![Google Cloud Platform]

Lab Overview: Getting Started with App Engine

Overview In this lab you explore Google App Engine using the Guestbook sample application. Guestbook uses the App Engine Memcache API to store entries ephemerally. You deploy the application to the App Engine production environment, and then you verify it.

Duration The timing of this lab is as follows:

Component	Timing
Introduction	5 minutes
Lab	20 minutes
Total	**25 minutes**

What you need To complete this lab, you need:

- The Google Cloud SDK installed and configured on your labs instance
- A Google Cloud project and project ID

What you will learn In this lab, you:

- Deploy an App Engine application that uses Memcache to the production environment
- Use the App Engine Project Dashboard to view cached data in Memcache

Python Lab: Getting Started with App Engine

Overview   In this lab, you explore Google App Engine using the Guestbook sample application. The application used in this lab caches data using Memcache. In the lab you:

- Deploy an App Engine application to the production environment
- Use the App Engine Project Dashboard to view cached data in Memcache

Clone the project   When you created your Compute Engine labs instance, you installed Git on the machine. In this section of the lab, you use Git to clone the repository containing your application.

To clone the project:

Step	Action
1	Access the Google Developers Console by typing the following URL in your browser: **https://console.developers.google.com**
2	In the navigator pane, click the **Gallery** icon (to the left of Google Developers Console at the top of the page).
3	Click **Compute Engine > VM instances**.
4	To the right of the **cp100-labs** instance, in the **Connect** column, click **SSH**.

5	Type the following command to clone the code repository.
	
	`git clone \`
	`https://github.com/GoogleCloudPlatformTraining/`
	`cp100-appengine-memcache-python.git`

12	Leave the SSH connection open.

Deploy the app

To deploy and test the Guestbook application:

Step	Action
1	Type the following command to change to the cp100-appengine-memcache-python directory. `cd cp100-appengine-memcache-python`

2	To deploy the application to production, type the following command and replace <Project ID> with the ID of your cp100 project. You can view your Project ID in the title bar of the SSH window (just after /projects/).
	
	`appcfg.py -A <Project ID> update .`
	`--noauth_local_webserver`

3	Copy the URL returned by the command and paste in the address bar of a new browser tab.
4	When prompted, click **Allow** to authorize the request.
5	Copy the code returned in your browser window and paste it into the SSH window. Then press **Enter**.
6	When the application is successfully deployed, open your browser, type the following URL, and replace <Project ID> with the ID of your cp100 project. **http://<Project ID>.appspot.com**
7	You should see the Guestbook application loaded in the browser. Leave the Guestbook tab open.
8	Switch to your SSH window and type **exit** to close it.

View cached data

Once you have deployed the application, you can visit the project dashboard and view items in the cache.

To view dashboard and cache:

Step	Action
1	On the Guestbook tab in your browser, create a few

	entries in the Guestbook application.
2	Switch to the [Google Developers Console]().
3	Click **Gallery > App Engine > Dashboard** and examine the metrics for your application deployment.
4	Click **Memcache** and examine the Memcache metrics.
5	Click **Find a key**.
6	In the **Search results by key** section, in the **Key** column, click **entries** to view the items in your cache.
7	The cached items appear in the **Value** window.
8	Close the Guestbook tab in your browser. Leave the Google Developers Console open.

Clean up   There is no need for you to remove the resources used in this lab.