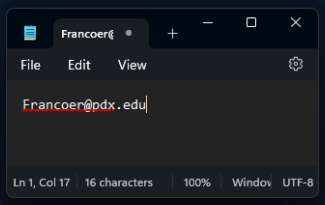
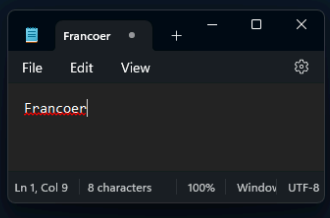
Erick Franco
Cs430p
2-23-25

07.1.4a

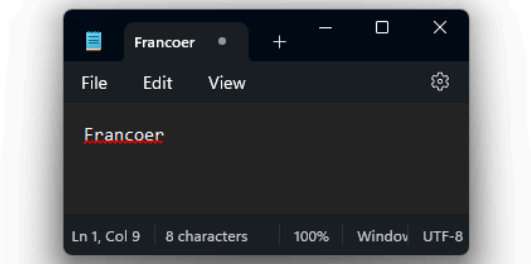
```
Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if you run "terraform apply" now.
[cloudshell-user@ip-10-132-54-20 tf]$ terraform apply

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
  + create

Terraform will perform the following actions:

  # aws_instance.guestbook will be created
  + resource "aws_instance" "guestbook" {
      + ami                                  = "ami-012ef95ef66694070"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + cpu_core_count                       = (known after apply)
      + cpu_threads_per_core                 = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
      + ebs_optimized                        = (known after apply)
      + enable_primary_ipv6                  = (known after apply)
      + get_password_data                    = false
      + host_id                              = (known after apply)
      + host_resource_group_arn              = (known after apply)
      + iam_instance_profile                 = (known after apply)
      + id                                   = (known after apply)
      + instance_initiated_shutdown_behavior = (known after apply)
      + instance_lifecycle                   = (known after apply)
      + instance_state                       = (known after apply)
      + instance_type                        = "t2.micro"
      + ipv6_address_count                   = (known after apply)
      + ipv6_addresses                       = (known after apply)
      + key_name                             = (known after apply)
      + monitoring                           = (known after apply)
      + outpost_arn                          = (known after apply)
      + password_data                        = (known after apply)
      + placement_group                      = (known after apply)
      + placement_partition_number           = (known after apply)
      + primary_network_interface_id         = (known after apply)
      + private_dns                          = (known after apply)
      + private_ip                           = (known after apply)
      + public_dns                           = (known after apply)
      + public_ip                            = (known after apply)
      + secondary_private_ips                = (known after apply)
      + security_groups                      = (known after apply)
      + source_dest_check                    = true
      + spot_instance_request_id             = (known after apply)
      + subnet_id                            = (known after apply)
      + tags_all                             = (known after apply)
      + tenancy                              = (known after apply)
      + user_data                            = (known after apply)
      + user_data_base64                     = (known after apply)
      + user_data_replace_on_change          = false
      + vpc_security_group_ids               = (known after apply)

      + capacity_reservation_specification (known after apply)

      + cpu_options (known after apply)

      + ebs_block_device (known after apply)

      + enclave_options (known after apply)

      + ephemeral_block_device (known after apply)

      + instance_market_options (known after apply)

      + maintenance_options (known after apply)
```




```
      + capacity_reservation_specification (known after apply)

      + cpu_options (known after apply)

      + ebs_block_device (known after apply)

      + enclave_options (known after apply)

      + ephemeral_block_device (known after apply)

      + instance_market_options (known after apply)

      + maintenance_options (known after apply)

      + metadata_options (known after apply)

      + network_interface (known after apply)

      + private_dns_name_options (known after apply)

      + root_block_device (known after apply)
    }

Plan: 1 to add, 0 to change, 0 to destroy.

Changes to Outputs:
  + ec2instance = (known after apply)

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

aws_instance.guestbook: Creating...
aws_instance.guestbook: Still creating... [10s elapsed]
aws_instance.guestbook: Creation complete after 12s [id=i-01d7e00a2a9b47a13]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

Outputs:

ec2instance = "44.211.144.44"
[cloudshell-user@ip-10-132-54-20 tf]$
```



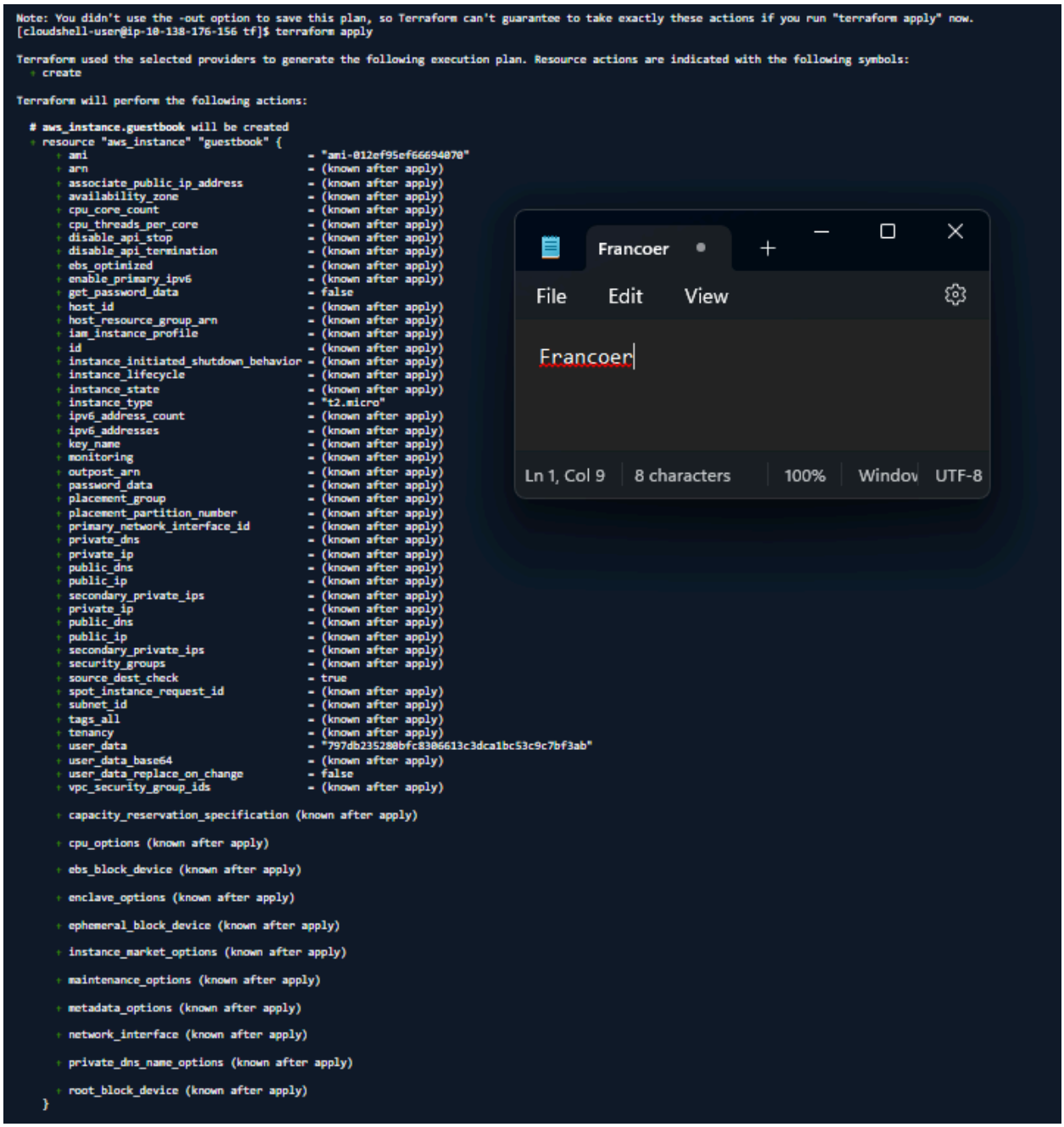
Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP	IPv6 IPs
View alarms +	us-east-1d	ec2-3-89-23-184.comp...	3.89.23.184	–	–
View alarms +	us-east-1d	ec2-44-211-144-44.co...	44.211.144.44	–	–



