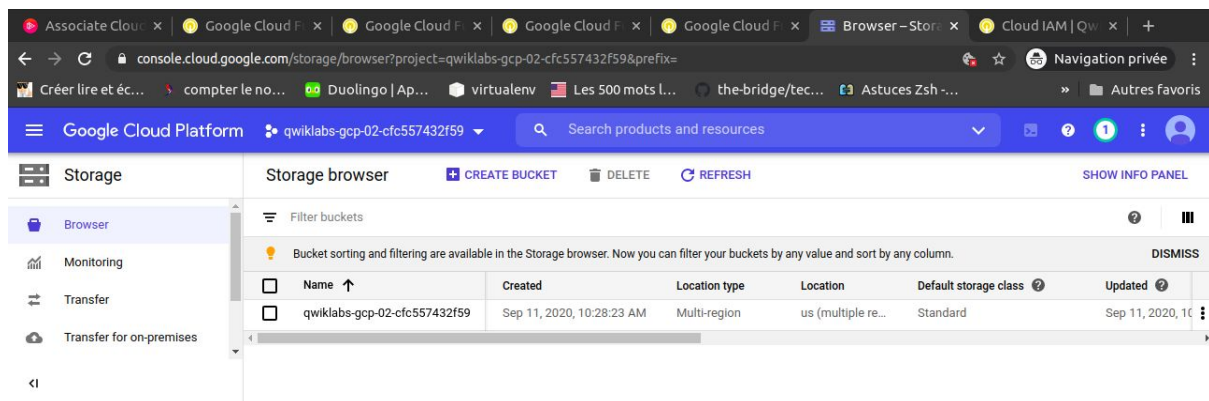


Getting Started with Cloud Storage and Cloud SQL

Lab Objectives

- Create a Cloud Storage bucket and place an image into it.
- Create a Cloud SQL instance and configure it.
- Connect to the Cloud SQL instance from a web server.
- Use the image in the Cloud Storage bucket on a web page

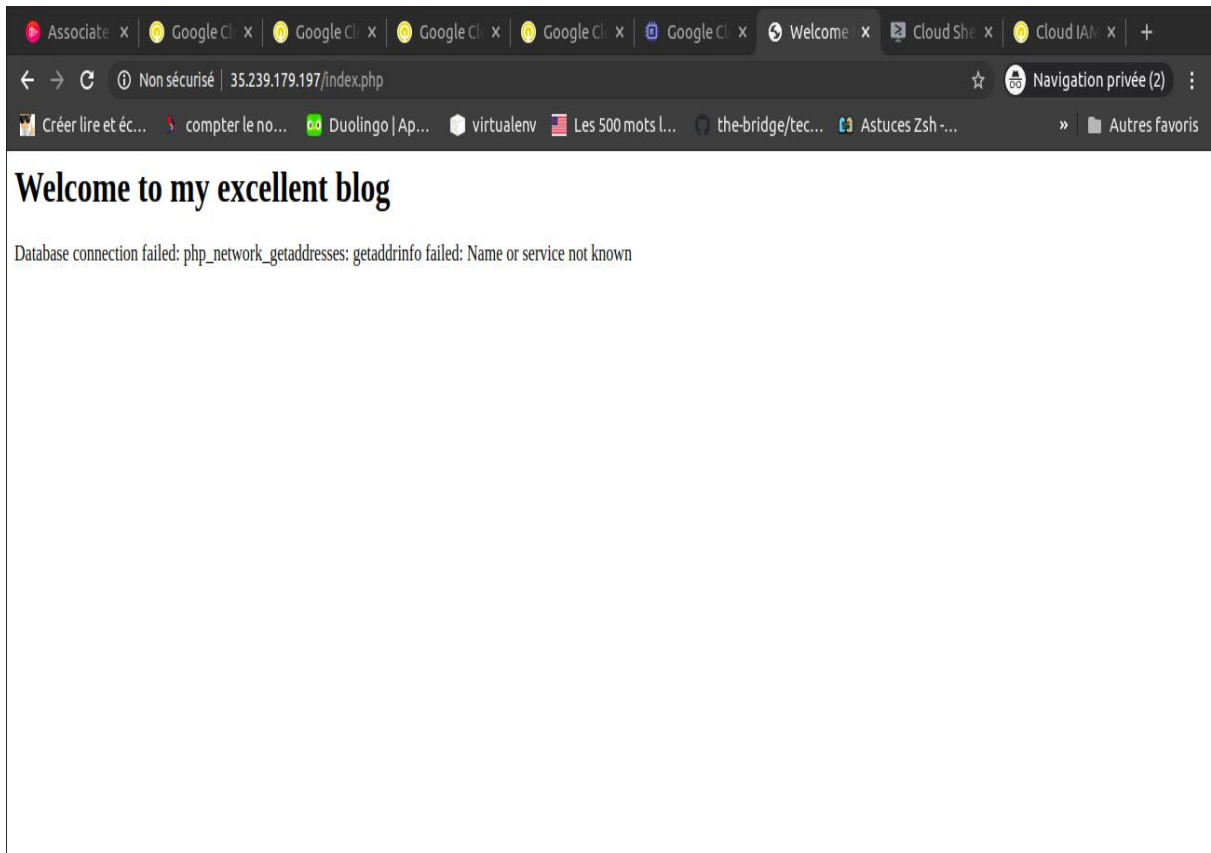
In this lab, we created a VM instance and installed an apache2 server on it. We then created a cloud storage bucket and copied an image to it from a public cloud storage.



