



These very **slides** (everything explained step by step).  
*The one link to link them all..*

[goo.gle/adk-cli-slides](https://goo.gl/adk-cli-slides)



The **ADK workshop** (a single page on GitHub): download ADK, Gemini CLI, and get to the **action!**

[goo.gle/adk-cli-workshop](https://goo.gle/adk-cli-workshop)



Get credits from Google Cloud!  
No credit card required!  
Your resources stay with you after  
this workshop!  
GMail required.

[goo.gle/adk-cli-credits](https://goo.gle/adk-cli-credits)

# Reclaim your \$\$ credits



Riccardo Carlesso  
Developer Advocate



[goo.gle/adk-cli-slides](https://goo.gle/adk-cli-slides)



# Table of Contents

- [05 !\[\]\(6302aad5aed157b291fddf37b4870784\_img.jpg\) Workshop links](#)
- [07 Reclaim credits](#)
- [20 Gemini API Key \(optional\)](#)
- [27 Gemini CLI installation](#)

## Workshop: Building a Simple Travel Agent

Welcome to the ADK workshop! In this session, we will build a simple travel agent step-by-step.

Curiosity: This workshop was built by Riccardo Carfagno with help from Gemini CLI. If you're curious, you can find how I did it by looking at the [GEMINI.md](#) and [WORKSHOP\\_PLAN.adk](#) adk in this folder.

Solution Note: My code is available under [GitHub](#). If you do want to check, you can find here. For the purpose of this Lab, this is ok. We're not here to learn how to write good ADK code, but how to set up your environment to get GOOD code automatically written under your direction. (1) installing the software, (2) configuring / getting it to work, and (3) entering the Golden Feedback Loop is what we really want to learn here. You can also test them all at the same time via [Just web-4steps!](#)

### Prerequisites (Installation)

For this tutorial, you need to install:

1. python and uv (best package manager for Python). Ensure you have `uv` installed:

```
curl -Lsf https://astral.sh/uv/install.sh | sh
```

2. Gemini CLI For Gemini CLI, find installation instructions here: <https://github.com/google-gemini/gemini-cli>.

I Note this requires having `mpc` or `npx` installed.  
ii. On Mac, you can use `brew` as per

iii. On Windows, you can use `choco`, or just download the executable from <https://nodejs.org/en/download/>

3. mpc installed (for step 4). Both `mpc` and `npx` should come naturally as part of Gemini CLI. If not, ask Gemini CLI to help you here.

4. [optional] Install Casey's [just](#), it's a 21st century Makefile if you like makefiles. Also here, ask Gemini CLI to help you install this, he could do it for you!

### Step 0: set up your work environment

You're going to create your OWN solution under `mysolution/`, so let's create the folder and the two files we need.

This is the moment where you can open your IDE (Visual Studio Code, IntelliJ, RubyMine, ...) and open the folder.

```
# 1. Find an empty directory, and download this repo
$ git clone https://github.com/valdus/al-friendy-agents/
$ cd adk/workshops/simple-travel-agent/

# 2. Create your solution empty skeleton
$ mkdir -p mysolution/
$ touch mysolution/_init_.py mysolution/agent.py

# 3. Call Gemini CLI
$ gds init
```

Important: Ensure you're running Gemini CLI from within the `simple-travel-agent/` folder. Also the IDE should show you this as root name. This ensures Gemini CLI picks up the right configuration.

### Step 1: Basic Agent

Let's start by creating a basic agent that can have a conversation.

Create a file named `mysolution/_init_.py`:

```
from agent import root_agent

As simple as that! This allows ADK to know where your code is: in agent.py.
Create a file named mysolution/agent.py:
```

```
from google.adk.agents import Agent

root_agent = Agent(
    name="travelbot",
    max_tokens=256,
    instruction="You are a helpful travel assistant."
    "You can help with general travel advice based on your knowledge.",
)
```

### Testing the agent

This is true for all the steps. ADK allows you to test your agent in two ways: CLI and Web.

- CLI is best for quick and automated tests
- Web is the best to visually see what's happening, use microphone (1), and troubleshooting.

Tip: for the purpose of this exercise, for everything except unit testing, use the Web. It's really amazing!

A good prompt which properly tests steps 1-2-3-4 can be this (smart "titrus prompt"):

H: I'd like to book a hotel in Paris for tomorrow evening alone, one night, in Paris city center. Ideally close to Gare de Lyon. Budget: below 200eur per night.

1. Tell me which YYYYMMDD and Day of the Week is tomorrow.

## Agent Development Kit (ADK)

License Apache 2.0 pypi v1.18.0 Python Unit Tests passing

Reddit [r/agentdevelopmentkit](#) Ask DeepWiki

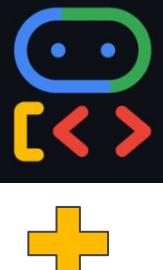
Select an agent

step01\_basics

step02\_tool

step03\_search

step04\_mpc



## Gemini CLI

Testing: CI passing Testing: E2E passing npm v0.15.3 license Apache-2.0

# > GEMINI

Tips for getting started:  
1. Use the command line, files, or run commands.  
2. Be specific for the best results.  
3. Help for more information.

x write a short paragraph about why Gemini is awesome

I will start by searching the web for "Gemini CLI" to understand its main features and purpose. Following that, I'll examine the README.md file for a project-specific overview. I will then consult `docs/` and `examples/` to gain a deeper understanding of its capabilities. Finally, I will write a short paragraph summarizing why Gemini is awesome.