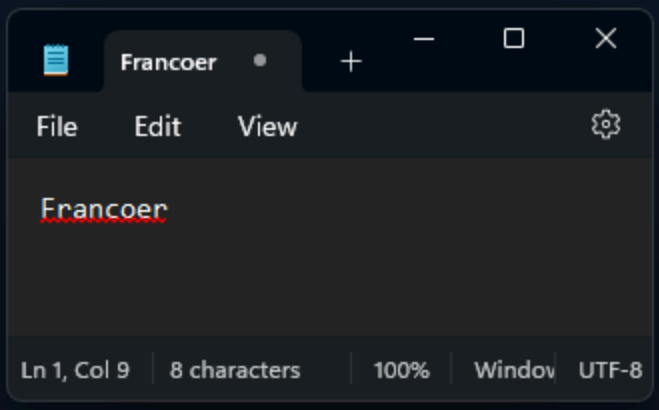
07.1.6a

```
ec2instance = "54.144.2.223"
[cloudshell-user@ip-10-138-176-156 tf]$ ssh ubuntu@54.144.2.223
The authenticity of host '54.144.2.223 (54.144.2.223)' can't be established.
ED25519 key fingerprint is SHA256:kDxeUE631OzGYL/RTD5CfR0T6j3avOmI2KYxtCrlU4k.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '54.144.2.223' (ED25519) to the list of known hosts.
ubuntu@54.144.2.223: Permission denied (publickey).
[cloudshell-user@ip-10-138-176-156 tf]$ Francoer
```

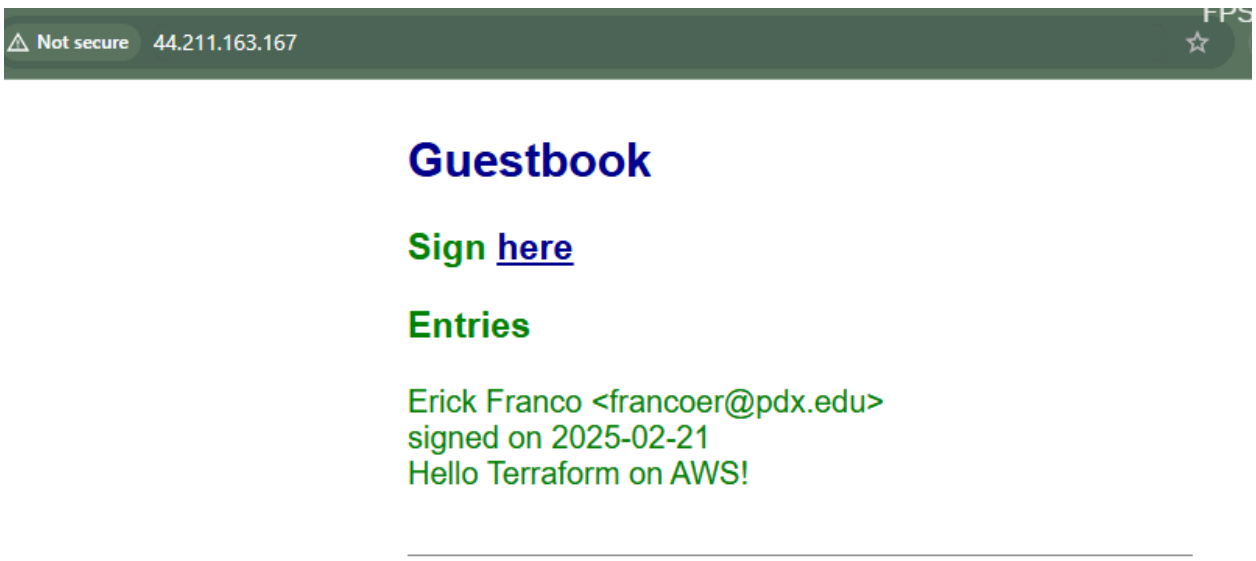
07.1.7a


Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if you run "terraform apply" now.
[cloudshell-user@ip-10-138-176-156 tf]$ terraform apply
Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create
Terraform will perform the following actions:
# aws_instance.guestbook will be created
+ resource "aws_instance" "guestbook" {
+ ami = "ami-012ef95ef66694070"
+ arn = (known after apply)
+ associate_public_ip_address = (known after apply)
+ availability_zone = (known after apply)
+ cpu_core_count = (known after apply)
+ cpu_threads_per_core = (known after apply)
+ disable_api_stop = (known after apply)
+ disable_api_termination = (known after apply)
+ ebs_optimized = (known after apply)
+ enable_primary_ipv6 = (known after apply)
+ get_password_data = false
+ host_id = (known after apply)
+ host_resource_group_arn = (known after apply)
+ iam_instance_profile = (known after apply)
+ id = (known after apply)
+ instance_initiated_shutdown_behavior = (known after apply)
+ instance_lifecycle = (known after apply)
+ instance_state = (known after apply)
+ instance_type = "t2.micro"
+ ipv6_address_count = (known after apply)
+ ipv6_addresses = (known after apply)
+ key_name = (known after apply)
+ monitoring = (known after apply)
+ outpost_arn = (known after apply)
+ password_data = (known after apply)
+ placement_group = (known after apply)
+ placement_partition_number = (known after apply)
+ primary_network_interface_id = (known after apply)
+ private_dns = (known after apply)
+ private_ip = (known after apply)
+ public_dns = (known after apply)
+ public_ip = (known after apply)
+ secondary_private_ips = (known after apply)
+ private_ip = (known after apply)
+ public_dns = (known after apply)
+ public_ip = (known after apply)
+ secondary_private_ips = (known after apply)
+ security_groups = (known after apply)
+ source_dest_check = true
+ spot_instance_request_id = (known after apply)
+ subnet_id = (known after apply)
+ tags_all = (known after apply)
+ tenancy = (known after apply)
+ user_data = "797db235280bfc8306613c3dca1bc53c9c7bf3ab"
+ user_data_base64 = (known after apply)
+ user_data_replace_on_change = false
+ vpc_security_group_ids = (known after apply)
+ capacity_reservation_specification (known after apply)
+ cpu_options (known after apply)
+ ebs_block_device (known after apply)
+ enclave_options (known after apply)
+ ephemeral_block_device (known after apply)
+ instance_market_options (known after apply)
+ maintenance_options (known after apply)
+ metadata_options (known after apply)
+ network_interface (known after apply)
+ private_dns_name_options (known after apply)
+ root_block_device (known after apply)
}
Francoer
File
Edit
View
Francoer
Ln 1, Col 9
8 characters
100%
Windov
UTF-8

