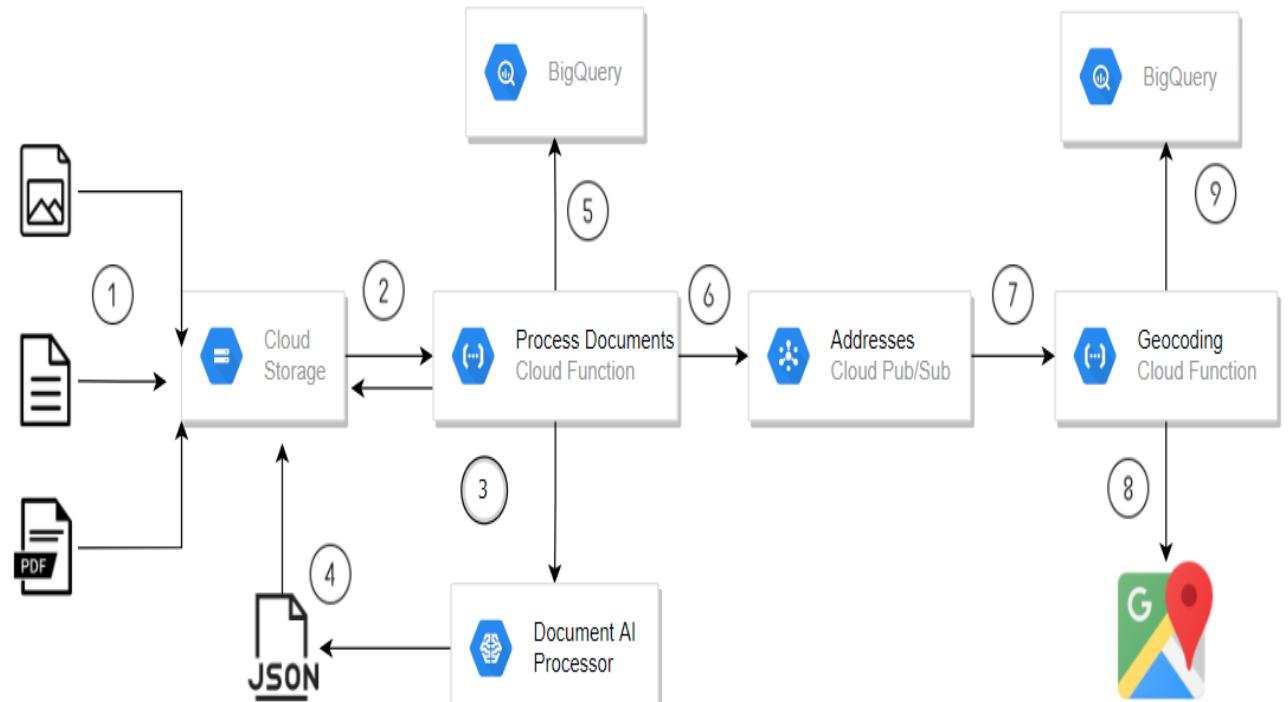


Build an End-to-End Data Capture Pipeline using Document AI

GSP927

Google Cloud Self-Paced Labs

- The Document AI API transforms unstructured documents and emails into analyzable, structured data for easier processing.
- In this lab, you'll construct a pipeline that processes Cloud Storage uploads via a Cloud Run function using Document AI's form processor to extract data and load it into BigQuery.
- If addresses are detected, they're routed to a Pub/Sub topic, triggering a second Cloud Run function that applies the Geocoding API for coordinates before storing results in BigQuery.
- The architecture flows from document upload → Document AI extraction → JSON/ data storage → address Pub/Sub trigger → geocoding → BigQuery ingestion, using a general form processor (specialized parsers like Invoice are available for complex cases).
- Note that while Cloud Run suits this demo, production pipelines should use Cloud Tasks to handle Document AI API timeouts reliably.



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Protect your account and

End Lab 01:28:23 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-04-dfc5ce584036

Password: yXp0pbijUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

Shell and supports tab-completion.

3. (Optional) You can list the active account name with this command:

```
gcloud auth list
```

4. Click Authorize.

Output:

```
ACTIVE: *
ACCOUNT: "ACCOUNT"

To set the active account, run:
$ gcloud config set account 'ACCOUNT'
```

5. (Optional) You can list the project ID with this command:

```
gcloud config list project
```

create an API key 0/100

Task 2. Download the lab source code

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Task 6. Edit environment variables for Cloud Run functions

Task 7. Test and validate the end-to-end solution

Congratulations!

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Dashboard – qwiklabs-gcp-00-d9f4d9f417bd x +

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-00-d9f4d9f417bd&pli=1&cloudshell=true

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) + Open Editor

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

Welcome to Cloud Shell! Type "help" to get started, or type "gemini" to try prompting with Gemini CLI.
Your Cloud Platform project in this session is set to **qwiklabs-gcp-00-d9f4d9f417bd**.
Use `gcloud config set project [PROJECT_ID]` to change to a different project.
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$ gcloud auth list
Credentials
Account: student-04-dfc5ce584036@qwiklabs.net

ACTIVE: *

ACCOUNT: student-04-dfc5ce584036@qwiklabs.net

To set the active account, run:
\$ gcloud config set account `ACCOUNT`

student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$ gcloud config list project
[core]
project = qwiklabs-gcp-00-d9f4d9f417bd

Your active configuration is: [cloudshell-23707]
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$

8 Finance headline India reported 8...

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Protect your account and

End Lab 01:28:06 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-04-dfc5ce584036

Password: yXp0pbijUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

Task 1. Enable APIs and create an API key

You must enable the APIs for Document AI, Cloud Run functions, Cloud Build, and Geocoding for this lab, then create the API key that is required by the Geocoding Cloud Run function.

1. Click **Activate Cloud Shell** at the top of the Google Cloud console.
2. In Cloud Shell, enter the following commands to enable the APIs required by the lab:

```
gcloud services enable documentai.googleapis.com
gcloud services enable cloudfunctions.googleapis.com
gcloud services enable cloudbuild.googleapis.com
gcloud services enable geocoding-backend.googleapis.com
```

3. In the console, in the **Navigation menu** (≡), click **APIs & services > Credentials**.
4. Select **Create credentials**, then select **API key** from the dropdown menu.

create an API key 0/100

Task 2. Download the lab source code

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Congratulations!

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End Lab 01:27:55 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. [Learn more.](#)

[Open Google Cloud console](#)

Username: student-04-dfc5ce584036

Password: yXp0pbjJUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

gcloud services enable cloudfunctions.googleapis.com
gcloud services enable cloudbuild.googleapis.com
gcloud services enable geocoding-backend.googleapis.com

3. In the console, in the **Navigation menu** (≡), click **APIs & services > Credentials**.

4. Select **Create credentials**, then select **API key** from the dropdown menu.

The API key created dialog box displays your newly created key. An API key is a long string containing upper and lower case letters, numbers, and dashes. For example, a4db08b757294ea94c08f2df493465a1.

5. Click three dots under **Actions** then click **Edit API key** in the dialog box.

6. Select **Restrict key** in the **API restrictions** section to add API restrictions for your new API key.

7. Click **Select APIs** drop-down and in the filter box and type **Geocoding API**.

8. Select **Geocoding API** and click **OK**.

9. Click the **Save** button.

create an API key 0/100

Task 2. Download the lab source code

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Congratulations!

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CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) x + Open Editor

```
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)$ gcloud services enable documentai.googleapis.com
gcloud services enable cloudfunctions.googleapis.com
gcloud services enable cloudbuild.googleapis.com
gcloud services enable geocoding-backend.googleapis.com
Operation "operations/acat.p2-1006094964444-021a6af1-1a44-455c-b638-16cf64a8c9c7" finished successfully.
Operation "operations/acf.p2-1006094964444-f8e307f3-718a-4107-b02d-e9cbf32d9459" finished successfully.
Operation "operations/acat.p2-1006094964444-ea1ac007-4375-492c-982b-7640d47e4817" finished successfully.
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)$
```

Air: Severe Thursday

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Google Cloud

Cloud Hub

Cloud overview

Solutions

Favorite products

Favorite products appear here

Products

Billing

IAM & Admin

Marketplace

APIs & Services

Vertex AI

Compute Engine

Kubernetes Engine

Cloud Storage

View all products

gcp-00-d9f4d9f417bd

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Search

Customize

Cloud foundations

API APIs

Requests (requests/sec)

6 PM 6:15 6:30

0.04/s
0.03/s
0.02/s
0.01/s
0

● Requests: 0.035/s

Go to APIs overview

Google Cloud Platform status

All services normal

Go to Cloud status dashboard

Billing

Estimated charges
For the billing period Dec 1 – 30, 2025
USD \$0.00

Take a tour of billing

View detailed charges

Monitoring

Create my dashboard
Set up alerting policies
Create uptime checks

Air: Severe Thursday

8

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API APIs & Services Credentials + Create credentials ▾ Delete Restore deleted credentials