- gds search Searching the web for: "Gemini CLI features and purpose"

I discovered Gemini's Awesome (use to control Z1)

Using 3 GEMINI.md files

/code/gemini-CLI (release) no sandbox (use .docs) gemini-2.5-pre (PRN context-left)

Gemini CLI is an open-source AI agent that brings the power of Gemini directly into your terminal. It provides lightweight access to Gemini, giving you the most direct path from your prompt to our model.



Step 1



goo.gle/adk-cli-workshop

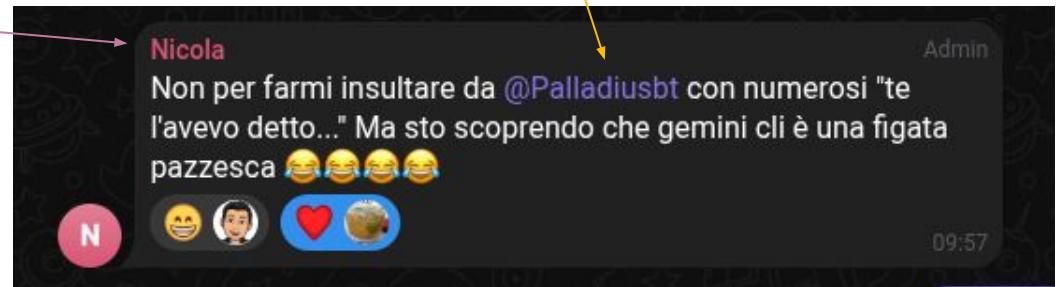
# Welcome to today's hands-on workshop!



# Dicono di Gemini CLI..



Gemini-CLI è una  
Figata Pazzesca!



# You will use:

01

A personal  
**Gmail account**

School and business accounts  
cannot use today's workshop free  
credits.

02

A personal **laptop**

Ideally without restrictions on  
network access.

03



The **Chrome browser**

Other browsers are supported,  
but with a large group we want  
to minimize variations.



# Open this URL:



Proprietary + Confidential



I like money!



[goo.gl/adk-cli-credits](https://goo.gl/adk-cli-credits)

You will need to be signed in



Sign in with Google



Please sign in

Developers Labs



Click on “Sign in with Google” button

[Sign out](#)

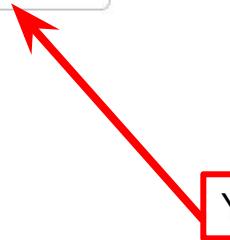
Hi, welcome Riccardo Carlesso (ricc@google.com)



# Developers Labs Milano 2025

Your credit will allow you to use Google Cloud, Gemini API and Firebase. Many products even have a [Free Tier](#). Once redeemed, it will be valid for **180 days** or until the balance is depleted if you use non-free services.

[CLICK HERE TO ACCESS YOUR CREDITS](#)



You should see a similar page. Click on this button.

# GCP credit application

Fill in the following information below to apply GCP credits to your account listed below.

First name \* —  
Amazing

Last name \* —  
Person

Account email  
cloud-dev@gmail.com

Credits will be applied to this account. If you'd like to apply credits to a different account, specify your preference [here](#).

Coupon code

## Terms and conditions

The following terms and conditions apply to the credit you received for Google Cloud products (the "Credit(s)").

The Credit is subject to valid registration and acceptance of an account with Google Cloud and satisfaction of any applicable eligibility requirements including the Google Cloud Platform [Terms of Service](#). You will be responsible for all usage in excess of the Credit and you may not be notified once the Credit is exhausted. The Credit is non-transferable and may not be sold or bartered. The Credit is valid for a limited time only and expires on the date indicated when you receive the applicable Credit code or on such date as designated by Google (in which case the earlier date applies). You may not use the Credit to engage in mining cryptocurrency unless you have obtained Google's written consent, which consent may be revoked by Google in its sole discretion at any time. Google reserves the right to cancel the Credit or change these terms at any time. You are responsible for determining the applicable tax treatment of receiving the Credits and for paying all applicable taxes. Offer void where prohibited by law.

Except for graduate or work-study students participating in an event in their personal capacities, if you are a government employee, including an employee of a public university, public educational institution or state-owned enterprise, you may not use (and you are ineligible to receive) any Credits.