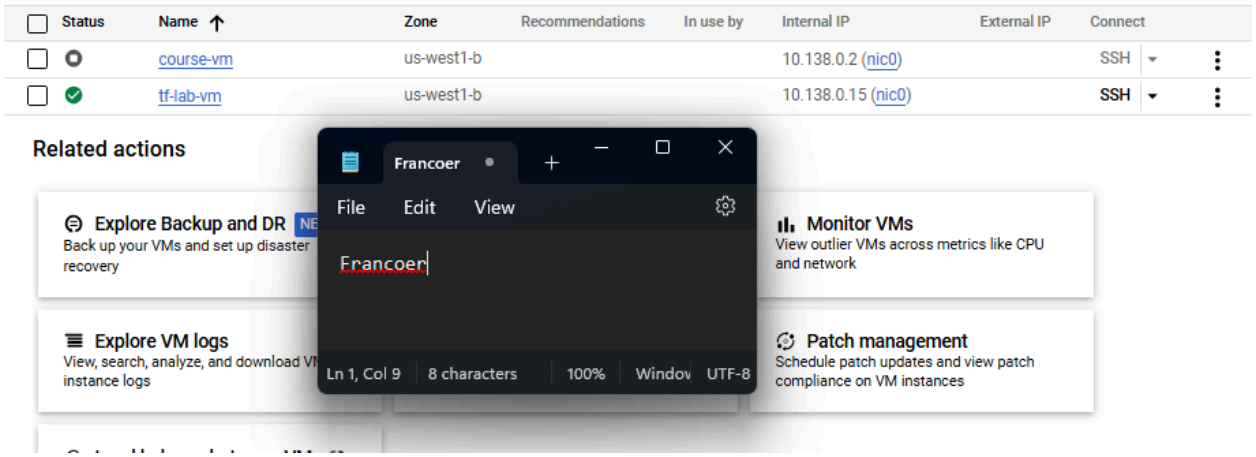
```
  # aws_security_group.sg-guestbook will be created
  + resource "aws_security_group" "sg-guestbook" {
      + arn                    = (known after apply)
      + description            = "Managed by Terraform"
      + egress                 = [
          + {
              + cidr_blocks      = [
                  + "0.0.0.0/0",
                ]
              + from_port        = 0
              + ipv6_cidr_blocks = [
                  + "::/0",
                ]
              + prefix_list_ids  = []
              + protocol         = "-1"
              + security_groups  = []
              + self             = false
              + to_port          = 0
                # (1 unchanged attribute hidden)
            },
        ]
      + id                     = (known after apply)
      + ingress                = [
          + {
              + cidr_blocks      = [
                  + "0.0.0.0/0",
                ]
              + from_port        = 22
              + ipv6_cidr_blocks = []
              + prefix_list_ids  = []
              + protocol         = "tcp"
              + security_groups  = []
              + self             = false
              + to_port          = 22
                # (1 unchanged attribute hidden)
            },
          + {
              + cidr_blocks      = [
                  + "0.0.0.0/0",
                ]
              + from_port        = 80
              + ipv6_cidr_blocks = []
              + prefix_list_ids  = []
              + protocol         = "tcp"
              + security_groups  = []
              + self             = false
              + to_port          = 80
                # (1 unchanged attribute hidden)
            },
        ]
      + name                   = "Guestbook-SG"
      + name_prefix            = (known after apply)
      + owner_id               = (known after apply)
      + revoke_rules_on_delete = false
      + tags_all               = (known after apply)
      + vpc_id                 = (known after apply)
    }

Plan: 2 to add, 0 to change, 0 to destroy.

Changes to Outputs:
  + ec2instance = (known after apply)

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

aws_security_group.sg-guestbook: Creating...
aws_security_group.sg-guestbook: Creation complete after 2s [id=sg-0f182921a1fee15c2]
aws_instance.guestbook: Creating...
aws_instance.guestbook: Still creating... [10s elapsed]
aws_instance.guestbook: Creation complete after 13s [id=i-030594387083e5f2]

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.

Outputs:

ec2instance = "44.211.163.167"
[cloudshell-user@ip-10-138-176-156 tf]$
```



07.1.8a


Not secure
44.211.163.167
Guestbook
Sign here
Entries
Erick Franco <francoer@pdx.edu>
signed on 2025-02-21
Hello Terraform on AWS!

07.1.4g

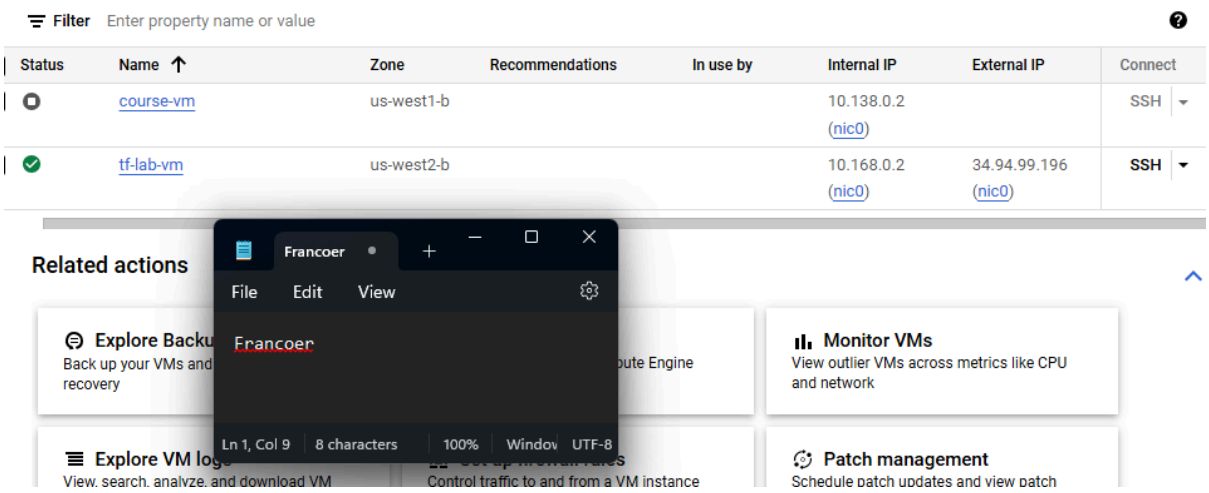

Status
Name
Zone
Recommendations
In use by
Internal IP
External IP
Connect
course-vm
us-west1-b
10.138.0.2 (nic0)
SSH
tf-lab-vm
us-west1-b
10.138.0.15 (nic0)
SSH
Related actions
Explore Backup and DR
Back up your VMs and set up disaster recovery
Monitor VMs
View outlier VMs across metrics like CPU and network
Explore VM logs
Patch management
Schedule patch updates and view patch compliance on VM instances
Francoer
File
Edit
View
Francoer
Ln 1, Col 9
8 characters
100%
UTF-8

