Quick tip: Review the prerequisites before you run the lab

End Lab 00:43:20

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-00-dd7ad92f2b6f

Password
A7Etsfb8rzny

Project ID
qwiklabs-gcp-00-7d115ed3

Generative AI with Vertex AI: Text Prompt Design: Challenge Lab

Lab 1 hour 30 minutes No cost Introductory

★★★★½

This lab may incorporate AI tools to support your learning.

Overview

This challenge lab is designed to test your knowledge of calling Gemini and utilizing a

Previous Next

Two featured guides on prompting from the Google Cloud documentation are:

1. Overview of prompting strategies from the Generative AI on Vertex AI documentation.
2. Prompt design strategies from the Gemini API documentation.

Both contain good tips. You are encouraged to **bookmark them**.

Objective

You will demonstrate your ability to:

- Initialize Gen AI in your environment
- Load a generative model

- Stay on topic with fallback responses
- Use examples to influence the model's response

Some of the following Python notebook cells have missing or incomplete code sections and tasks that need to be completed, indicated by the code comments starting with `# TODO`. Your challenge is to complete each cell, run it to test for correctness, and then move on. When all the cells are working, you have completed the challenge.

Note: If you need help, this notebook demonstrates getting started using Gemini in Python.

Task 1. Open the notebook in Vertex AI Workbench

bar and click the first result.

2. Find the `generative-ai-jupyterlab` instance and click on the **Open JupyterLab** button.

   The JupyterLab interface for your Workbench instance will open in a new browser tab.

Task 2. Open the notebook and complete the challenge

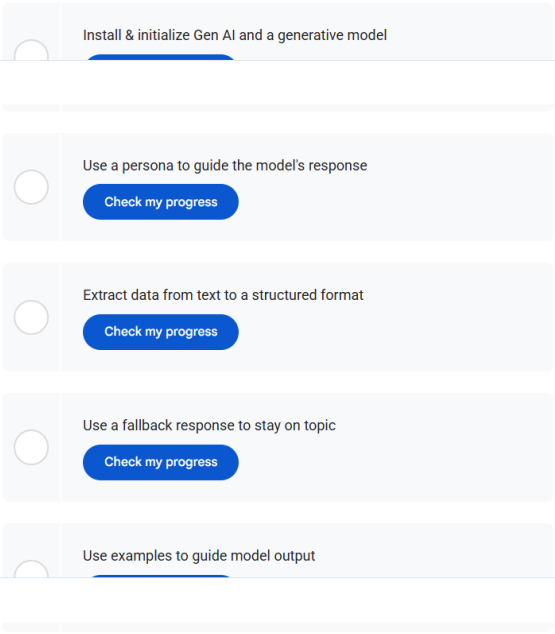
1. Click on the `text_prompt_design_challenge_lab-v1.0.0.ipynb` file.
2. In the **Select Kernel** dialog, choose **Python 3** from the list of available kernels.
3. Complete the challenge based on the notebook.

Note: Save your notebook before each progress check.

Task 3. Progress checks

After you run the notebook, check that you completed each task.

- Click **Check my progress** to verify the objective.



Congratulations!

If you have completed the steps above, you have demonstrated your ability to use several prompt engineering techniques.

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Lab Last Tested April 28, 2025

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Challenge Lab