**ACCEPT AND CONTINUE**

\* Indicates required

Make sure that you are applying for the correct account

Click on "Accept and Continue" to proceed

Google Cloud

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

Search



Overview

Paid account

Manage billing account

Learn

Billing account overview

Your total cost (1–7 September 2024)



Cost

\$0.00

Last 7 days

Current month

Credits used

\$0.00

View details

If you see a Billing page, click on top left “Google Cloud” until you see a Project selector on top left

Total cost

\$0.00

Forecasted total cost

Available once there is enough usage

# Go to [console.cloud.google.com](https://console.cloud.google.com)

The screenshot shows the Google Cloud Console homepage. At the top, there is a navigation bar with the Google Cloud logo, a dropdown menu labeled "No organisation", a search bar, and various icons. Below the navigation bar is a "Welcome" section with a colorful logo, a message about creating or selecting a project, and links for "Dashboard" and "Recommendations". There are also four buttons for creating VMs, BigQuery queries, GKE clusters, and storage buckets. The main area is titled "Quick access" and contains eight cards for "API APIs and services", "IAM and admin", "Billing", "Compute Engine", "Cloud Storage", "BigQuery", "VPC network", and "Kubernetes engine". At the bottom left is a "View all products" button. Two red callout boxes are overlaid on the page: one pointing to the "No organisation" dropdown menu with the text "Click on this dropdown menu", and another pointing to the "No organisation" logo with the text "!! If you can't see this dropdown, click first on the colorful logo".

Google Cloud No organisation Search (/) for resources, docs, products and more Search

Welcome

Create or select a project to get up and running with Google Cloud. [Learn more about projects](#)

Dashboard Recommendations

+ Create a VM + Run a query in BigQuery + Create a GKE cluster + Create a storage bucket

Quick access

API APIs and services IAM and admin Billing Compute Engine

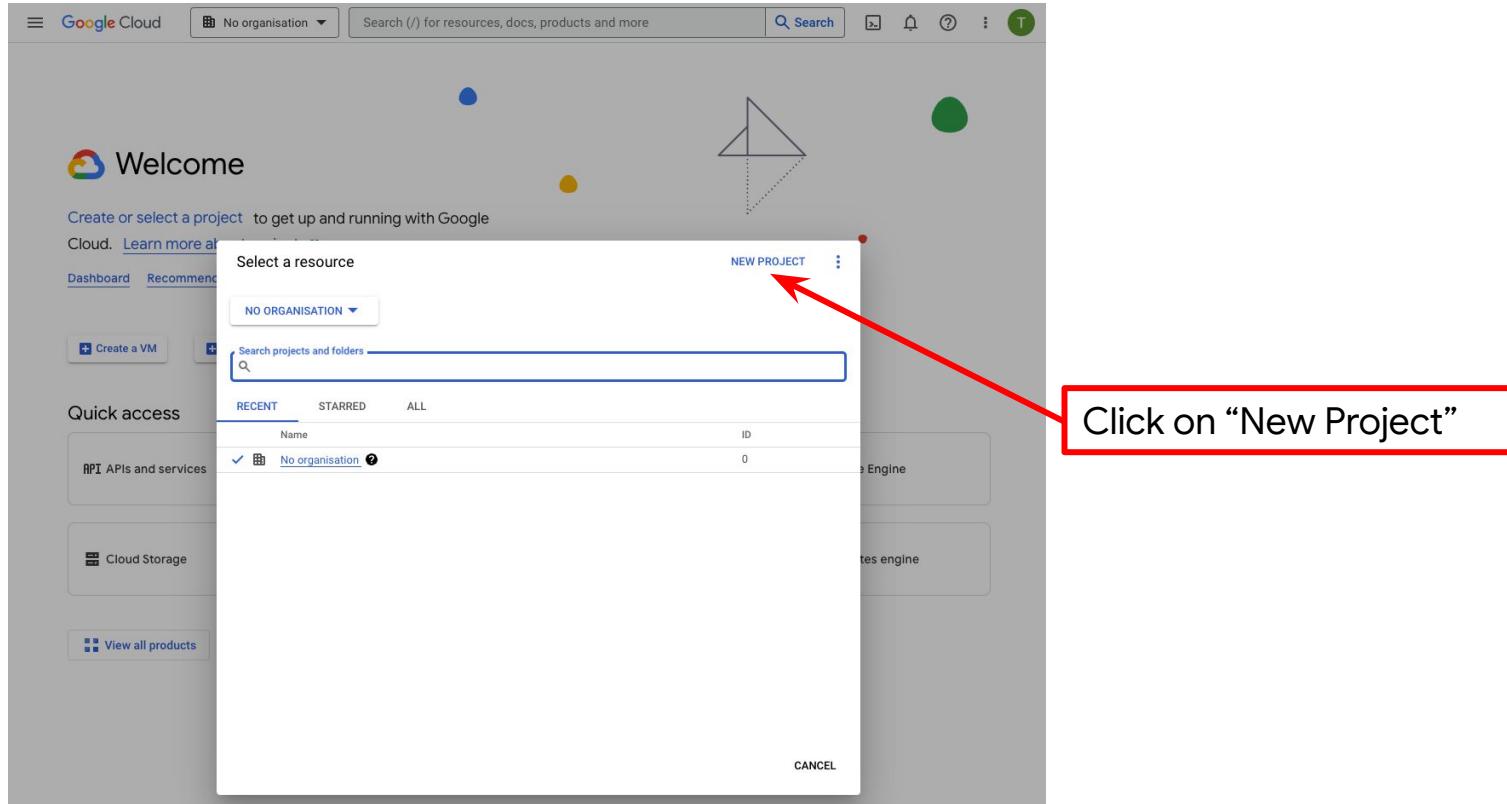
Cloud Storage BigQuery VPC network Kubernetes engine