07.1.5g

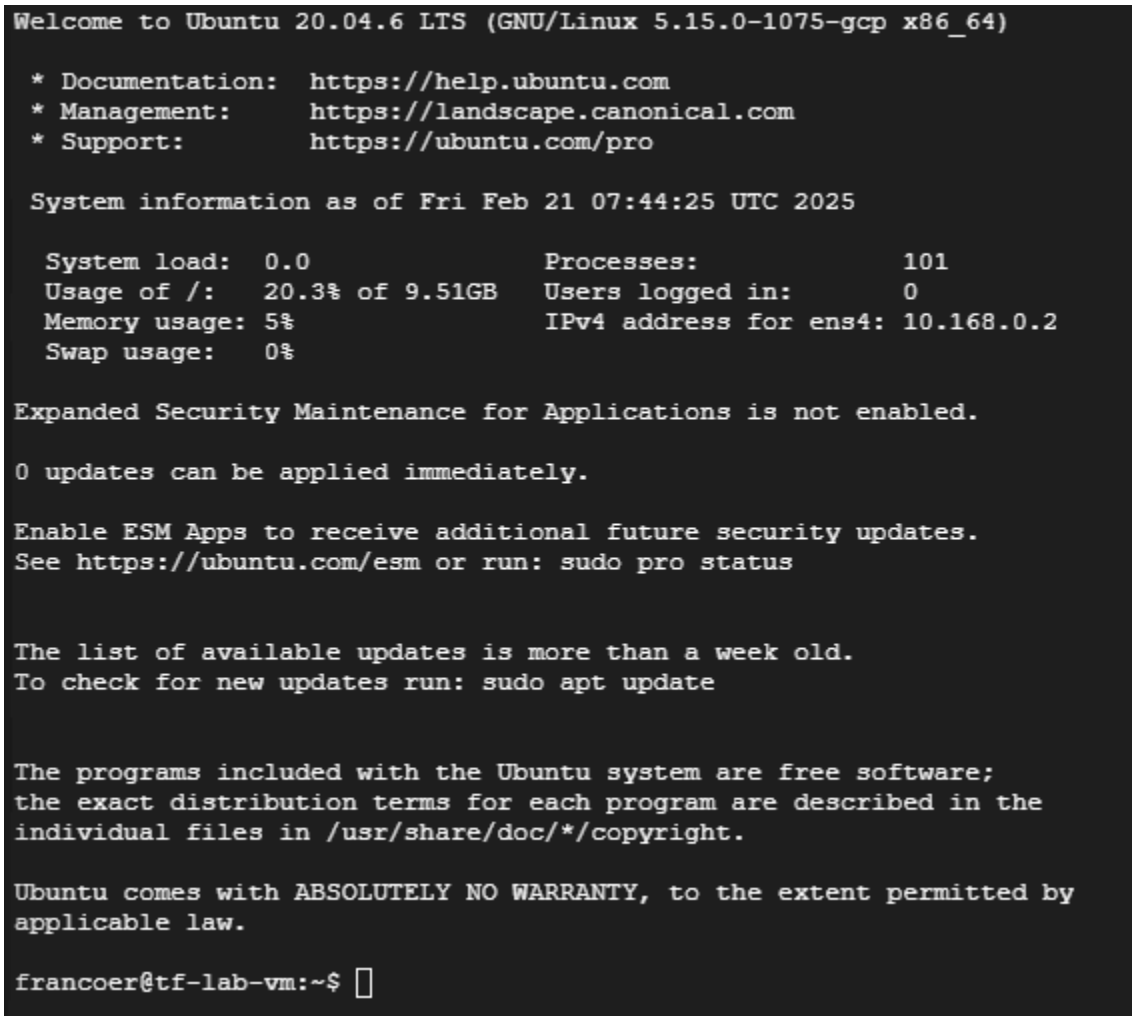
```
francoer@cloudshell:~/tf (cloud-franco-francoer)$ terraform plan

google_compute_instance.default: Refreshing state... [id=projects/cloud-franco-francoer/zones/us-west1-b/instances/tf-lab-vm]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
  + create
-/+ destroy and then create replacement

Terraform will perform the following actions:

  # google_compute_address.static will be created
  + resource "google_compute_address" "static" {
      + address            = (known after apply)
      + address_type       = "EXTERNAL"
      + creation_timestamp = (known after apply)
      + effective_labels   = {
          + "goog-terraform-provisioned" = "true"
        }
      + id                 = (known after apply)
      + label_fingerprint  = (known after apply)
      + name               = "ipv4-address"
      + network_tier       = (known after apply)
      + prefix_length      = (known after apply)
      + project            = "cloud-franco-francoer"
      + purpose            = (known after apply)
      + region             = (known after apply)
      + self_link          = (known after apply)
      + subnetwork         = (known after apply)
      + terraform_labels   = {
          + "goog-terraform-provisioned" = "true"
        }
      + users              = (known after apply)
    }

  # google_compute_instance.default must be replaced
-/+ resource "google_compute_instance" "default" {
      ~ cpu_platform         = "Intel Broadwell" -> (known after apply)
      ~ creation_timestamp   = "2025-02-20T22:40:40.357-08:00" -> (known after apply)
      ~ current_status       = "RUNNING" -> (known after apply)
      - enable_display       = false -> null
      ~ id                   = "projects/cloud-franco-francoer/zones/us-west1-b/instances/tf-lab-vm" -> (known after apply)
      ~ instance_id          = "8347655322434117896" -> (known after apply)
      ~ label_fingerprint    = "vezUS-42LLM=" -> (known after apply)
      - labels               = {} -> null
      - metadata             = {} -> null
      ~ metadata_fingerprint = "aVQrWDQOQpg=" -> (known after apply)
      + min_cpu_platform     = (known after apply)
        name                 = "tf-lab-vm"
      - resource_policies    = [] -> null
      ~ self_link            = "https://www.googleapis.com/compute/v1/projects/cloud-franco-francoer/zones/us-west1-b/instances/tf-lab-vm" -> (known after app
ly)
      - tags                 = [] -> null
      ~ tags_fingerprint     = "42WmSpB8rSM=" -> (known after apply)
        # (7 unchanged attributes hidden)

      ~ boot_disk {
          ~ device_name                = "persistent-disk-0" -> (known after apply)
          + disk_encryption_key_sha256 = (known after apply)
          + kms_key_self_link          = (known after apply)
          ~ source                     = "https://www.googleapis.com/compute/v1/projects/cloud-franco-francoer/zones/us-west1-b/disks/tf-lab-vm" -> (known aft
er apply)
            # (2 unchanged attributes hidden)

          ~ initialize_params {
              - enable_confidential_compute = false -> null
              ~ image                       = "https://www.googleapis.com/compute/v1/projects/ubuntu-os-cloud/global/images/ubuntu-minimal-2004-focal-v2025021
3" -> "ubuntu-minimal-2004-focal-v20250213"
              ~ labels                      = {} -> (known after apply)
              ~ provisioned_iops            = 0 -> (known after apply)
              ~ provisioned_throughput      = 0 -> (known after apply)
              - resource_manager_tags       = {} -> null
              ~ resource_policies           = [] -> (known after apply)
              ~ size                        = 10 -> (known after apply)
```

```
          ~ initialize_params {
              - enable_confidential_compute = false -> null
              ~ image                       = "https://www.googleapis.com/compute/v1/projects/ubuntu-os-cloud/global/images/ubuntu-minimal-2004-focal-v2025021
3" -> "ubuntu-minimal-2004-focal-v20250213"
              ~ labels                      = {} -> (known after apply)
              ~ provisioned_iops            = 0 -> (known after apply)
              ~ provisioned_throughput      = 0 -> (known after apply)
              - resource_manager_tags       = {} -> null
              ~ resource_policies           = [] -> (known after apply)
              ~ size                        = 10 -> (known after apply)
              ~ type                        = "pd-standard" -> (known after apply)
            }
        }

      ~ network_interface { # forces replacement
          - internal_ipv6_prefix_length = 0 -> (known after apply)
          + ipv6_access_type            = (known after apply)
          + ipv6_address                = (known after apply)
          ~ name                        = "nic0" -> (known after apply)
          ~ network                     = "https://www.googleapis.com/compute/v1/projects/cloud-franco-francoer/global/networks/default" -> "default"
          ~ network_ip                  = "10.138.0.15" -> (known after apply)
          - queue_count                 = 0 -> null
          ~ stack_type                  = "IPV4_ONLY" -> (known after apply)
          ~ subnetwork                  = "https://www.googleapis.com/compute/v1/projects/cloud-franco-francoer/regions/us-west1/subnetworks/default" -> (know
n after apply)
          ~ subnetwork_project          = "cloud-franco-francoer" -> (known after apply)

          + access_config {
              + nat_ip       = (known after apply)
              + network_tier = (known after apply)
            }
        }
      + network_interface { # forces replacement
          + internal_ipv6_prefix_length = (known after apply)
          + ipv6_access_type            = (known after apply)
          + ipv6_address                = (known after apply)
          + name                        = (known after apply)
          + network                     = "default"
          + network_ip                  = (known after apply)
          + stack_type                  = (known after apply)
          + subnetwork                  = (known after apply)
          + subnetwork_project          = (known after apply)
        }

      - scheduling {
          - automatic_restart   = true -> null
          - availability_domain = 0 -> null
          - min_node_cpus       = 0 -> null
          - on_host_maintenance = "MIGRATE" -> null
          - preemptible         = false -> null
          - provisioning_model  = "STANDARD" -> null
        }

      - shielded_instance_config {
          - enable_integrity_monitoring = true -> null
          - enable_secure_boot          = false -> null
          - enable_vtpm                 = true -> null
        }
    }

Plan: 2 to add, 0 to change, 1 to destroy.

Changes to Outputs:
  + ip = (known after apply)


Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if you run "terraform apply" now.
francoer@cloudshell:~/tf (cloud-franco-francoer)$
```