Enabled APIs & services Create credentials to a API key Identifies your project using a simple API key to check quota and access

Library OAuth client ID Requests user consent so your app can access the user's data

Credentials Service account Enables server-to-server, app-level authentication using robot accounts

OAuth consent screen Help me choose Asks a few questions to help you decide which type of credential to use

Page usage agreements

API Keys Remember Name No API keys to display

Configure consent screen

Restrictions Actions

OAuth 2.0 Client IDs

Name	Creation date	Type	Client ID	Actions
No OAuth clients to display				

Service Accounts

Manage service accounts

Email	Name	Actions
qwiklabs-gcp-00-d9f4d9f417bd@appspot.gserviceaccount.com	App Engine default service account	
1006094964444-compute@developer.gserviceaccount.com	Compute Engine default service account	
qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com	Qwiklabs User Service Account	

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API Credentials – APIs & Services

https://console.cloud.google.com/apis/credentials?project=qwiklabs-gcp-00-d9f4d9f417bd

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Enabled APIs & services Library Credentials OAuth consent screen Page usage agreements

Create credentials to access your enabled APIs. [Learn more](#)

⚠ Remember to configure the OAuth consent screen with information about your application. [Configure consent screen](#)

API Keys API key created Use this key in your application by passing it with the `key=API_KEY` parameter.

Your API key [Copy](#)

OAuth 2.0 Client IDs Client ID Actions Show key ⋮

No OAuth clients to display

Service Accounts Email Name Actions ↗

qwiklabs-gcp-00-d9f4d9f417bd@appspot.gserviceaccount.com App Engine default service account

1006094964444-compute@developer.gserviceaccount.com Compute Engine default service account

qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com Qwiklabs User Service Account

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Create credentials to access your enabled APIs. [Learn more](#)

⚠ Remember to configure the OAuth consent screen with information about your application. [Configure consent screen](#)

API Keys

<input type="checkbox"/>	<input checked="" type="radio"/>	Name	Creation date	Restrictions	Actions
<input type="checkbox"/>	<input checked="" type="radio"/>	API key 1	Dec 30, 2025	—	Show key ⋮

OAuth 2.0 Client IDs

<input type="checkbox"/>	Name	Creation date	Type	Client ID	Actions
No OAuth clients to display					

Service Accounts

<input type="checkbox"/>	Email	Name	Actions
<input type="checkbox"/>	qwiklabs-gcp-00-d9f4d9f417bd@appspot.gserviceaccount.com	App Engine default service account	
<input type="checkbox"/>	1006094964444-compute@developer.gserviceaccount.com	Compute Engine default service account	
<input type="checkbox"/>	qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com	Qwiklabs User Service Account	

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Enabled APIs & services Library Credentials OAuth consent screen Page usage agreements

Create credentials to access your enabled APIs. [Learn more](#)

⚠ Remember to configure the OAuth consent screen with information about your application. [Configure consent screen](#)

API Keys

<input type="checkbox"/>	<input checked="" type="radio"/>	Name	Creation date	Restrictions	Actions
<input type="checkbox"/>	<input checked="" type="radio"/>	API key 1	Dec 30, 2025	—	Show key Edit API key Delete API key

OAuth 2.0 Client IDs

<input type="checkbox"/>	Name	Creation date	Type	Client ID	Actions
<input type="checkbox"/>	No OAuth clients to display				

Service Accounts

<input type="checkbox"/>	Email	Name	Actions
<input type="checkbox"/>	qwiklabs-gcp-00-d9f4d9f417bd@appspot.gserviceaccount.com	App Engine default service account	
<input type="checkbox"/>	1006094964444-compute@developer.gserviceaccount.com	Compute Engine default service account	
<input type="checkbox"/>	qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com	Qwiklabs User Service Account	

9+ 14°C Clear Search

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API Edit API key – APIs & Services - X +

https://console.cloud.google.com/apis/credentials/key/0060b3b4-3c58-40d0-a6c0-cd5d8d5f8812?project=qwiklabs-gcp-00-d9f4d9f417bd | 3

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd Search (/) for resources, docs, products, and more Search

API APIs & Services Key restrictions Creation date December 30, 2025, 6:48:07 PM GMT+5

Add restrictions to reduce security risk and prevent unauthorized use. [Learn more](#)

This key is unrestricted. To prevent unauthorized use, we recommend restricting where and for which APIs it can be used. [Learn more](#)

Enabled APIs & services Library Credentials OAuth consent screen Page usage agreements

Application restrictions

None Websites IP addresses Android apps iOS apps

Geocoding API

Note: It may take up to 5 minutes for settings to take effect

Save Cancel

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API Edit API key – APIs & Services - X +

https://console.cloud.google.com/apis/credentials/key/0060b3b4-3c58-40d0-a6c0-cd5d8d5f8812?project=qwiklabs-gcp-00-d9f4d9f417bd | 3

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API APIs & Services ⭐

Enabled APIs & services

Library

Credentials

OAuth consent screen

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This key is unrestricted. To prevent unauthorized use, we recommend restricting where and for which APIs it can be used. [Learn more](#)

Application restrictions [?](#)

None

Websites

IP addresses

Android apps

iOS apps

API restrictions [?](#)

Don't restrict key
This key can call any API

Restrict key

1 API ▾

Selected APIs:

Geocoding API

Note: It may take up to 5 minutes for settings to take effect

Save Cancel

9+ 14°C Clear

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End Lab

01:22:17

? Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.

[Learn more.](#)

Open Google Cloud console

Username

student-04-dfc5ce584036



Password

yXp0ppbiJUBg8



Project ID

qwiklabs-gcp-00-d9f4d9f



Automate Data Capture at Scale with Document AI > Build an End-to-End Data Capture Pipeline using Document AI

Task 2. Download the lab source code

In this task, you copy the source files into your Cloud Shell. These files include the source code for the Cloud Run functions and the schemas for the BigQuery tables that you will create in the lab.

1. In Cloud Shell, enter the following command to download the source code for this lab:

```
mkdir ./documentai-pipeline-demo
gcloud storage cp -r \
gs://splx/gsp927/documentai-pipeline-demo/* \
~/documentai-pipeline-demo/
```

Task 3. Create a form processor

Create an instance of the generic form processor to use in the Document AI Platform

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create an API key 20/100

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Task 6. Edit environment variables for Cloud Run functions

Task 7. Test and validate the end-to-end solution

Congratulations!

API Credentials – APIs & Services - x +

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CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) + Open Editor

Welcome to Cloud Shell! Type "help" to get started, or type "gemini" to try prompting with Gemini CLI.
Your Cloud Platform project in this session is set to **qwiklabs-gcp-00-d9f4d9f417bd**.
Use `gcloud config set project [PROJECT_ID]` to change to a different project.
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$ mkdir ./documentai-pipeline-demo
gcloud storage cp -r \
 gs://splz/gsp927/documentai-pipeline-demo/* \
 ~/documentai-pipeline-demo/
Copying gs://splz/gsp927/documentai-pipeline-demo/sample-files/cymbal_invoice.pdf to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/sample-files/cymbal_invoice.pdf
Copying gs://splz/gsp927/documentai-pipeline-demo/scripts/cloud-functions/geocode-addresses/.env.yaml to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/scripts/cloud-functions/geocode-addresses/.env.yaml
Copying gs://splz/gsp927/documentai-pipeline-demo/scripts/cloud-functions/geocode-addresses/main.py to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/scripts/cloud-functions/geocode-addresses/main.py
Copying gs://splz/gsp927/documentai-pipeline-demo/scripts/cloud-functions/geocode-addresses/requirements.txt to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/scripts/cloud-functions/geocode-addresses/requirements.txt
Copying gs://splz/gsp927/documentai-pipeline-demo/scripts/cloud-functions/process-invoices/.env.yaml to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/scripts/cloud-functions/process-invoices/.env.yaml
Copying gs://splz/gsp927/documentai-pipeline-demo/scripts/cloud-functions/process-invoices/main.py to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/scripts/cloud-functions/process-invoices/main.py
Copying gs://splz/gsp927/documentai-pipeline-demo/scripts/cloud-functions/process-invoices/requirements.txt to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/scripts/cloud-functions/process-invoices/requirements.txt
Copying gs://splz/gsp927/documentai-pipeline-demo/scripts/table-schema/doc_ai_extracted_entities.json to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/scripts/table-schema/doc_ai_extracted_entities.json
Copying gs://splz/gsp927/documentai-pipeline-demo/scripts/table-schema/geocode_details.json to file:///home/student_04_dfc5ce584036/documentai-pipeline-demo/scripts/table-schema/geocode_details.json
Completed files 9/9 | 81.4kiB/81.4kiB

Average throughput: 374.8kiB/s
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$

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Build an End-to-End Data Capture Pipeline using

Task 3. Create a form processor

Create an instance of the generic form processor to use in the Document AI Platform using the Document AI **Form Parser** specialized parser. The generic form processor will process any type of document and extract all the text content it can identify in the document. It is not limited to printed text, it can handle handwritten text and text in any orientation, supports a number of languages, and understands how form data elements are related to each other so that you can extract key:value pairs for form fields that have text labels.