[View all products](#)

Click on this dropdown menu

!! If you can't see this dropdown, click first on the colorful logo

# Create a new project (skip if you already created one)



# Creating a new project (skip if you already created one)

## New Project

**A** You have 23 projects remaining in your quota. Request an increase or delete projects. [Learn more ↗](#)

[MANAGE QUOTAS ↗](#)

Project name \*  ?

Project ID: awesome-project-402007. It cannot be changed later. [EDIT](#)

Billing account \*  ▼

Any charges for this project will be billed to the account you select here.

Location \*  BROWSE

Parent organization or folder

CREATE CANCEL

Name your project, eg  
“Google Hackathon”

 Select “trial billing account” (if it shows up\*)



(\*) This is **important**, as it connects your project to your new 5 \$ wallet

Select “No Organization”  
(if Location field shows up)

Click “CREATE”

# Creating a new project (Skip if you already have one)

## New Project

⚠ You have 23 projects remaining in your quota. Request an increase or delete projects. [Learn more ↗](#)

[MANAGE QUOTAS ↗](#)

Project name \*  ?

Project ID: awesome-project-402007. It cannot be changed later. [EDIT](#)

Billing account \*  ▼

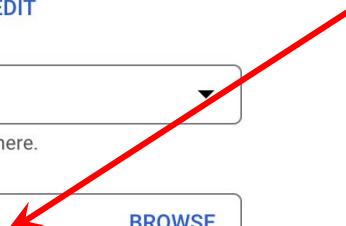
Any charges for this project will be billed to the account you select here.

Location \*  No organization Browse

Parent organization or folder

CREATE CANCEL

If you can't choose "No organization", you might be in trouble.  
One person from **unimo.it** was.



# Check that your project is billed correctly

1. Search for **Billing** or go to <https://console.cloud.google.com/billing>
2. Click on **My projects** tab
3. Make sure your project is associated with the **Google Cloud Platform Trial Billing Account**

Billing

---

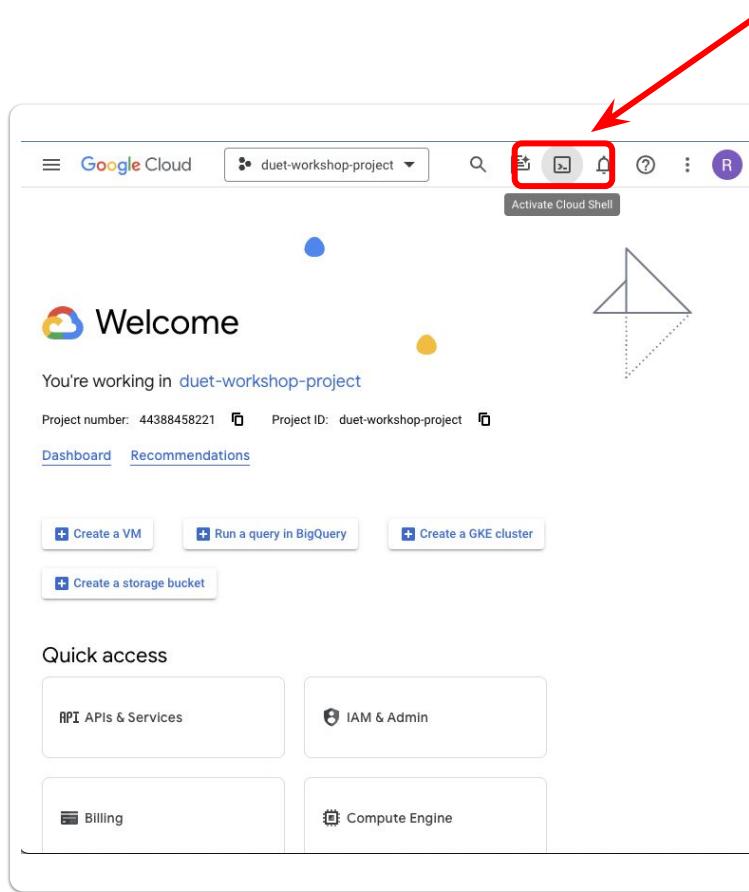
My billing accounts    [My projects](#)

---

Filter Enter property name or value

Name	ID	Billing account ↑
•	sustained-column-2f3h4	<a href="#">Gemini Code Assist</a>
• Tango Zurich Project	tango-zurich-project	<a href="#">Google Cloud Platform Trial Billing Account</a>