My ip stayed the same? I followed the instructions to a tee



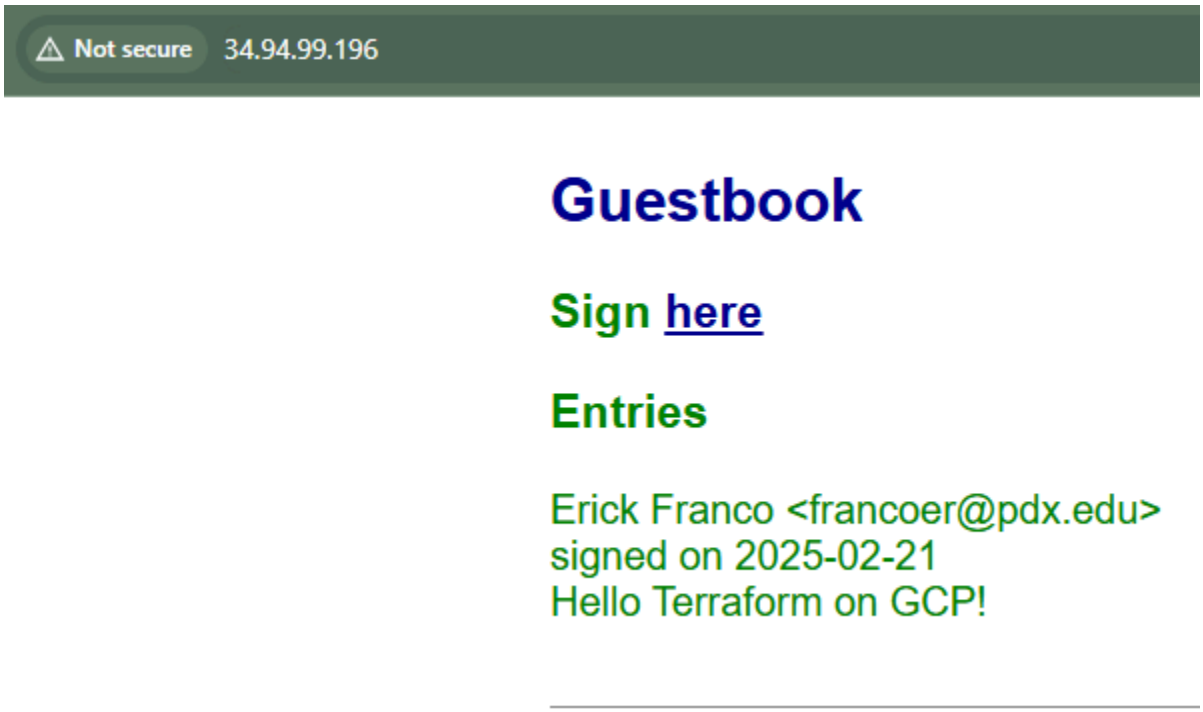
07.1.6g



07.1.7g

- What resources are being added, changed, or destroyed?
    - Google_compute_instace.default
- What part of the configuration forces a replacement to occur?
    - Metadata_startup_script