- In the Google Cloud Console, in the search bar, type **Document AI** and click the product page result.
- Click **Explore Processors**, and then click **Form Parser** to create a new processor.
- Specify the processor name as **form-processor** and select the region **US (United States)** from the list.
- Click **Create** to create your processor.

You will configure a Cloud Run function later in this lab with the processor ID and location of this processor so that the Cloud Run function will use this specific processor to process sample invoices.

create an API key 20/100

Task 2. Download the lab source code

Task 3. Create a form processor

Task 4. Create Cloud Storage buckets and a BigQuery dataset

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Task 6. Edit environment variables for Cloud Run functions

Task 7. Test and validate the end-to-end solution

Congratulations!

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd

API APIs & Services Credentials + Create credential

Enabled APIs & services Create credentials to access your enabled APIs

Library

Credentials Remember to configure the consent screen for this API

OAuth consent screen

Page usage agreements

API Keys

Name API key 1

OAuth 2.0 Client IDs

Name No OAuth clients to display

Service Accounts

Email [qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com](#) [1006094964444-compute@developer.gserviceaccount.com](#) [qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com](#)

document ai

generative ai document summarization

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My processors Product page · Document AI

Cloud Document AI API Marketplace · Service to parse structured information from unstructured or semi-structured...

Products & pages

Document AI Product · Document analysis, classification, and searches

My processors Product page · Document AI

Monitoring Product page · Document AI

Documentation & tutorials

Document AI Documentation · Document AI helps developers create high-accuracy processors to extract,...

Document AI documentation

Configure consent screen

Show more

Show key

Actions

Actions

Actions

Actions

Actions

Manage service accounts

Actions

Actions

Actions

Actions

Qwiklabs User Service Account

https://console.cloud.google.com/ai/document-ai?referrer=search&project=qwiklabs-gcp-00-d9f4d9f417bd

Processor gallery – Document AI

https://console.cloud.google.com/ai/document-ai/processor-gallery?project=qwiklabs-gcp-00-d9f4d9f417bd

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd document ai

Document AI / Processor gallery

Overview

Processors

My processors

Processor gallery

Custom Processors

Monitoring

Capacity Reservation

Processor gallery

Search processors

Features

Trainable 9

Type

General 3

Specialized 12

Access status

Public 17

Private 2

Region

eu 18

General

Ready to use out-of-the-box processors for general document goals.

Document OCR

Identify and extract text in different types of documents

Form Parser

Extract form elements such as checkboxes

Specialized

Schematized processors for domain-specific documents.

Create processor

Form Parser

Extract text and spatial structure from documents, including tabular content through OCR [Learn more](#)

Processor name * Must start with a letter. Can use letters, numbers, spaces, dashes, and underscores.

Region

Advanced options

Create Cancel

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Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.

Learn more.

Open Google Cloud console

Username: student-04-dfc5ce584036

Password: yXp0pbijUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

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Task 4. Create Cloud Storage buckets and a BigQuery dataset

In this section, you will prepare your environment by creating the Google Cloud resources that are required for your document processing pipeline.

Create input, output, and archive Cloud Storage buckets

Create input, output, and archive Cloud Storage buckets for your document processing pipeline.

1. In Cloud Shell, enter the following command to create the Cloud Storage buckets for the lab:

```
export PROJECT_ID=$(gcloud config get-value core/project)
export BUCKET_LOCATION="us-west1"
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-input-invoices
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-output-invoices
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-archive-invoices
```

- create an API key 20/100
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Time limit

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Open Google Cloud console

Username

student-04-dfc5ce584036



Password

yXp0ppbiJUBg8



Project ID

qwiklabs-gcp-00-d9f4d9f



Create input, output, and archive Cloud Storage buckets

Create input, output, and archive Cloud Storage buckets for your document processing pipeline.

- In Cloud Shell, enter the following command to create the Cloud Storage buckets for the lab:

```
export PROJECT_ID=$(gcloud config get-value core/project)
export BUCKET_LOCATION="us-west1"
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-input-invoices
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-output-invoices
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-archived-invoices
```

Create a BigQuery dataset and tables

Create a BigQuery dataset and the three output tables required for your data

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create an API key 20/100

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Congratulations!



form-processor – Document AI - x +

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd document ai Search

CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) x + Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

Welcome to Cloud Shell! Type "help" to get started, or type "gemini" to try prompting with Gemini CLI.
Your Cloud Platform project in this session is set to **qwiklabs-gcp-00-d9f4d9f417bd**.
Use `gcloud config set project [PROJECT_ID]` to change to a different project.

```
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)$ export PROJECT_ID=$(gcloud config get-value core/project)
export BUCKET_LOCATION="us-west1"
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-input-invoices
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-output-invoices
gsutil mb -c standard -l ${BUCKET_LOCATION} -b on \
  gs://${PROJECT_ID}-archived-invoices
Your active configuration is: [cloudshell-12299]
Creating gs://qwiklabs-gcp-00-d9f4d9f417bd-input-invoices/...
Creating gs://qwiklabs-gcp-00-d9f4d9f417bd-output-invoices/...
Creating gs://qwiklabs-gcp-00-d9f4d9f417bd-archived-invoices/...
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)$
```

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Build an End-to-End Data Capture Pipeline using

Create a BigQuery dataset and tables

Create a BigQuery dataset and the three output tables required for your data processing pipeline.

1. In Cloud Shell, enter the following command to create the BigQuery tables for the lab:

```
bq --location="US" mk -d \
    --description "Form Parser Results" \
    ${PROJECT_ID}:invoice_parser_results
cd ~/documentai-pipeline-demo/scripts/table-schema/
bq mk --table \
    invoice_parser_results.doc_ai_extracted_entities \
    doc_ai_extracted_entities.json
bq mk --table \
    invoice_parser_results.geocode_details \
    geocode_details.json
```

You can navigate to BigQuery in the Cloud Console and inspect the schemas for the tables in the `invoice_parser_results` dataset using the BigQuery SQL workspace.

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Protect your account and

End Lab 01:19:25 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-04-dfc5ce584036

Password: yXp0ppbiJUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

create an API key 20/100

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Congratulations!

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CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) + Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#) Don't show again Dismiss

```
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)$ bq --location="US" mk -d \
--description "Form Parser Results" \
${PROJECT_ID}:invoice_parser_results
cd ~/documentai-pipeline-demo/scripts/table-schema/
bq mk --table \
 invoice_parser_results.doc_ai_extracted_entities \
 doc_ai_extracted_entities.json
bq mk --table \
 invoice_parser_results.geocode_details \
 geocode_details.json
Dataset 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results' successfully created.
Table 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results.doc_ai_extracted_entities' successfully created.
Table 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results.geocode_details' successfully created.
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$
```

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Protect your account and

End Lab 01:18:47 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. [Learn more.](#)

[Open Google Cloud console](#)

Username: student-04-dfc5ce584036e

Password: yXp0pbjJUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

invoice_parser_results.doc_ai_extracted_entities \
doc_ai_extracted_entities.json
bq mk --table \
invoice_parser_results.geocode_details \
geocode_details.json

You can navigate to BigQuery in the Cloud Console and inspect the schemas for the tables in the `invoice_parser_results` dataset using the BigQuery SQL workspace.

Create a Pub/Sub topic

Initialize the Pub/Sub topic used to trigger the Geocoding API data enrichment operations in the processing pipeline.

- In Cloud Shell, enter the following command to create the Pub/Sub topics for the lab:

```
export GEO_CODE_REQUEST_PUBSUB_TOPIC=geocode_request
gcloud pubsub topics \
create ${GEO_CODE_REQUEST_PUBSUB_TOPIC}
```

create an API key 20/100

Task 2. Download the lab source code

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Congratulations!

