Questions:

1. To access Load Balancer and get response from the instances we’ll need to

install some web service on the instances in order to get some response from them,

Then create Security Group that allow inbound HTTP traffic,

And add the created Security Group as “security\_group” parameter inside the Load Balancer resource

1. Yes, it matters in which Availability Zones the instances reside.

Cause beside the idea behind Load Balancer that is improve performance and reliability, responses to all requests que faster as possible.

Is to add redundancy, it is mean if one of the Availability Zone will be down or unavailable from any reason the second Availability Zone will be the backup in this case

And will continue to response and support the service, the service (App) still be available if one of Availability Zone is down.

Bonus Questions:

1. Security measures that I’ll add to application once it is deployed:

-Expose the APP by HTTPS and not HTTP.

-Reduce much as possible the Security Group Inbound rules that allow just to who needed to access - Source IP range, Connection type (HTTP,SSH,etc.), Port range and Protocol.

-Request to login and authenticate with Active Directory Domain user.

-Add Multi Factor Authentication

1. By default, I taught that I’ll monitoring the most common metrics “CPU” and “Memory” but maybe the app requires other metrics to monitor like “Number of Running Processes”, “Response Time”, “Number of Requests in Que” or “Number of Connected Session”

So, with more details about what the Application should provide I’ll know bater which metrics to monitor.

1. When we change Terraform code and run “terraform apply” again

Terraform look on state data file (terraform.tfstate) refresh it and compare the state data to terraform code.

Find the changes and print them, then ask for your confirmation to apply them by “yes”

If you approve it, he makes the changes and update the state data.

So, terraform decide what should be done by comparing our code in front of the real world (AWS)