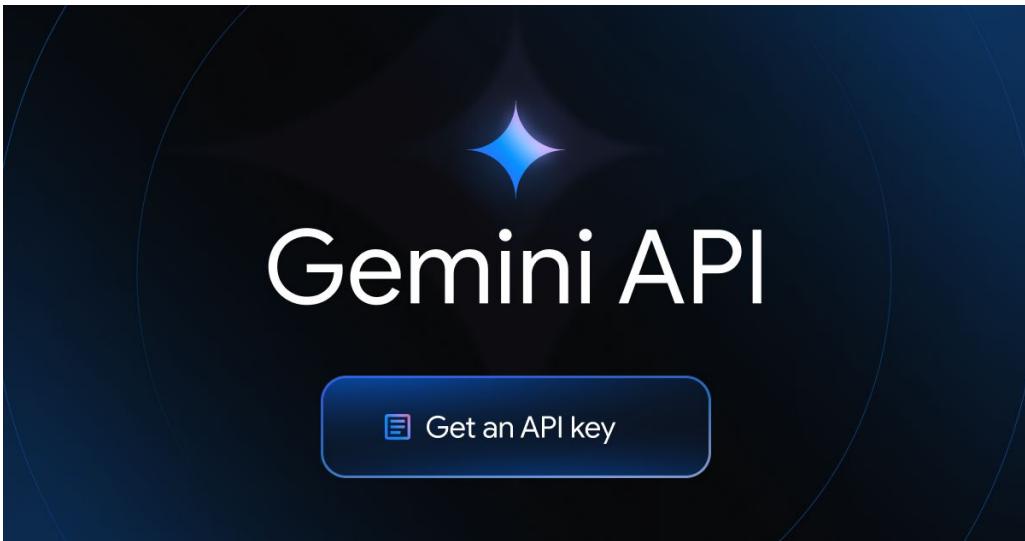
# Open Cloud Shell



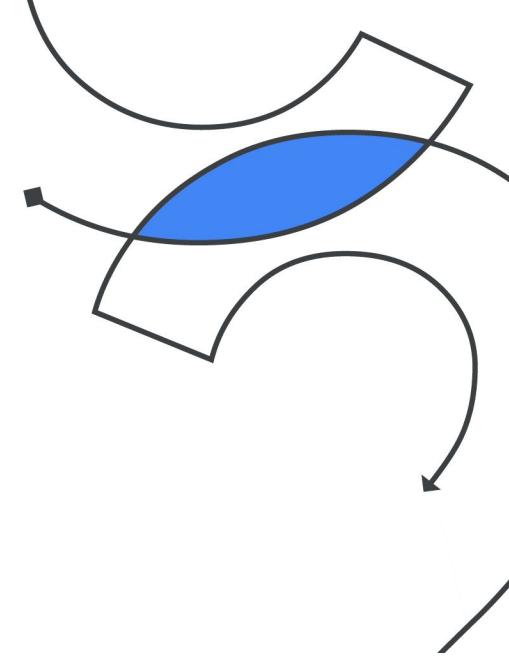
**Note:** It may take a minute or two to start your VM

If you don't have a  
project set up yet, raise  
your hand for a TA to help  
you.





(optional)



 Filter

Overview

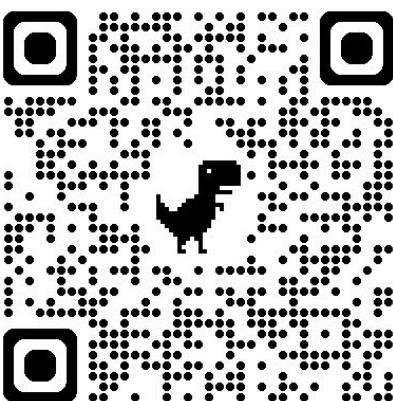
Get started

API keys

Quickstart

Libraries

Release notes



Gemini 1.5 Flash price drop, fine-tuning access for all developers, and more!

[Learn more](#)[Home](#) > [Gemini API](#) > [Docs](#)

## Get an API key

[Send feedback](#)

To use the Gemini API, you need an API key. You can create a key with one click in Google AI Studio.

[Get an API key](#)

★ **Important:** Remember to use your API keys securely. Review [Keep your API key secure](#) and then check out the [API quickstarts](#) to learn language-specific best practices for securing your API key.

<https://ai.google.dev/gemini-api/docs/api-key>

## Google AI Studio

⟳ Get API key

⊕ Create new prompt

☒ New tuned model

⤷ My library

⤷ Allow Drive access

□ Prompt Gallery

🔍 Documentation

☁️ API Reference

⤷ Gemini cookbook

⤷ Discourse forum

## Get API key

### API keys

You can create a new project if you don't have one already or add API keys to an existing project. All projects are subject to the [Google Cloud Platform Terms of Service](#), which you agree to when creating a new project, while use of the Gemini API and Google AI Studio is subject to the [Gemini API Terms of Service](#).