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Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)$ bq --location="US" mk -d \
--description "Form Parser Results" \
${PROJECT_ID}:invoice_parser_results
cd ~/documentai-pipeline-demo/scripts/table-schema/
bq mk --table \
  invoice_parser_results.doc_ai_extracted_entities \
  doc_ai_extracted_entities.json
bq mk --table \
  invoice_parser_results.geocode_details \
  geocode_details.json
Dataset 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results' successfully created.
Table 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results.doc_ai_extracted_entities' successfully created.
Table 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results.geocode_details' successfully created.
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$ export GEO_CODE_REQUEST_PUBSUB_TOPIC=geo
code_request
gcloud pubsub topics \
  create ${GEO_CODE_REQUEST_PUBSUB_TOPIC}
Created topic [projects/qwiklabs-gcp-00-d9f4d9f417bd/topics/geocode_request].
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$
```

9+ 14°C Clear

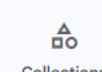
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Task 5. Create Cloud Run functions

Create the two Cloud Run functions that your data processing pipeline uses to process invoices uploaded to Cloud Storage. These functions use the Document AI API to extract form data from the raw documents, then use the GeoCode API to retrieve geolocation data about the address information extracted from the documents.

You can examine the source code for the two Cloud Run functions using the Code Editor or any other editor of your choice. The Cloud Run functions are stored in the following folders in Cloud Shell:

- Process Invoices - `scripts/cloud-functions/process-invoices`
- Geocode Addresses - `scripts/cloud-functions/geocode-addresses`

The main Cloud Run function, `process-invoices`, is triggered when files are uploaded to the input files storage bucket you created earlier.

The function folder `scripts/cloud-functions/process-invoices` contains the two files that are used to create the `process-invoices` Cloud Run function.

The `requirements.txt` file specifies the Python libraries required by the function. This includes the Document AI client library as well as the other Google Cloud libraries

- create an API key 40/100
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End Lab 01:17:53 Time limit

Create the Cloud Run function to process documents uploaded to Cloud Storage

Create a Cloud Run function that uses a Document AI form processor to parse form documents that have been uploaded to a Cloud Storage bucket.

- Run the command to get the email address of the project's Cloud Storage service agent:

```
gcloud storage service-agent --project=$PROJECT_ID
```

- Run the below command to allow the required permissions to the Cloud Storage service account:

```
PROJECT_NUMBER=$(gcloud projects describe $PROJECT_ID --format="value(projectNumber)")

gcloud iam service-accounts create "service-$PROJECT_NUMBER" \
--display-name "Cloud Storage Service Account" || true
```

create an API key 40/100

Task 2. Download the lab source code

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Congratulations!

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Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

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```
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)$ bq --location="US" mk -d \
--description "Form Parser Results" \
${PROJECT_ID}:invoice_parser_results
cd ~/documentai-pipeline-demo/scripts/table-schema/
bq mk --table \
 invoice_parser_results.doc_ai_extracted_entities \
 doc_ai_extracted_entities.json
bq mk --table \
 invoice_parser_results.geocode_details \
 geocode_details.json
Dataset 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results' successfully created.
Table 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results.doc_ai_extracted_entities' successfully created.
Table 'qwiklabs-gcp-00-d9f4d9f417bd:invoice_parser_results.geocode_details' successfully created.
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$ export GEO_CODE_REQUEST_PUBSUB_TOPIC=geo
code_request
gcloud pubsub topics \
    create ${GEO_CODE_REQUEST_PUBSUB_TOPIC}
Created topic [projects/qwiklabs-gcp-00-d9f4d9f417bd/topics/geocode_request].
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$ gcloud storage service-agent --project=${PROJECT_ID}
service-1006094964444@gs-project-accounts.iam.gserviceaccount.com
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$
```

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End Lab 01:16:43 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

[Open Google Cloud console](#)

Username: student-04-dfc5ce584036

Password: yXp0ppbJUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

gcloud storage service-agent --project=\$PROJECT_ID

2. Run the below command to allow the required permissions to the Cloud Storage service account:

```
PROJECT_NUMBER=$(gcloud projects describe $PROJECT_ID --format="value(projectNumber)")

gcloud iam service-accounts create "service-$PROJECT_NUMBER" \
--display-name "Cloud Storage Service Account" || true

gcloud projects add-iam-policy-binding $PROJECT_ID \
--member="serviceAccount:service-$PROJECT_NUMBER@gs-project-
accounts.iam.gserviceaccount.com" \
--role="roles/pubsub.publisher"
gcloud projects add-iam-policy-binding $PROJECT_ID \
--member="serviceAccount:service-$PROJECT_NUMBER@gs-project-
accounts.iam.gserviceaccount.com" \
--role="roles/iam.serviceAccountTokenCreator"
```

create an API key 40/100

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Congratulations!

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Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#) Don't show again Dismiss

```
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$ PROJECT_NUMBER=$(gcloud projects describe $PROJECT_ID --format="value(projectNumber)")  
gcloud iam service-accounts create "service-$PROJECT_NUMBER" \  
--display-name "Cloud Storage Service Account" || true  
  
gcloud projects add-iam-policy-binding $PROJECT_ID \  
--member="serviceAccount:service-$PROJECT_NUMBER@google-project-accounts.iam.gserviceaccount.com" \  
--role="roles/pubsub.publisher"  
gcloud projects add-iam-policy-binding $PROJECT_ID \  
--member="serviceAccount:service-$PROJECT_NUMBER@google-project-accounts.iam.gserviceaccount.com" \  
--role="roles/iam.serviceAccountTokenCreator"  
Created service account [service-1006094964444].  
Updated IAM policy for project [qwiklabs-gcp-00-d9f4d9f417bd].  
bindings:  
- members:  
  - serviceAccount:qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com  
    role: roles/bigquery.admin  
- members:  
  - serviceAccount:1006094964444@cloudbuild.gserviceaccount.com  
    role: roles/cloudbuild.builds.builder  
- members:  
  - serviceAccount:service-1006094964444@gcp-sa-cloudbuild.iam.gserviceaccount.com  
    role: roles/cloudbuild.serviceAgent  
- members:  
  - serviceAccount:1006094964444-compute@developer.gserviceaccount.com  
    role: roles/cloudfunctions.admin  
- members:  
  - serviceAccount:service-1006094964444@gcf-admin-robot.iam.gserviceaccount.com
```

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CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) + Open Editor

Open Editor Settings

i Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

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```
- serviceAccount:service-1006094964444@gs-project-accounts.iam.gserviceaccount.com
role: roles/iam.serviceAccountTokenCreator
- members:
  - serviceAccount:admiral@qwiklabs-services-prod.iam.gserviceaccount.com
  - serviceAccount:qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com
  - user:student-04-dfc5ce584036@qwiklabs.net
role: roles/owner
- members:
  - serviceAccount:1006094964444-compute@developer.gserviceaccount.com
role: roles/pubsub.admin
- members:
  - serviceAccount:service-1006094964444@gs-project-accounts.iam.gserviceaccount.com
role: roles/pubsub.publisher
- members:
  - serviceAccount:1006094964444-compute@developer.gserviceaccount.com
role: roles/run.admin
- members:
  - serviceAccount:service-1006094964444@serverless-robot-prod.iam.gserviceaccount.com
role: roles/run.serviceAgent
- members:
  - serviceAccount:1006094964444-compute@developer.gserviceaccount.com
  - serviceAccount:qwiklabs-gcp-00-d9f4d9f417bd@qwiklabs-gcp-00-d9f4d9f417bd.iam.gserviceaccount.com
role: roles/storage.admin
- members:
  - user:student-04-dfc5ce584036@qwiklabs.net
role: roles/viewer
etag: BwZHK1FRtx0=
version: 1
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd) $
```

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Automate Data Capture at Scale | Automate Data Capture at Scale | (1085) Build an End-to-End Data Cap | (1085) Build an End-to-End Data Cap | +

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Lab setup instructions and requirements

Protect your account and

End Lab 01:15:45 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-04-dfc5ce584036

Password: yXp0pbijUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

--role="roles/iam.serviceAccountTokenCreator"

Note: If the Cloud Storage service account exists, you can ignore the error.

3. Create the Invoice Processor Cloud Run function:

```
cd ~/documentai-pipeline-demo/scripts
export CLOUD_FUNCTION_LOCATION="us-west1"

gcloud functions deploy process-invoices \
--no-gen2 \
--region=${CLOUD_FUNCTION_LOCATION} \
--entry-point=process_invoice \
--runtime=python39 \
--source=cloud-functions/process-invoices \
--timeout=400 \
--env-vars-file=cloud-functions/process-invoices/.env.yaml \
--trigger-resource=gs://${PROJECT_ID}-input-invoices \
--trigger-event=google.storage.object.finalize
```

create an API key 40/100

Task 2. Download the lab source code

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Congratulations!

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30-12-2025

form-processor – Document AI - x +

https://console.cloud.google.com/ai/document-ai/locations/us/processors/50a0471c45595c75/details?project=qwiklabs-gcp-00-d9f4d9f417bd&... | 7

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Google Cloud document ai Search

CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) + Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
- serviceAccount:service-1006094964444@gs-project-accounts.iam.gserviceaccount.com
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts/table-schema (qwiklabs-gcp-00-d9f4d9f417bd)$ cd ~/documentai-pipeline-demo/scripts
export CLOUD_FUNCTION_LOCATION="us-west1"

gcloud functions deploy process-invoices \
--no-gen2 \
--region=${CLOUD_FUNCTION_LOCATION} \
--entry-point=process_invoice \
--runtime=python39 \
--source=cloud-functions/process-invoices \
--timeout=400 \
--env-vars-file=cloud-functions/process-invoices/.env.yaml \
--trigger-resource=gs://${PROJECT_ID}-input-invoices \
--trigger-event=google.storage.object.finalize
WARNING: Python 3.9 is no longer supported by the Python community as of 5 October, 2025. Runtime python39 is currently deprecated for Cloud Functions. We recommend you to upgrade to the latest version of Python as soon as possible.
Deploying function (may take a while - up to 2 minutes)...working
For Cloud Build Logs, visit: https://console.cloud.google.com/cloud-build/builds;region=us-west1/d4aac4e9-32d6-4f1c-83a2-5eb42a44888b?project=1006094964444
Deploying function (may take a while - up to 2 minutes)...done.
automaticUpdatePolicy: {}
availableMemoryMb: 256
buildId: d4aac4e9-32d6-4f1c-83a2-5eb42a44888b
buildName: projects/1006094964444/locations/us-west1/builds/d4aac4e9-32d6-4f1c-83a2-5eb42a44888b
buildServiceAccount: projects/qwiklabs-gcp-00-d9f4d9f417bd/serviceAccounts/1006094964444-compute@developer.gserviceaccount.com
dockerRegistry: ARTIFACT_REGISTRY
entryPoint: process_invoice
environmentVariables:
  GCS_OUTPUT_URI_PREFIX: processed
  GEOCODE_REQUEST_TOPICNAME: geocode_request
```

9+ 14°C Clear

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07:00 PM 30-12-2025 ENG IN

form-processor – Document AI - x +

https://console.cloud.google.com/ai/document-ai/locations/us/processors/50a0471c45595c75/details?project=qwiklabs-gcp-00-d9f4d9f417bd&... | 7

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Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

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```
buildName: projects/1006094964444/locations/us-west1/builds/d4aac4e9-32d6-4f1c-83a2-5eb42a44888b
buildServiceAccount: projects/qwiklabs-gcp-00-d9f4d9f417bd/serviceAccounts/1006094964444-compute@developer.gserviceaccount.com
dockerRegistry: ARTIFACT_REGISTRY
entryPoint: process_invoice
environmentVariables:
  GCS_OUTPUT_URI_PREFIX: processed
  GEOCODE_REQUEST_TOPICNAME: geocode_request
  PARSER_LOCATION: YourParserlocation_goeshere
  PROCESSOR_ID: YourProcessorID_goeshere
  TIMEOUT: '300'
eventTrigger:
  eventType: google.storage.object.finalize
  failurePolicy: {}
  resource: projects/_/buckets/qwiklabs-gcp-00-d9f4d9f417bd-input-invoices
  service: storage.googleapis.com
ingressSettings: ALLOW_ALL
labels:
  deployment-tool: cli-gcloud
maxInstances: 5
name: projects/qwiklabs-gcp-00-d9f4d9f417bd/locations/us-west1/functions/process-invoices
runtime: python39
satisfiesPzi: true
serviceAccountEmail: qwiklabs-gcp-00-d9f4d9f417bd@appspot.gserviceaccount.com
sourceUploadUrl: https://storage.googleapis.com/uploads-958518514861.us-west1.cloudfunctions.appspot.com/87da879f-397d-446d-a87a-f9e1f6f42dc1.zip
status: ACTIVE
timeout: 400s
updateTime: '2025-12-30T13:30:18.069115827Z'
versionId: '1'
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts (qwiklabs-gcp-00-d9f4d9f417bd) $
```

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Lab setup instructions and requirements

Protect your account and

End Lab 01:12:42 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-04-dfc5ce584036

Password: yXp0ppbiJUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

Automate Data Capture at Scale with Document AI > Build an End-to-End Data Capture Pipeline using Document AI

Create the Cloud Run function to lookup geocode data from an address

Create the Cloud Run function that accepts address data from a Pub/Sub message and uses the Geocoding API to precisely locate the address.

1. Create the Geocoding Cloud Run function:

```
cd ~/documentai-pipeline-demo/scripts
gcloud functions deploy geocode-addresses \
--no-gen2 \
--region=${CLOUD_FUNCTION_LOCATION} \
--entry-point=process_address \
--runtime=python39 \
--source=cloud-functions/geocode-addresses \
--timeout=60 \
--env-vars-file=cloud-functions/geocode-addresses/.env.yaml \
--trigger-topic=${GEO_CODE_REQUEST_PUBSUB_TOPIC}
```

- create an API key 40/100
- Task 2. Download the lab source code
- Task 3. Create a form processor
- Task 4. Create Cloud Storage buckets and a BigQuery dataset
- Task 5. Create Cloud Run functions
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- Congratulations!

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https://console.cloud.google.com/ai/document-ai/locations/us/processors/50a0471c45595c75/details?project=qwiklabs-gcp-00-d9f4d9f417bd&... | 7

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Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts (qwiklabs-gcp-00-d9f4d9f417bd)$ cd ~/documentai-pipeline-demo/scripts
gcloud functions deploy geocode-addresses \
--no-gen2 \
--region=${CLOUD_FUNCTION_LOCATION} \
--entry-point=process_address \
--runtime=python39 \
--source=cloud-functions/geocode-addresses \
--timeout=60 \
--env-vars-file=cloud-functions/geocode-addresses/.env.yaml \
--trigger-topic=${GEO_CODE_REQUEST_PUBSUB_TOPIC}
WARNING: Python 3.9 is no longer supported by the Python community as of 5 October, 2025. Runtime python39 is currently deprecated for Cloud Functions. We recommend you to upgrade to the latest version of Python as soon as possible.
Deploying function (may take a while - up to 2 minutes)...working...
For Cloud Build Logs, visit: https://console.cloud.google.com/cloud-build/builds;region=us-west1/1b7cb821-2e87-49a2-8c22-fe8b1f4941e6?project=1006094964444
Deploying function (may take a while - up to 2 minutes)...done.
automaticUpdatePolicy: {}
availableMemoryMb: 256
buildId: 1b7cb821-2e87-49a2-8c22-fe8b1f4941e6
buildName: projects/1006094964444/locations/us-west1/builds/1b7cb821-2e87-49a2-8c22-fe8b1f4941e6
buildServiceAccount: projects/qwiklabs-gcp-00-d9f4d9f417bd/serviceAccounts/1006094964444-compute@developer.gserviceaccount.com
dockerRegistry: ARTIFACT_REGISTRY
entryPoint: process_address
environmentVariables:
  API_key: YourAPIKey_GoesHere
eventTrigger:
  eventType: google.pubsub.topic.publish
  failurePolicy: {}
resource: projects/qwiklabs-gcp-00-d9f4d9f417bd/topics/geocode_request
service: pubsub.googleapis.com
```

9+ 14°C Clear

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ENG IN

07:03 PM 30-12-2025

form-processor – Document AI - x +

https://console.cloud.google.com/ai/document-ai/locations/us/processors/50a0471c45595c75/details?project=qwiklabs-gcp-00-d9f4d9f417bd&... | 7

