Zero to GenAI Demo on Google Cloud (Console Only)

Goal: Create a service account, enable Gemini (AI) API, drop in a Python file, and run a live demo—all in the browser.

1. Create a Service Account

1. Go to ☰ → **IAM & Admin** → **Service Accounts**.

2. Click **+ CREATE SERVICE ACCOUNT**.

3. Fill in:

   - **Service account name:** `genai-demo-sa`

   - **Service account ID:** auto-filled

   - **Description:** e.g. "Demo SA for GenAI"

4. Click **CREATE AND CONTINUE** (no roles yet).

2. Generate a Key for the Service Account

1. In the **Grant this service account access** step, skip roles and click **DONE**.

2. Back on the Service Accounts page, locate `genai-demo-sa`, click the ⋮ on the right → **Manage keys**.

3. Under "Keys," click **ADD KEY** → **Create new key** → **JSON** → **CREATE**.

4. A file named like `genai-demo-sa-XXXX.json` will download—note its location.

3. Grant Permissions to the Service Account

1. Go to ☰ → **IAM & Admin** → **IAM**.

2. Find the row for **genai-demo-sa@heroviredacademics.iam.gserviceaccount.com**.

3. Click the pencil (✎) to edit.

4. Under "Add another role," choose **Vertex AI User** (`roles/aiplatform.user`).

5. Click **SAVE**.

4. Enable the Generative AI (Gemini) API

1. Go to ☰ → **APIs & Services** → **Library**.

2. In the search box type **Generative AI API** or **Gemini API**.

3. Click **Generative AI API** in the results, then **ENABLE**.

4. (Optional) Repeat for **Vertex AI API** if you plan to use other Vertex features.

5. Open Cloud Shell & Editor

1. In the top-right of the Console, click the **>_** Cloud Shell icon to open a browser shell.

2. Once Cloud Shell starts, click the **Open Editor** (pencil icon) to get a full-file view.

6. Add Your Python Code

1. In the Cloud Shell Editor, click **File → New File**, name it `genai_demo.py` .

2. Paste in this code, replacing `YOUR_API_KEY` with the key from step 2 (or skip the `api_key` line if you'll set ADC):

```
from google import genai

def main():
    # 1. Instantiate the client for Vertex AI Gemini:
    client = genai.Client(
        vertexai=True,
        project="heroviredacademics",
        location="us-central1"
    )  # required args for Google Cloud API calls  [oai_citation_attribution:1‡A
tamel.Dev](https://atamel.dev/posts/2024/12-17_vertexai_googleai_united_
```

```
with_new_genai_sdk/?utm_source=chatgpt.com)

    # 2. Send a prompt and get back generated text:
    resp = client.models.generate_content(
        model="gemini-1.5-flash",
        contents="Write me a short poem about sunrise in Bangalore."
    )

    # 3. Print the output
    print("=== Generated Poem ===\n")
    print(resp.text)

if __name__ == "__main__":
    main()
```

3. Save the file.

7. Run Your Python File

1. Back in the Cloud Shell terminal (bottom pane), install the SDK:

   ```
   pip3 install --upgrade google-genai --user
   ```

2. Execute your demo:

   ```
   python3 genai_demo.py
   ```

3. ▶️ You'll see your generated poem printed live.