Use your API keys securely. Do not share them or embed them in code the public can view.

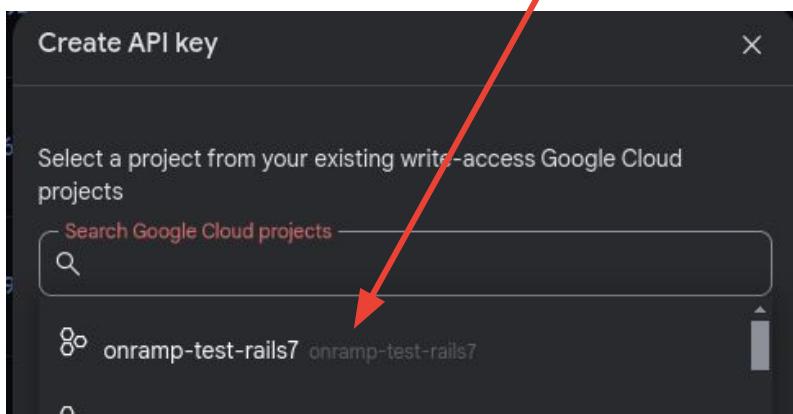
If you use Gemini API from a project that has billing enabled, your use will be subject to [pay-as-you-go pricing](#).

⟳ Create API key

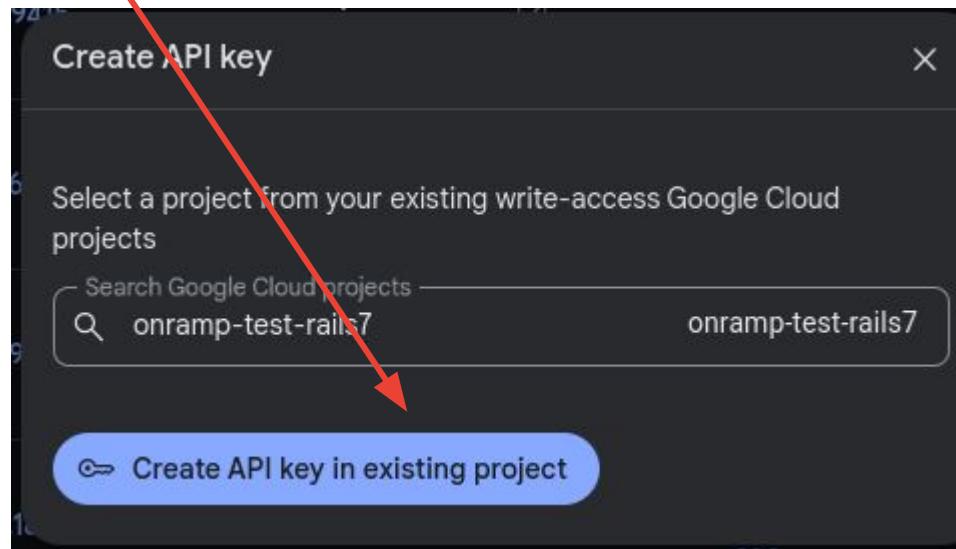
Your API keys are listed below. You can also view and manage your project and API keys in Google Cloud.

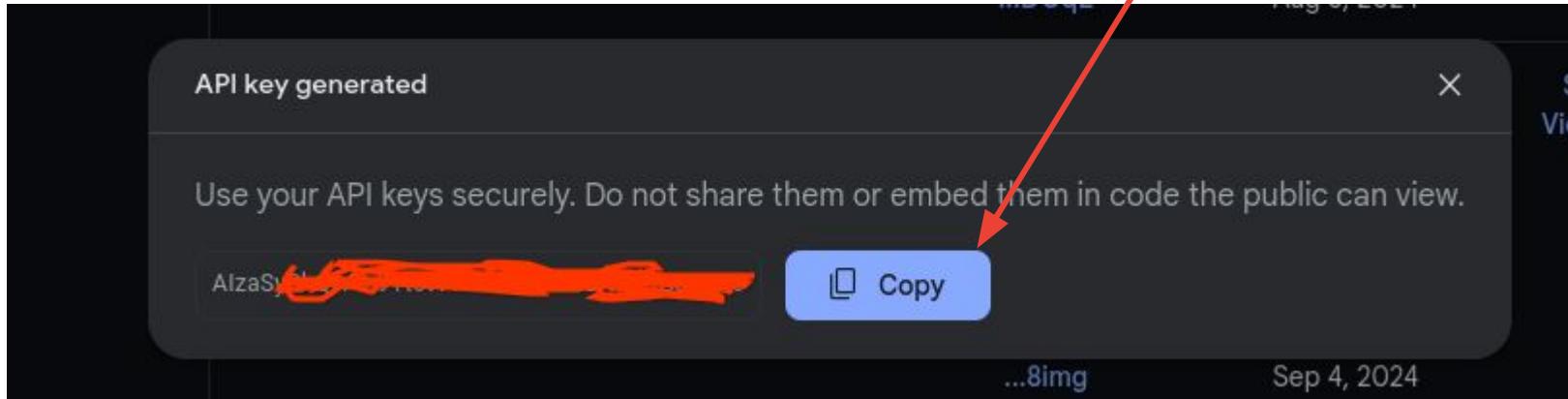
Project number	Project ID	API key	Created	Plan
----------------	------------	---------	---------	------

1. Select project



2. Click to create key within that project





*Tip: Usually it starts with “Alza”*

```
$ .envrc /Users/ricc/git/gic/.envrc
22     export GOOGLE_GENAI_KEY='AIzaSyA
```

# Congratulations !

You are all set to start developing with Google Cloud  
and invoking Gemini!