[Copied image into our bucket]

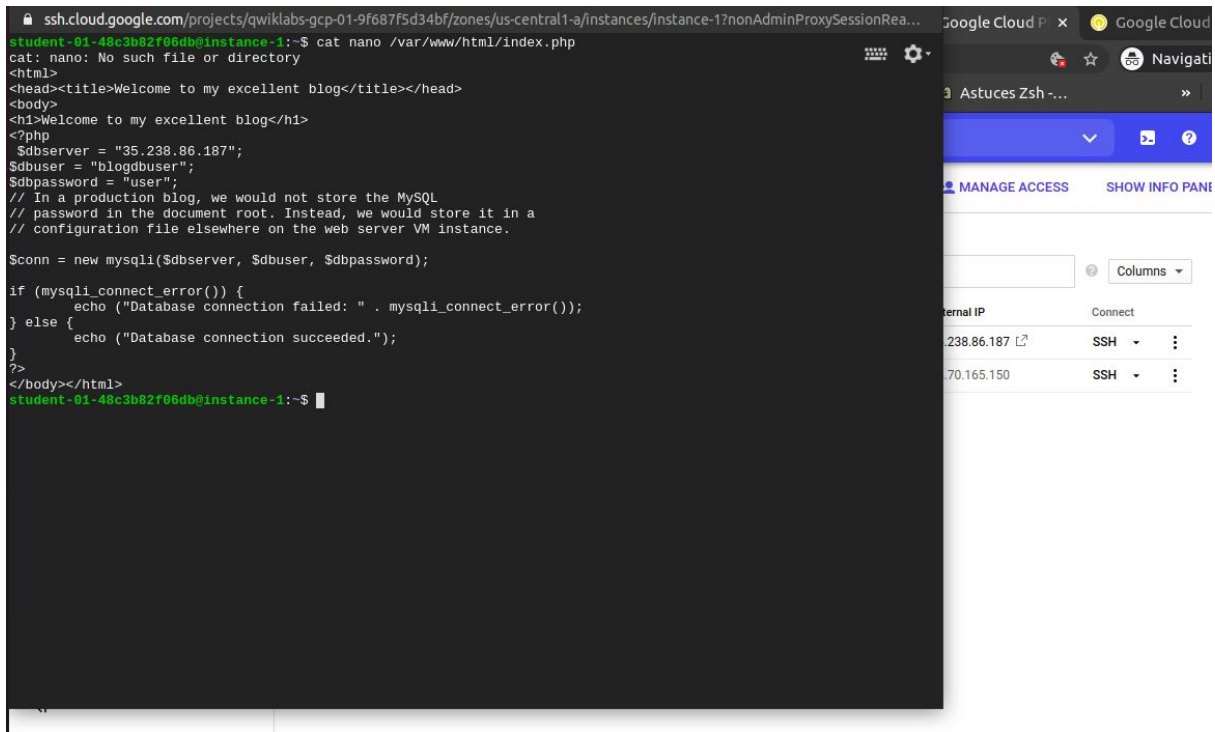
We also created a sql Instance with mysql as a database engine. Note that a Cloud SQL is a fully managed database system that currently supports mysql, postgresql and sql server. We created a user account on the sql instance. This user was used to configure the vm instance to use our cloud sql instance. To do this, we created an index.php file in our root web server directory. In this file we just copied and pasted a code that was provided for us.

But when we ran our server, we got a database connection error (we can read **database connection failed...** under the welcome message):



[Error connecting to database]

This is normal as we didn't configure our vm instance to use the cloud sql yet. To do this, we just have to specify the database name, username, password and ip address that we created previously as shown below:



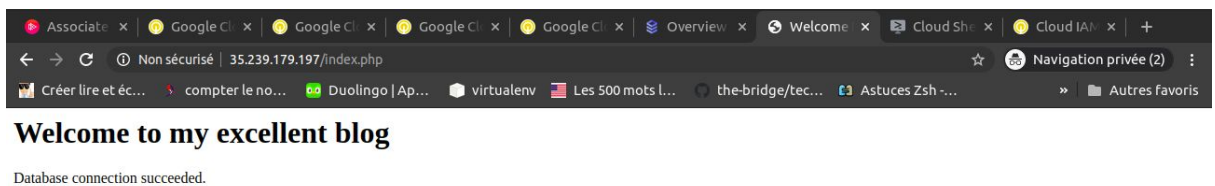
```
student-01-48c3b82f06db@instance-1:~$ cat nano /var/www/html/index.php
cat: nano: No such file or directory
<html>
<head><title>Welcome to my excellent blog</title></head>
<body>
<h1>Welcome to my excellent blog</h1>
<?php
$dbserver = "35.238.86.187";
$dbuser = "blogdbuser";
$dbpassword = "user";
// In a production blog, we would not store the MySQL
// password in the document root. Instead, we would store it in a
// configuration file elsewhere on the web server VM instance.

$conn = new mysqli($dbserver, $dbuser, $dbpassword);

if (mysqli_connect_error()) {
    echo ("Database connection failed: " . mysqli_connect_error());
} else {
    echo ("Database connection succeeded.");
}
?>
</body></html>
student-01-48c3b82f06db@instance-1:~$
```

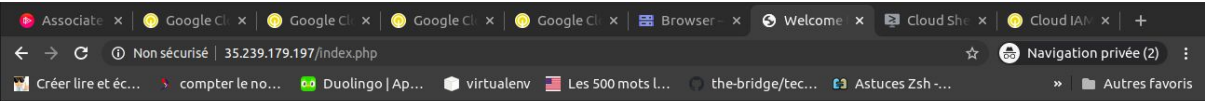
[Configuration file]

And now, the connection was established we can read **database connection succeeded** under the welcome message)



[Successfully connected to the database]

We also configured our vm instance to use the image that we copied in our cloud storage bucket. For this, we copied the public link of our image and put it in a html img balise. When we ran our server, we could see our image as we can see in the screenshot below:



[Successfully read image from bucket]