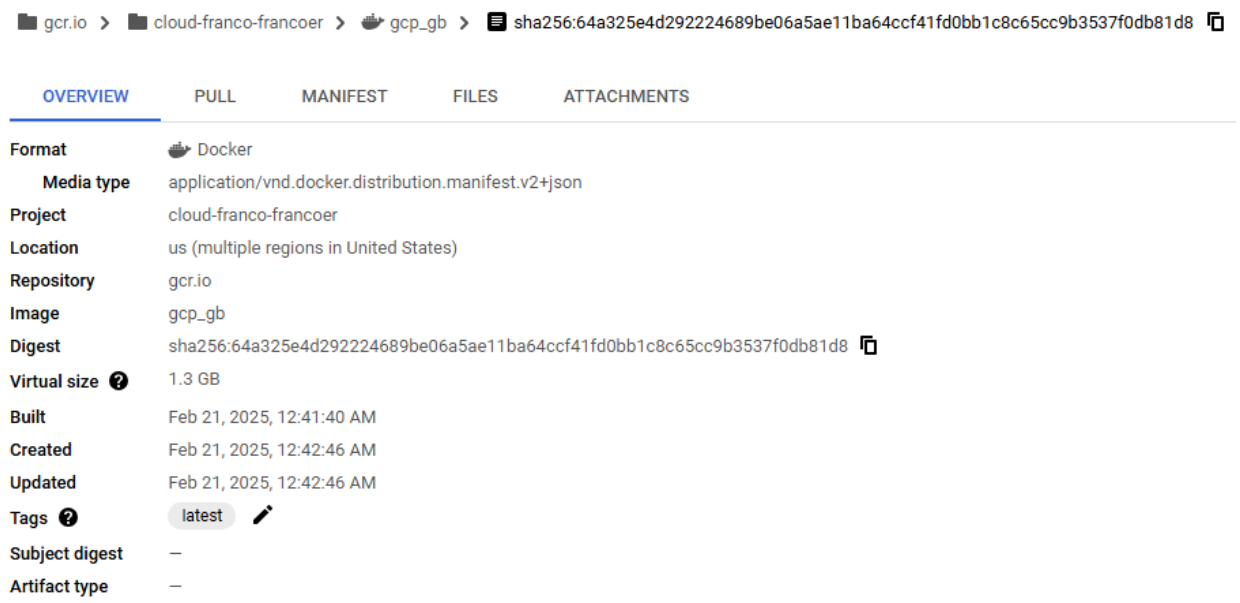
07.1.8g



07.2.4g

- What is the name of the Instance Template dynamically generated to create the two nodes (VMs)?
  - gke-guestbook-default-pool-aa9d86aa
- What is the name of the Instance Group dynamically generated that the two nodes belong to?
  - gke-guestbook-default-pool-aa9d86aa-grp
- What are the names of the two nodes?
  - Gke-guestbook-default-pool-aa9d86aa-672w
  - gke-guestbook-default-pool-aa9d86aa-zx1n

07.2.5g

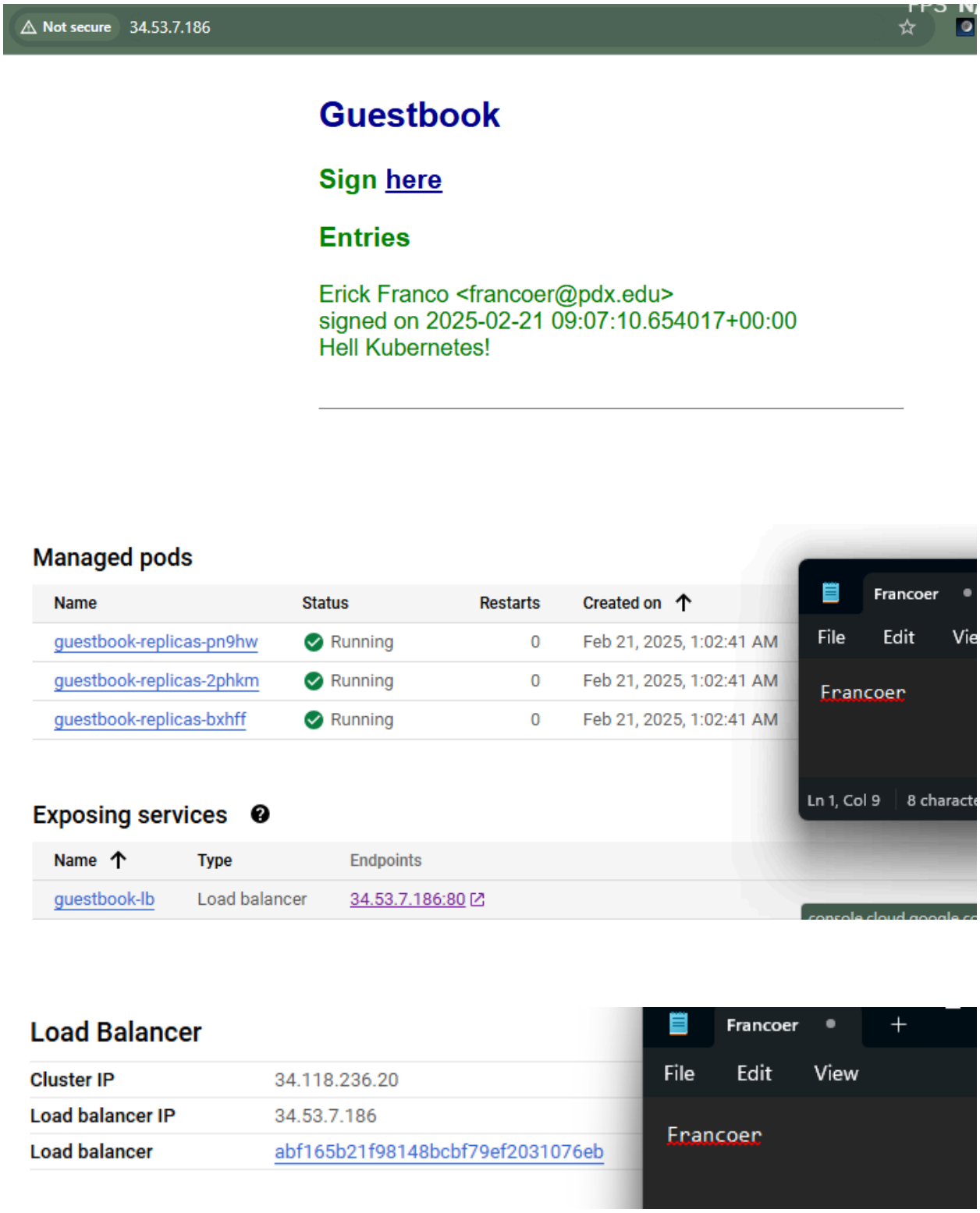


07.2.7g

```
francoer@cloudshell:~/cs430-src/05_gcp_datastore (cloud-franco-francoer)$ kubectl get pods
NAME                       READY   STATUS    RESTARTS   AGE
guestbook-replicas-2phkm   1/1     Running   0          114s
guestbook-replicas-bxhff   1/1     Running   0          114s
guestbook-replicas-pn9hw   1/1     Running   0          114s
francoer@cloudshell:~/cs430-src/05_gcp_datastore (cloud-franco-francoer)$
```