# > Gemini CLI



```
import { useState, useEffect, useRef } from 'react';

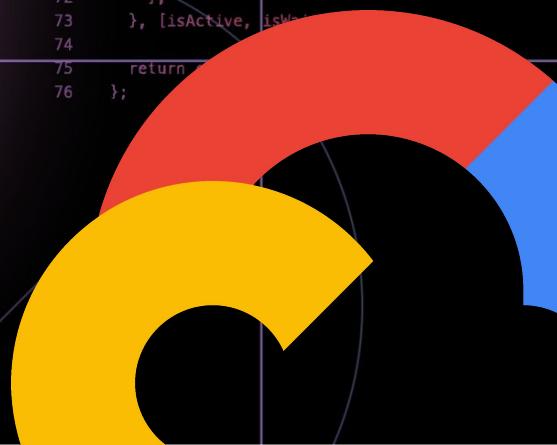
export const WITTY_LOADING_PHRASES = [
  "I'm Feeling Lucky",
  "Don't panic...",
  "Don't rush perfection (or my code)...",
  "Greasin' the cogs of the machine...",
  "Hold tight, I'm crafting a masterpiece...",
  "I'm Giving Her all she's got Captain!",
  "I'm going the distance, I'm going for speed...",
  "I've got a good feeling about this...",
];

export const PHRASE_CHANGE_INTERVAL_MS = 15000;

/**
 * Custom hook to manage cycling through loading phrases.
 * @param [state] The current phrase being active.
 * @param isWaiting Whether to show a specific waiting phrase.
 * @returns The current loading phrase.
 */
export const usePhraseCycler = (isActive: boolean, isWaiting: boolean) => {
```



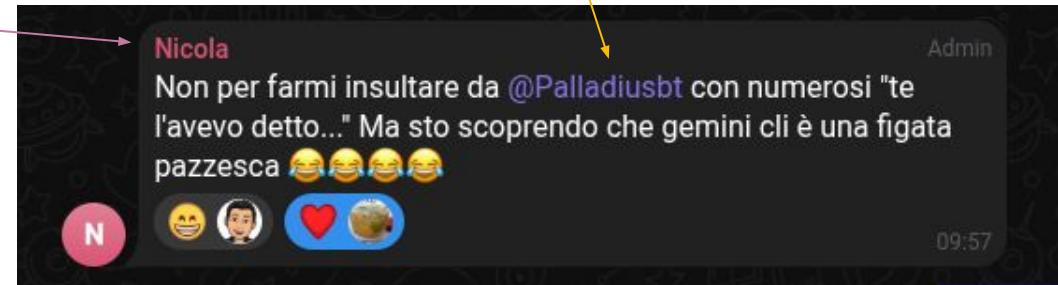
```
46   Math.random() * WITTY_LOADING_PHRASES.length;
47 );
48 setCurrentLoadingPhrase(WITTY_LOADING_PHRASES[0]);
49
50 // ...
51
52 // ...
53
54
55   setCurrentLoadingPhrase(WITTY_LOADING_PHRASES[0]);
56 }, PHRASE_CHANGE_INTERVAL_MS);
57 } else {
58   // Idle or other states, clear the phrase interval
59   // and reset to the first phrase for next activation
60   if (phraseIntervalRef.current) {
61     clearInterval(phraseIntervalRef.current);
62     phraseIntervalRef.current = null;
63   }
64   setCurrentLoadingPhrase(WITTY_LOADING_PHRASES[0]);
65 }
66
67 return () => {
68   if (phraseIntervalRef.current) {
69     clearInterval(phraseIntervalRef.current);
70     phraseIntervalRef.current = null;
71   }
72 };
73 }, [isActive, isWaiting]);
74
75 return (
76 );
```





# Dicono di Gemini CLI..

(scusate il momento faceto)





# Open Source



**G gemini-cli** Private

main · 240 Branches · 1 Tag

Go to file

Add file

Code

About

No description, website, or topics provided.

