QLabs Overview

BA770 Lab Session

Questrom School of Business, Boston University

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QLabs Overview

- You may follow the bullet points in this slides to review a QLab after you complete it.
- Key takeaways are marked with an asterisk before index.

Lecture1, QLabA
A Tour of Qwiklabs and the Google Cloud Platform

a) Gain an overall understanding of Qwiklabs platform and identify key features of a lab environment.

b) Access the GCP console with (temporary) specific credentials.

⋆ c) Know the definition of GCP projects.

⋆ d) Use the GCP navigation menu to identify types of GCP services.

e) Learn about primitive roles and use the Cloud IAM service to inspect actions available to specific users.

⋆ f) Learn basic Cloud Shell commands; run commands like touch, nano, and cat to create, edit, and output the content of files.

g) Learn about the API library and examine its chief features.

Lecture1, QLabA, Tips

a) Make sure you're using the temporary account to log in!

b) If you find something wrong or you get stuck in a session, don't be nervous - end the current session and open a new one. Redoing a lab will not influence your QLab grades.

c) Be careful with all keyboard and/or mouse operations when you are on the lab page. Do not click the End Lab button until you have completed all the tasks.

d) Here's GCP documentation for reference:
https://cloud.google.com/docs/overview/cloud-platform-servicestop_of_page
Learn more about applications provided by GCP, including virtual machine, storage, database, etc.

Lecture1, QLabB
Getting Started with Cloud Shell & gcloud

a) Gain an understanding of Google Cloud Shell, including definition, function, feature, etc.

⋆ b) Be familiar with **cd** command and **vi** editor.

c) Use gcloud commands to view configurations.

⋆ d) Use gsutil commands to manage Cloud Storage resources; know how to create a bucket and copy an existing file to a bucket.

Lecture1, QLabB, Tips

a) Bucket names are universally unique, so avoid using names like 'my_bucket' 'test_bucket'; otherwise you may receive 'ServiceException: 409 Bucket xxx already exists'.

b) **vi** documentation: https://www.ccsf.edu/Pub/Fac/vi.html

c) Refer to documentation (you could just google it) to know more about **gcloud** and **gsutil** commands.

Lecture1, QLabC*
Creating a Virtual Machine

⋆ a) Create a virtual machine with 1) the GCP Console, 2) **gcloud** command line.

b) Check existing instances in **Navigation menu - Compute Engine - VM instances**.

⋆ c) Access the virtual machine by 1) launching a SSH client directly from browser, or 2) SSH'ing into the instance using gcloud.

Lecture1, QLabC*, Tips

a) Be aware of the window you're typing in:
- When you are SSHing into an instance with a prompt window, make sure you execute the commands in this window.
- If you are using **gcloud** commands, make sure the commands are running in the Cloud Shell.

b) To know more about SSH, please refer to:
https://searchsecurity.techtarget.com/definition/Secure-Shell

c) To know more about **sudo** command, please refer to:
https://www.sudo.ws/man/1.8.14/sudo.man.html

d) To know more about commonly used commands in GCP, please refer to: https://cloud.google.com/sdk/gcloud/