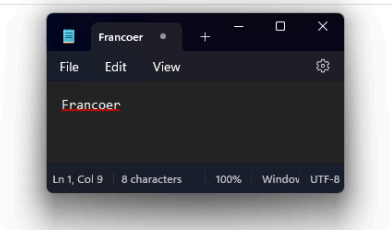
```
francoer@cloudshell:~/cs430-src/05_gcp_datastore (cloud-franco-francoer)$ kubectl get services
NAME           TYPE           CLUSTER-IP      EXTERNAL-IP   PORT(S)        AGE
guestbook-lb   LoadBalancer   34.118.236.20   34.53.7.186   80:31067/TCP   2m26s
kubernetes     ClusterIP      34.118.224.1    <none>        443/TCP        44m
francoer@cloudshell:~/cs430-src/05_gcp_datastore (cloud-franco-francoer)$
```

07.2.8g


Not secure
34.53.7.186
Guestbook
Sign here
Entries
Erick Franco <francoer@pdx.edu>
signed on 2025-02-21 09:07:10.654017+00:00
Hell Kubernetes!
Managed pods
Name
Status
Restarts
Created on
guestbook-replicas-pn9hw
Running
0
Feb 21, 2025, 1:02:41 AM
guestbook-replicas-2phkm
Running
0
Feb 21, 2025, 1:02:41 AM
guestbook-replicas-bxhff
Running
0
Feb 21, 2025, 1:02:41 AM
Francoer
File
Edit
Francoer
Ln 1, Col 9
Exposing services
Name
Type
Endpoints
guestbook-lb
Load balancer
34.53.7.186:80
Load Balancer
Cluster IP
34.118.236.20
Load balancer IP
34.53.7.186
Load balancer
abf165b21f98148bcbf79ef2031076eb
Francoer
File
Edit
View
Francoer

Filter Enter property name or value

Name	IP address	Access type	Region	Type	Version	In use by	Subnetwork	VPC Network
–	10.138.0.2	Internal	us-west1	Ephemeral	IPv4	VM instance course-vm (Zone us-west1-b)	default	default
–	10.138.0.17	Internal	us-west1	Ephemeral	IPv4	VM instance gke-guestbook-default-pool-aa9d86aa-672w (Zone us-west1-b)	default	default
–	10.138.0.18	Internal	us-west1	Ephemeral	IPv4	VM instance gke-guestbook-default-pool-aa9d86aa-zx1n (Zone us-west1-b)	default	default
–	34.53.7.186	External	us-west1	Ephemeral	IPv4	Forwarding rule abf165b21f98148bcbf79ef2031076eb		
–	34.53.26.3	External	us-west1	Ephemeral	IPv4	VM instance gke-guestbook-default-pool-aa9d86aa-zx1n (Zone us-west1-b)	default	default
–	35.247.93.244	External	us-west1	Ephemeral	IPv4	VM instance gke-guestbook-default-pool-aa9d86aa-672w (Zone us-west1-b)	default	default



-Load balancer: 34.53.7.186

-Node internal are the ones that start with 10

-The external are the rest, 34.53.26.3, 35.247.93.244

07.2.12g

Sign here

Entries

Erick Franco <francoer@pdx.edu>
signed on 2025-02-21 09:07:10.654017+00:00
Hell Kubernetes!

Erick Franco <francoer@pdx.edu>
signed on 2025-02-08 07:56:33.776285+00:00
Hello Cloud Shell!

Erick Franco <francoer@pdx.edu>
signed on 2025-02-08 07:07:36.379017+00:00
Hello Datastore!

Erick Franco <francoer@pdx.com>
signed on 2025-02-13 23:31:15.362181+00:00
Hello App Engine!

Erick Franco <francoer@pdx.edu>
signed on 2025-02-08 08:05:50.107646+00:00
Hello Computer Engine!

Erick Franco <francoer@pdx.edu>
signed on 2025-02-08 07:39:47.408752+00:00
Hello Docker Datastore!

Erick Franco <francoer@pdx.edu>
signed on 2025-02-15 21:42:09.250034+00:00
Hello Cloud Run!

Erick Franco <francoer@pdx.edu>
signed on 2025-02-21 09:50:15.172737+00:00
Hello Cloud Build!

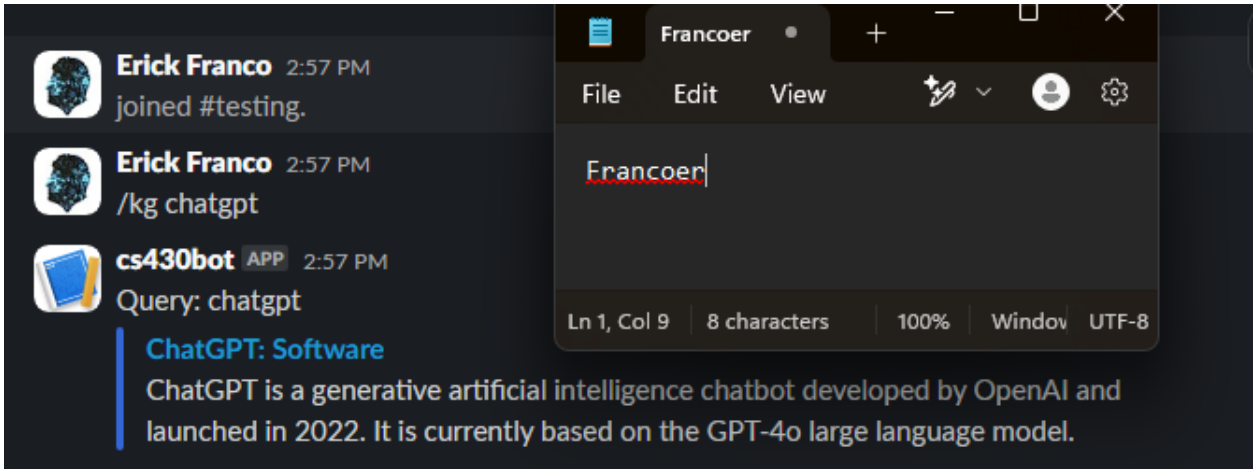
07.3.2g

- Does Google provide a Python package specifically for accessing the Knowledge Graph API?
    - Google doesnt provide a dedicated python package

07.3.3g

- Show the source line that constructs the query we wish to send to the Knowledge Graph API.
    - req = kgsearch.entities().search(query=query, limit=1)
- Show the source line that then executes the query and saves the response. What is the name of the method that sends the query to the Knowledge Graph API?
    - res = req.execute()
    - The method is execute()
- What is the Python data type that is used to represent the formatted message?
    - Python dictionary, or message
- What are the three main attributes of the formatted message passed back to Slack?
    - response_type
    - text
    - attachments

07.3.8g



07.4.3g

```
(env) francoer@cloudshell:~ (cloud-franco-francoer)$ cd ~/python-docs-samples/vision/snippets/detect
(env) francoer@cloudshell:~/python-docs-samples/vision/snippets/detect (cloud-franco-francoer)$ python detect.py labels-uri gs://cloud-samples-data/ml-api-cod
elab/birds.jpg
Labels:
Bird
Ratite
Common ostrich
Flightless bird
Beak
Vertebrate
Wildlife
Terrestrial animal
Greater rhea
Feather
(env) francoer@cloudshell:~/python-docs-samples/vision/snippets/detect (cloud-franco-francoer)$
```