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Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
Deploying function (may take a while - up to 2 minutes)...done.
automaticUpdatePolicy: {}
availableMemoryMb: 256
buildId: 1b7cb821-2e87-49a2-8c22-fe8b1f4941e6
buildName: projects/1006094964444/locations/us-west1/builds/1b7cb821-2e87-49a2-8c22-fe8b1f4941e6
buildServiceAccount: projects/qwiklabs-gcp-00-d9f4d9f417bd/serviceAccounts/1006094964444-compute@developer.gserviceaccount.com
dockerRegistry: ARTIFACT_REGISTRY
entryPoint: process_address
environmentVariables:
  API_key: YourAPIKey_GoesHere
eventTrigger:
  eventType: google.pubsub.topic.publish
  failurePolicy: {}
  resource: projects/qwiklabs-gcp-00-d9f4d9f417bd/topics/geocode_request
  service: pubsub.googleapis.com
ingressSettings: ALLOW_ALL
labels:
  deployment-tool: cli-gcloud
maxInstances: 5
name: projects/qwiklabs-gcp-00-d9f4d9f417bd/locations/us-west1/functions/geocode-addresses
runtime: python39
satisfiesPzi: true
serviceAccountEmail: qwiklabs-gcp-00-d9f4d9f417bd@appspot.gserviceaccount.com
sourceUploadUrl: https://storage.googleapis.com/uploads-958518514861.us-west1.cloudfunctions.appspot.com/941de6fa-e773-400b-bd24-002d4689dc74.zip
status: ACTIVE
timeout: 60s
updateTime: '2025-12-30T13:32:44.833049983Z'
versionId: '1'
student_04_dfc5ce584036@cloudshell:~/documentai-pipeline-demo/scripts (qwiklabs-gcp-00-d9f4d9f417bd) $
```

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Automate Data Capture at Scale with Document AI > Build an End-to-End Data Capture Pipeline using Document AI

Build an End-to-End Data Capture Pipeline using

Lab setup instructions and requirements

Protect your account and

End Lab 01:10:08 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. [Learn more.](#)

[Open Google Cloud console](#)

Username: student-04-dfc5ce584036

Password: yXp0ppbiJUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

Task 6. Edit environment variables for Cloud Run functions

In this task, you finalize the configuration of the Cloud Run functions by editing the environment variables for each function to reflect your lab specific parameters via the Cloud Console.

Edit environment variables for the process-invoices Cloud Run function

Set the Cloud Run function environment variables for the **process-invoices** function.

1. In the Cloud Console, in the search bar, type **Cloud Run functions** and click the product page result.

It will redirect to the **Cloud Run** console, click on **Go to Cloud Run functions 1st gen** to see the deployed functions **process-invoices** and **geocode-addresses**.

Note: If you are not able to see the link for **Go to Cloud Run functions 1st gen**, then refresh the Cloud Run console.

create an API key 40/100

Task 2. Download the lab source code

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Task 4. Create Cloud Storage buckets and a BigQuery dataset

Task 5. Create Cloud Run functions

Task 6. Edit environment variables for Cloud Run functions

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Congratulations!

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Build an End-to-End Data Capture Pipeline using

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Protect your account and

End Lab 01:02:49 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-04-dfc5ce584036

Password: yXp0pbjJUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f4

4. Click **Runtime, build, connections and security settings** to expand that section.

5. Under **Runtime environment variables**, add the **GCP_PROJECT** variable and the value to match your Project ID.

6. Under **Runtime environment variables**, update the **PROCESSOR_ID** value to match the Invoice processor ID you created earlier.

7. Under **Runtime environment variables**, update the **PARSER_LOCATION** value to match the region of the invoice processor you created earlier. This will be **us** or **eu**. This parameter **must** be lowercase.

8. Click **Next** and select **.env.yaml** and then update the **PROCESSOR_ID**, **PARSER_LOCATION**, and **GCP_PROJECT** values again for your invoice processor.

Configuration — Code

Runtime: Python 3.9

Entry point: process_invoice

Source code: Inline Editor

.env.yaml

requirements.txt

Press Option+F1 for Accessibility Options.

```
1 PARSE_LOCATION: us
2 PROCESSOR_ID: e3f5582893836300
3 GCS_OUTPUT_URI_PREFIX: processed
4 TIMEOUT: "300"
5 GEOCODE_REQUEST_TOPICNAME: geocode_request
6 GCP_PROJECT: qwiklabs-gcp-01-4a92ee1be10
```

create an API key 40/100

Task 2. Download the lab source code

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https://console.cloud.google.com/ai/document-ai/locations/us/processors/50a0471c45595c75/details?project=qwiklabs-gcp-00-d9f4d9f417bd&...

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd

Document AI / Processors / Processor: 50a0471c45595c75

Overview Overview Processors My processors Processor gallery Custom Processors Monitoring Capacity Reservation

form-processor

Processor details Manage version

Basic information

Name	for
ID	50a0471c45595c75
Status	Green
Processor Type	Form
Created	Dec 12, 2023
Encryption Type	Go
Region	us

Prediction

Prediction endpoint ? http://

Test your processor

Supports JPEG, JPG, PNG, BMP, PDF, PDF

Upload test document

Cloud Run functions

Search x

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- Cloud Run functions Product · Event-driven serverless functions
- Cloud Run Documentation · Cloud Run is a fully managed platform that enables you to run your code...

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- Domain mappings Product page · Cloud Run

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- Cloud Run documentation

CLOUD SHELL

https://console.cloud.google.com/functions/run_redirect?referrer=search&cloudshell=true&project=qwiklabs-gcp-00-d9f4d9f417bd

Open Editor

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Services – Cloud Run – qwiklabs

https://console.cloud.google.com/run/services?cloudshell=true&project=qwiklabs-gcp-00-d9f4d9f417bd

Cloud Run

Services

Deploy container

Connect repo

Write a function

Search (/) for resources, docs, products, and more

Cloud Run functions (1st gen)

Learn more

Go to Cloud Run functions 1st gen

Filter services

Name Deployment type Req/sec Region Authentication Ingress Last deployed Deployed by

Release Notes

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Cloud Shell icon

Search icon

File icon

Image icon

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Video icon

Document icon

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07:07 PM

30-12-2025

9+ 14°C Clear

Your project has Cloud Run functions (1st gen) that are not listed on this page.

Run your app on a fully managed platform

Get started by creating a service - each Cloud Run service has a unique

Functions (1st Gen) – Cloud Run

https://console.cloud.google.com/functions/list?cloudshell=true&project=qwiklabs-gcp-00-d9f4d9f417bd

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Cloud Run functions Functions (1st Gen) Refresh Learn

This page only shows legacy 1st gen functions. Creating new 1st gen functions in the console is no longer supported. Creation is now only possible using the gcloud CLI, API, or Terraform.

Please go to Cloud Run to manage all new function deployments.

Learn more Go to Cloud Run

Filter functions

	Name ↑	Last deployed	Region	Upgrade status	Recommendation	Trigger	Runtime	Memory allocated	Executed function	Actions
<input type="checkbox"/>	geocode-addresses	Dec 30, 2025, 7:02:44 PM	us-west1	Ready to upgrade		Topic: geocode_request	Python 3.9	256 MB	process_address	⋮
<input type="checkbox"/>	process-invoices	Dec 30, 2025, 7:00:18 PM	us-west1			Bucket: qwiklabs-gcp-00-d9f4d9f417bd-input-invoices	Python 3.9	256 MB	process_invoice	⋮

CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) Open Editor

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Search

07:07 PM 30-12-2025 ENG IN

Cloud Run functions – qwiklabs-1

https://console.cloud.google.com/functions/details/us-west1/process-invoices?env=gen1&cloudshell=true&project=qwiklabs-gcp-00-d9f4d9f41...

Cloud Run functions / Functions (1st Gen) / Details: process-invoices

Function details Edit Delete Learn

⚠ Python 3.9 is deprecated as of Oct 5, 2025 and will be decommissioned on Apr 5, 2026. Please update to the latest runtime version available.

process-invoices Cloud Run function (1st gen) Version 1, deployed at Dec 30, 2025, 7:00:...

Metrics Details Source Variables Trigger Permissions Logs Testing

Predefined ✓ 1 hour 6 hours 12 hours 1 day 2 days 4 days 7 days 14 days 30 days Annotations (1)

Invocations/Second No data is available for the selected time frame.

Execution time No data is available for the selected time frame.

CLOUD SHELL Open Editor

https://console.cloud.google.com/functions/edit/us-west1/process-invoices?env=gen1&clou...

9+ 14°C Clear

Search

07:08 PM 30-12-2025 ENG IN

>Edit function – Cloud Run function × form-processor – Document AI – qvii +

https://console.cloud.google.com/functions/edit/us-west1/process-invoices?env=gen1&project=qwiklabs-gcp-00-d9f4d9f417bd

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Cloud Run functions / Functions (1st Gen) / Details: process-invoices / Edit

Edit function Learn

App Engine default service account

By default Cloud Functions uses the automatically created Default App Engine Service Account. [Learn more about service accounts.](#)

Runtime environment variables

Name 1 *	Value 1
GCS_OUTPUT_URI_PREFIX	processed
Name 2 *	Value 2
GEOCODE_REQUEST_TOPICNAME	geocode_request
Name 3 *	Value 3
PARSER_LOCATION	us
Name 4 *	Value 4
PROCESSOR_ID	50a0471c45595c75
Name 5 *	Value 5
TIMEOUT	300
Name 6 *	Value 6
GCP_PROJECT	qwiklabs-gcp-00-d9f4d9f417bd

+ Add variable

Next Cancel

9+ 14°C Clear Search

ENG IN 07:12 PM 30-12-2025

>Edit function – Cloud Run function × form-processor – Document AI – qvii +

https://console.cloud.google.com/functions/edit/us-west1/process-invoices?env=gen1&project=qwiklabs-gcp-00-d9f4d9f417bd

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Cloud Run functions / Functions (1st Gen) / Details: process-invoices / Edit

Edit function Learn

Configuration — 2 Code

Runtime Python 3.9 Entry point * process_invoice

⚠ Python 3.9 is deprecated as of Oct 5, 2025 and will be decommissioned on Apr 5, 2026. Please use the latest runtime version available. Learn more

Source code Inline Editor .env.yaml requirements.txt main.py

Press Alt+F1 for Accessibility Options.