Readme

Apache-2.0 license

Security policy

Activity

Custom properties

21 stars

26 watching

21 forks

Releases

1 tags

Create a new release

Packages

No packages published

Publish your first package

Contributors 40

+ 26 contributors

File	Description	Last Commit
.gcp	refactor: rename gemini-code to gemini-cli (#B22)	4 days ago
.gemini	toggle off (#B09)	5 days ago
.github	Update package-lock.json (#738)	last week
.vscode	refactor: rename gemini-code to gemini-cli (#B22)	4 days ago
docs	add excludeTools flag to settings.json config (#957)	3 hours ago
eslint-rules	feat: add custom eslint rule for cross-package imports (#...)	2 months ago
packages	Show session summary on exit for ctrl+c x 2. Fix exit UI (#...)	1 hour ago
scripts	fixes to proxy on macos; prevent curl from hanging during...	6 hours ago
.gitignore	refactor: rename gemini-code to gemini-cli (#B22)	4 days ago
.npmrc	refactor: rename gemini-code to gemini-cli (#B22)	4 days ago
.prettierrc.json	Run npm run format	2 months ago
CONTRIBUTING.md	fixes to proxy on macos: prevent curl from hanging during...	6 hours ago
Dockerfile	restricted networking for all sandboxing methods, new se...	yesterday
GEMINI.md	Docs: Enhance "Writing Tests" section in GEMINI.md (#6...	last week
LICENSE	add LICENSE (#25)	2 months ago
Makefile	Makefile for convenience (#833)	4 days ago

[goo.gle/gemini-cli](https://goo.gle/gemini-cli)

[goo.gle/giancarlo](https://goo.gle/giancarlo)

# 1. Installation



```
# Or: npx https://github.com/google-gemini/gemini-cli  
npm install -g @google/gemini-cli
```

```
npm install -g @google/gemini-cli
```



## 2. Authentication: /auth

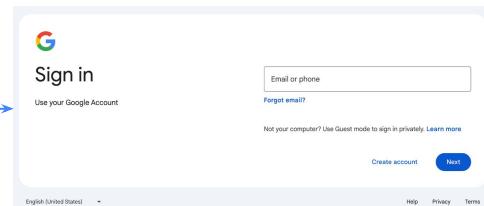


```
> /auth

Get started

How would you like to authenticate for this project?

1. Login with Google
● 2. Use Gemini API Key
3. Vertex AI
```



gemini

```
# Get your key from https://aistudio.google.com/apikey
export GEMINI_API_KEY="YOUR_API_KEY"
gemini
```

```
# Set your Google Cloud Project
export GOOGLE_CLOUD_PROJECT="YOUR_PROJECT_NAME"
gemini
```

Choose “**Login for Google**”

# Thank you



Riccardo Carlesso  
Developer Advocate



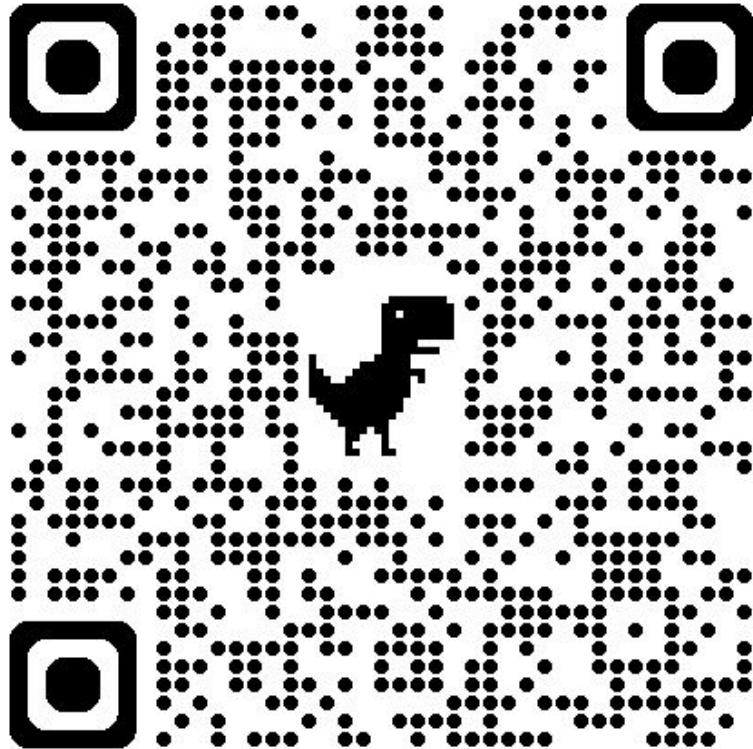
Google Cloud

## Feedback on Riccardo's presentation

This is a feedback form on Riccardo's latest presentation.  
Please let me know how I did - or contact me on

Twitter: <https://twitter.com/sreccardo>

Linkedin: <https://www.linkedin.com/in/riccardocarlesso/>



[https://docs.google.com/forms/d/19x1Drek\\_o6ruoxJhXuNp2TZFDIG45hja0ZAc3nhwca/do/viewform](https://docs.google.com/forms/d/19x1Drek_o6ruoxJhXuNp2TZFDIG45hja0ZAc3nhwca/do/viewform)



You like Ruby too?



# RUBYCON ITALY

THE PREMIER RUBY CONFERENCE IN THE HEART OF ITALY 



<https://rubycon.it/>

8 MAY 2026