- What is the name of the function?
    - Detect-labels_uri
- What type of Vision client is instantiated in it?
    - vision.ImageAnnotatorClient
- What method is invoked in the Vision client to perform the detection?
    - client.label_detection
- What is the name of the attribute in the response object that contains the results we seek?
    - response.label_annotations

```
francoer@cloudshell:~/python-docs-samples/vision/snippets/detect (cloud-franco-francoer)$ wget "https://goviks.com/images
42&quality=80&format=jpg" -O psulogo
--2025-02-23 23:52:17--  https://goviks.com/images/2016/5/19/newlogooldsite.jpg?width=942&quality=80&format=jpg
Resolving goviks.com (goviks.com)... 45.223.99.110, 45.223.114.110
Connecting to goviks.com (goviks.com)|45.223.99.110|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://images.sidearmdev.com/resize?url=https%3a%2f%2fdxbhsrqyrr690.cloudfront.net%2fsidearm.nextgen.sites%2fp
2f5%2f19%2fnewlogooldsite.jpg&width=942&type=webp [following]
--2025-02-23 23:52:17--  https://images.sidearmdev.com/resize?url=https%3a%2f%2fdxbhsrqyrr690.cloudfront.net%2fsidearm.ne
fimages%2f2016%2f5%2f19%2fnewlogooldsite.jpg&width=942&type=webp
Resolving images.sidearmdev.com (images.sidearmdev.com)... 18.238.217.41, 18.238.217.58, 18.238.217.82, ...
Connecting to images.sidearmdev.com (images.sidearmdev.com)|18.238.217.41|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 9322 (9.1K) [image/webp]
Saving to: 'psulogo'

psulogo                             100%[=============================================================================

2025-02-23 23:52:17 (1.04 GB/s) - 'psulogo' saved [9322/9322]

francoer@cloudshell:~/python-docs-samples/vision/snippets/detect (cloud-franco-francoer)$ python detect.py logos psulogo
Logos:
Portland State University
francoer@cloudshell:~/python-docs-samples/vision/snippets/detect (cloud-franco-francoer)$
```

- What method is invoked in the Vision client to perform the detection?
    - detect_logo

07.4.4g

```
francoer@cloudshell:~/python-docs-samples/speech/snippets (cloud-franco-francoer)$ python transcribe.py resources/audio.raw
Transcript: how old is the Brooklyn Bridge
francoer@cloudshell:~/python-docs-samples/speech/snippets (cloud-franco-francoer)$
```

- What is the name of the function?
    - transcribe_file
- What method is invoked in the Speech client to perform the detection?
    - client.recognize
- What is the name of the attribute in the response object that contains the results we seek?
    - Result

07.4.5g

```
francoer@cloudshell:~/python-docs-sampl
Text: 你有沒有帶外套
Translation: Do you have a coat?
Detected source language: zh-TW
francoer@cloudshell:~/python-docs-sampl
```

- What is the name of the function?
    - translate-text
- What method is invoked in the Translate client to perform the detection?
    - translate_client.translate
- What is the name of the attribute in the response object that contains the results we seek?
    - input
    - translatedText
    - detectedSourceLanguage

07.4.6g

```
francoer@cloudshell:~/python-docs-samples/translate/samples/snippets (cloud-franco-francoer)$ py
"homework is awful!" has sentiment=-0.800000011920929

Entities are:
name: homework
francoer@cloudshell:~/python-docs-samples/translate/samples/snippets (cloud-franco-francoer)$ py
"homework is ok" has sentiment=0.30000001192092896

Entities are:
name: homework
francoer@cloudshell:~/python-docs-samples/translate/samples/snippets (cloud-franco-francoer)$ py
"homework is awesome?" has sentiment=0.4000000059604645

Entities are:
name: homework
francoer@cloudshell:~/python-docs-samples/translate/samples/snippets (cloud-franco-francoer)$ py
"homework is awesome!" has sentiment=0.8999999761581421

Entities are:
name: homework
francoer@cloudshell:~/python-docs-samples/translate/samples/snippets (cloud-franco-francoer)$ py
d wore yellow t-shirts'
"The protestors in Oregon put on gas masks and wore yellow t-shirts" has sentiment=-0.6000000238

Entities are:
name: protestors
name: gas masks
name: Oregon
name: t-shirts
francoer@cloudshell:~/python-docs-samples/translate/samples/snippets (cloud-franco-francoer)$
```

07.4.8g

- What is the name of the function that performs the transcription?
    - transcribe_gcs
- What is the name of the function that performs the translation?
    - translate_text
- What is the name of the function that performs the entity analysis on the translation?
    - entities_text
- What is the name of the function that performs the entity analysis on the image?
    - Detect_labels_uri

07.4.9g

- If the program deems them unrelated, then based on the results from the APIs, what must be changed in the program to address this?
    - Have the results from the image be all lower case
- If the program deems them unrelated, then based on the results from the APIs, what must be changed in the program to address this?
    - Have shortened words for the images, because it has bicycle but never bike
- If the program deems them unrelated, then based on the results from the APIs, what must be changed in the program to address this?
    - If you have two words maybe have the important word be by itself and have a plural of the words as an option
    -

07.4.13g

- What are the 3 labels with the highest confidence that the Video Intelligence API associates with the video and what are the confidences for each?
    - Sports .92
    - Sport .91
    - Player .84
- What is the name of the client class in the package that is used?
    - VideoIntelligenceServiceClient
- What method is used in that class to perform the annotation?
    - Annotate_video

07.4.16g

8080-cs-636384430516-default.cs-us-west1-wolo.cloudshell.dev

Google Cloud Platform - Face Detection Sample

This Python Flask application demonstrates App Engine Flexible, Google Cloud Storage, Datastore, and th

Upload File: Choose File No file chosen

Submit

Screenshot 2025-02-23 171039.png was uploaded 2025-02-24 01:10:56.228141+00:00.

Joy Likelihood for Face: Likely

07.4.17g

- What line of code creates the query for previous detections?
    - query = datastore_client.query(kind="Faces")
- What line of code sends the query to Cloud Datastore?
    - image_entities = list(query.fetch())

- Show the line that retrieves the name of the storage bucket to use.
    - bucket = storage_client.get_bucket(CLOUD_STORAGE_BUCKET)
- What form field is used to specify the uploaded photo?
    - photo = request.files["file"]
- Show the line that copies the photo's contents to the storage bucket.
    - blob.upload_from_string(photo.read(), content_type=photo.content_type)
- What method in Vision's annotation client is used to perform the analysis?
    - faces = vision_client.face_detection(image=image).face_annotations
- What fields are stored in Cloud Datastore for each image?
    - blob.name
    - Blob.public_url
    - Current_datetime
    - face_joy
- What happens at the end of the `upload_photo` route?
    - return redirect("/")