```
1 PARSER_LOCATION: YourParserlocation_goeshere
2 PROCESSOR_ID: YourProcessorID_goeshere
3 GCS_OUTPUT_URI_PREFIX: processed
4 TIMEOUT: "300"
5 GEOCODE_REQUEST_TOPICNAME: geocode_request
6
7
```

Previous Deploy Cancel

9+ 14°C Clear Search

ENG IN 07:12 PM 30-12-2025

>Edit function – Cloud Run function × form-processor – Document AI – qvii +

https://console.cloud.google.com/functions/edit/us-west1/process-invoices?env=gen1&project=qwiklabs-gcp-00-d9f4d9f417bd

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Cloud Run functions / Functions (1st Gen) / Details: process-invoices / Edit

Edit function Learn

Configuration — 2 Code

Runtime Python 3.9 Entry point * process_invoice

⚠ Python 3.9 is deprecated as of Oct 5, 2025 and will be decommissioned on Apr 5, 2026. Please use the latest runtime version available. Learn more

Source code Inline Editor .env.yaml requirements.txt main.py

Press Alt+F1 for Accessibility Options.

```
1 PARSER_LOCATION: us
2 PROCESSOR_ID: 50a0471c45595c75
3 GCS_OUTPUT_URI_PREFIX: processed
4 TIMEOUT: "300"
5 GEOCODE_REQUEST_TOPICNAME: geocode_request
6 GCP_PROJECT: qwiklabs-gcp-00-d9f4d9f417bd
7
8
```

Previous Deploy Cancel

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End Lab 00:56:32 ? Time limit

Edit environment variables for the geocode-addresses Cloud Run function

Set the Cloud Run function environment variables for the GeoCode data enrichment function.

1. Click the Cloud Run function **geocode-addresses** to open its management page.
2. Click **Edit**.
3. Click **Runtime, build, connections and security settings** to expand that section.
4. Under **Runtime environment variables**, update the **API_key** value to match to the API Key value created in Task 1.
5. Click **Next** and select **.env.yaml** and then update the **API_key** value to match the API Key value you set in the previous step.
6. Click **Deploy**.

Deploy the Geocode Addresses Cloud Run function

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create an API key 40/100

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Task 5. Create Cloud Run functions

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Task 7. Test and validate the end-to-end solution

Congratulations!



>Edit function – Cloud Run function x form-processor – Document AI – qvii +

https://console.cloud.google.com/functions/list?env=gen1&project=qwiklabs-gcp-00-d9f4d9f417bd

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Cloud Run functions Functions (1st Gen) Refresh Learn

This page only shows legacy 1st gen functions. Creating new 1st gen functions in the console is no longer supported. Creation is now only possible using the gcloud CLI, API, or Terraform.

Please go to Cloud Run to manage all new function deployments.

Learn more

Go to Cloud Run

Filter functions										
	Name ↑	Last deployed	Region	Upgrade status	Recommendation	Trigger	Runtime	Memory allocated	Executed function	Actions
<input checked="" type="checkbox"/>	geocode-addresses	Dec 30, 2025, 7:02:44PM	us-west1	Ready to upgrade		Topic: geocode_request	Python 3.9	256 MB	process_address	⋮
<input type="checkbox"/>	process-invoices	Dec 30, 2025, 7:00:18PM	us-west1			Bucket: qwiklabs-gcp-00-d9f4d9f417bd-input-invoices	Python 3.9	256 MB	process_invoice	⋮

>Edit function – Cloud Run function | form-processor – Document AI – qvii | +

https://console.cloud.google.com/functions/edit/us-west1/geocode-addresses?env=gen1&project=qwiklabs-gcp-00-d9f4d9f417bd

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Cloud Run functions / Functions (1st Gen) / Details: geocode-addresses / Edit

Edit function Learn

Configuration — 2 Code

Runtime Python 3.9 Entry point * process_address

⚠ Python 3.9 is deprecated as of Oct 5, 2025 and will be decommissioned on Apr 5, 2026. Please use the latest runtime version available. Learn more

Source code Inline Editor Press Alt+F1 for Accessibility Options.

1 API_key: AIzaSyBZYmWhuEkVJ0BrcicVfT2vQbLzD5QRbro
2

.env.yaml requirements.txt main.py

Previous Deploy Cancel

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>Edit function – Cloud Run function x form-processor – Document AI – qvii +

https://console.cloud.google.com/functions/edit/us-west1/geocode-addresses?env=gen1&project=qwiklabs-gcp-00-d9f4d9f417bd | 7

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Edit function Learn

Configuration — 2 Code

Runtime Python 3.9 Entry point * process_address

⚠ Python 3.9 is deprecated as of Oct 5, 2025 and will be decommissioned on Apr 5, 2026. Please use the latest runtime version available. Learn more

Source code Inline Editor + .env.yaml requirements.txt main.py

Press Alt+F1 for Accessibility Options.

```
1 API_key: AIzaSyBZYmWhuEkVJ0BrcicVfT2vQbLzD5QRbro
2
```

Updating function "geocode-addresses"...

Previous Deploying... Cancel

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End Lab
00:55:26
?
Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.

Learn more.
Open Google Cloud console
Username
student-04-dfc5ce584036

Password
yXp0pbijUBg8

Project ID
qwiklabs-gcp-00-d9f4d9f


Task 7. Test and validate the end-to-end solution

Upload test data to Cloud Storage and monitor the progress of the pipeline as the documents are processed and the extracted data is enhanced.

- In Cloud Shell, enter the following command to upload sample forms to the Cloud Storage bucket that will trigger the `process-invoices` Cloud Run function:

```
export PROJECT_ID=$(gcloud config get-value core/project)
gsutil cp gs://splts/gsp927/documentai-pipeline-demo/sample-files/*
```

- In the Cloud Console, in the search bar, type `Cloud Run functions` and click the product page result.
- Click the Cloud Run function `process-invoices` to open its management page.
- Click **Logs**.

create an API key
80/100
Task 2. Download the lab source code
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>Edit function – Cloud Run functio x form-processor – Document AI – qvii +

https://console.cloud.google.com/functions/list?env=gen1&project=qwiklabs-gcp-00-d9f4d9f417bd&cloudshell=true

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CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) + Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

Welcome to Cloud Shell! Type "help" to get started, or type "gemini" to try prompting with Gemini CLI.
Your Cloud Platform project in this session is set to **qwiklabs-gcp-00-d9f4d9f417bd**.
Use `gcloud config set project [PROJECT_ID]` to change to a different project.
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$ export PROJECT_ID=\$(gcloud config get-value core/project)
gsutil cp gs://splz/gsp927/documentai-pipeline-demo/sample-files/* gs://\${PROJECT_ID}-input-invoices/
Your active configuration is: [cloudshell-24298]
Copying gs://splz/gsp927/documentai-pipeline-demo/sample-files/cymbal_invoice.pdf [Content-Type=application/pdf]...
- [1 files] [67.4 KiB/ 67.4 KiB]
Operation completed over 1 objects/67.4 KiB.
student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$

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Search

07:18 PM 30-12-2025 ENG IN

process-invoices – Cloud Run function | form-processor – Document AI – qwi... +

https://console.cloud.google.com/functions/details/us-west1/process-invoices?env=gen1&cloudshell=true&project=qwiklabs-gcp-00-d9f4d9f41...

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd Search (/) for resources, docs, products, and more Search

Cloud Run functions / Functions (1st Gen) / Details: process-invoices

Function details Edit Delete Learn C

⚠ Python 3.9 is deprecated as of Oct 5, 2025 and will be decommissioned on Apr 5, 2026. Please update to the latest runtime version available.

Learn more Edit and redeploy

process-invoices Cloud Run function (1st gen) Version 2, deployed at Dec 30, 2025, 7:14:...

Metrics Details Source Variables Trigger Permissions Logs Testing

Logs Severity Default Filter Search all fields and values

Severity	Timestamp	Summary
INFO	2025-12-30 18:58:31.977 IST	Cloud Functions CreateFunction us-west1:process-invoices student-04-dfc5ce584036@qwiklabs.net {@type: type.googleapis.com/google.cloud.audit.AuditLog, authenticationInfo: {...}, authorizingIdentity: {...}, auditLogName: "projects/qwiklabs-gcp-00-d9f4d9f417bd/auditLogs/20251230T071425Z", auditEvent: {...}, logName: "projects/qwiklabs-gcp-00-d9f4d9f417bd/logs/cloud-functions.googleapis.com%2Faudit", logType: "AUDIT", method: "POST", methodName: "CreateFunction", resource: ".../functions/process-invoices", resourceName: ".../functions/process-invoices", sourceService: "Cloud Functions", status: {...}, timestamp: "2025-12-30T07:14:25.977Z", traceId: "..."}, targetResource: ".../functions/process-invoices", targetService: "Cloud Functions", verb: "CREATE"
INFO	2025-12-30 18:58:32.557 IST	Cloud Functions CreateFunction us-west1:process-invoices student-04-dfc5ce584036@qwiklabs.net {@type: type.googleapis.com/google.cloud.audit.AuditLog, authenticationInfo: {...}, authorizingIdentity: {...}, auditLogName: "projects/qwiklabs-gcp-00-d9f4d9f417bd/auditLogs/20251230T071425Z", auditEvent: {...}, logName: "projects/qwiklabs-gcp-00-d9f4d9f417bd/logs/cloud-functions.googleapis.com%2Faudit", logType: "AUDIT", method: "POST", methodName: "CreateFunction", resource: ".../functions/process-invoices", resourceName: ".../functions/process-invoices", sourceService: "Cloud Functions", status: {...}, timestamp: "2025-12-30T07:14:32.557Z", traceId: "..."}, targetResource: ".../functions/process-invoices", targetService: "Cloud Functions", verb: "CREATE"
INFO	2025-12-30 18:58:32.605 IST	Cloud Functions CreateFunction us-west1:process-invoices student-04-dfc5ce584036@qwiklabs.net {@type: type.googleapis.com/google.cloud.audit.AuditLog, authenticationInfo: {...}, authorizingIdentity: {...}, auditLogName: "projects/qwiklabs-gcp-00-d9f4d9f417bd/auditLogs/20251230T071425Z", auditEvent: {...}, logName: "projects/qwiklabs-gcp-00-d9f4d9f417bd/logs/cloud-functions.googleapis.com%2Faudit", logType: "AUDIT", method: "POST", methodName: "CreateFunction", resource: ".../functions/process-invoices", resourceName: ".../functions/process-invoices", sourceService: "Cloud Functions", status: {...}, timestamp: "2025-12-30T07:14:32.605Z", traceId: "..."}, targetResource: ".../functions/process-invoices", targetService: "Cloud Functions", verb: "CREATE"
WARNING	2025-12-30 19:00:09.678 IST	process-invoices An error occurred: module 'importlib.metadata' has no attribute 'packages_distributions'
WARNING	2025-12-30 19:00:09.681 IST	process-invoices /layers/google.python.pip/pip/lib/python3.9/site-packages/google/api_core/_python_version_support.py:252: FutureWarning: You are using a Python version (3.9.25) past...
WARNING	2025-12-30 19:00:09.681 IST	process-invoices warnings.warn(message, FutureWarning)

CLOUD SHELL Terminal (qwiklabs-gcp-00-d9f4d9f417bd) Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

Operation completed over 1 objects/67.4 KiB.

student_04_dfc5ce584036@cloudshell:~ (qwiklabs-gcp-00-d9f4d9f417bd)\$

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Build an End-to-End Data Capture Pipeline using

Lab setup instructions and requirements

Protect your account and

End Lab 00:53:47 ? Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. [Learn more.](#)

[Open Google Cloud console](#)

Username: student-04-dfc5ce584036e

Password: yXp0pbijUBg8

Project ID: qwiklabs-gcp-00-d9f4d9f

Open the BigQuery console

- In the Google Cloud Console, select Navigation menu > BigQuery.

The **Welcome to BigQuery in the Cloud Console** message box opens. This message box provides a link to the quickstart guide and the release notes.

- Click **Done**.

The BigQuery console opens.

- Expand your Project ID in the Explorer.
- Expand **invoice_parser_results**.
- Select **doc_ai_extracted_entities** and click **Preview**.

You can see the form information extracted from the invoices by the invoice processor, and you can see that address information and the supplier name has been detected.

- Select **geocode_details** and click **Preview**.

create an API key 80/100

Task 2. Download the lab source code

Task 3. Create a form processor

Task 4. Create Cloud Storage buckets and a BigQuery dataset

Task 5. Create Cloud Run functions

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Task 7. Test and validate the end-to-end solution

Congratulations!

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Congratulations!

Automate Data Capture at Scale with Document AI > Build an End-to-End Data Capture Pipeline using Document AI

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1. In the Google Cloud Console, select Navigation menu > BigQuery.

The **Welcome to BigQuery in the Cloud Console** message box opens. This message box provides a link to the quickstart guide and the release notes.

2. Click **Done**.

The BigQuery console opens.

3. Expand your Project ID in the Explorer.

4. Expand **invoice_parser_results**.

5. Select **doc_ai_extracted_entities** and click **Preview**.

You can see the form information extracted from the invoices by the invoice processor, and you can see that address information and the supplier name has been detected.

6. Select **geocode_details** and click **Preview**.

You can see the formatted address, latitude, and longitude for each invoice that has been processed that contained address data that Document AI was able to extract.

< Previous

Check complete. Points earned: 20. Message: Assessment Completed!

Next >



process-invoices – Cloud Run function form-processor – Document AI

https://console.cloud.google.com/ai/document-ai/locations/us/processors/50a0471c45595c75/details?project=qwiklabs-gcp-00-d9f4d9f417bd

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd

Document AI / Processors / Processor: 50a0471c45595c75

Overview Overview

Processors

My processors

Processor gallery

Custom Processors

Monitoring

Capacity Reservation

form-processor

Processor details Manage versions

Basic information

Name form-processor

ID 50a0471c45595c75

Status Enabled

Processor Type Form Processor

Created Dec 12, 2023

Encryption Type Google Cloud KMS

Region us

Prediction

Prediction endpoint http://34.125.100.100:8080/predict

Test your processor

Supports JPEG, JPG, PNG, BMP, PDF, TIF, TIFF, DOCX, XLSX, PPTX, CSV, JSON, XML, PDF, TIF, TIFF, DOCX, XLSX, PPTX, CSV, JSON, XML

Upload test document

BIGquery export

bigquery export

bigquery

Top results

BigQuery Product · Data warehouse/analytics

Bigtable Product · Petabyte-scale, low-latency, non-relational

Databases home Product · Menu for core database services

Products & pages

BigQuery Product · Data warehouse/analytics

Bigtable Product · Petabyte-scale, low-latency, non-relational

Databases home Product · Menu for core database services

Show more

Resources

invoice_parser_results BigQuery Dataset

https://console.cloud.google.com/bigquery?referrer=search&project=qwiklabs-gcp-00-d9f4d9f417bd



process-invoices – Cloud Run function BigQuery – qwiklabs-gcp-00-d9f4d9f417bd

<https://console.cloud.google.com/bigquery?referrer=search&project=qwiklabs-gcp-00-d9f4d9f417bd&ws=!1m5!1m4!4m3!1sqwiklabs-gcp-00-d9f4d9f417bd>

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Google Cloud qwiklabs-gcp-00-d9f4d9f417bd BIG Search

Search BigQuery resources Show starred only

qwiklabs-gcp-00-d9f4d9f417bd

- Repositories
- Queries
- Notebooks
- Data canvases
- Data preparations
- Pipelines
- Connections

invoice_parser_results

- doc_ai_extracted_entities
- geocode_details

Untitled...ery doc_ai...ies

Schema Details Preview Table Explorer Preview Insights Lineage Data Profile Data Quality

Row	input_file_name	date	address	supplier	invoice_number
1	cymbal_invoice-0.gif	10/31/2021	1600 Amphitheatre Parkway Mountain View, CA, United States	null	00001

Results per page: 50 1 – 1 of 1

Job history

9+ 14°C Clear Search

ENG IN 07:20 PM 30-12-2025

process-invoices – Cloud Run function BigQuery – qwiklabs-gcp-00-d9f4d9f417bd +

https://console.cloud.google.com/bigquery?referrer=search&project=qwiklabs-gcp-00-d9f4d9f417bd&ws=!1m5!1m4!4m3!1sqwiklabs-gcp-00-d9f4d9f417bd

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 - Queries
 - Notebooks
 - Data canvases
 - Data preparations
 - Pipelines
 - Connections
- invoice_parser_results
 - doc_ai_extracted_entities
 - geocode_details

Untitled...ery geocod...ils

qwiklabs-gcp-00-d9f4d9f417bd / Datasets / invoice_parser_results / Tables / geocode_details

geocode_det... Query Open in Share Copy Snapshot Delete

Schema	Details	Preview	Table Explorer	Preview	Insights	Lineage	Data Profile	Data Quality
Row	input_file_name	entity_type	entity_text	place_id	formatted_address			
1	cymbal_invoice-0.gif	Address:	1600 Amphitheatre Parkway Mountain View, CA, United States	ChIJxQvW8wK6j4AR3ukttGy3w2s	Google Building 41, Amphitheatre Pkwy View, CA 94043, US			

Results per page: 50 1 – 1 of 1 Job history Show

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