



Arquitectura de Infraestructura & Gobierno de TICs - 2024-01

Lab Infrastructure as Code Terraform

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General Context

The GitHub provider is used to interact with GitHub resources. The provider allows you to manage your GitHub organization's members and teams easily. It needs to be configured with the proper credentials before it can be used. Use the navigation to the left to read about the available resources.

1. Install Terraform - **Done**
2. Create a Github account following these [instructions](#) If you already have an account, consider removing the credentials in the code that you will send to the Professor.
3. Configure your **main.tf** in this way. More information [here](#).

```
terraform {  
  required_providers {  
    github = {  
      source  = "integrations/github"  
      version = "~> 5.0"  
    }  
  }  
}  
  
# Configure the GitHub Provider  
provider "github" {}  
  
# Add a user to the organization  
resource "github_membership" "membership_for_user_x" {  
  # ...  
}
```



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4. Create a repository in this way. More information [here](#).

```
resource "github_repository" "example" {  
  name          = "example"  
  description   = "My awesome codebase"  
  
  visibility    = "public"  
  
  template {  
    owner          = "github"  
    repository     = "terraform-template-module"  
    include_all_branches = true  
  }  
}
```

```
resource "github_repository" "example" {  
  name          = "example"  
  description   = "My awesome web page"  
  
  private = false  
  
  pages {  
    source {  
      branch = "master"  
      path   = "/docs"  
    }  
  }  
}
```



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5. Create 3 branches. Choose the names that you want in this way. More information [here](#):

```
resource "github_branch" "development" {  
  repository = "example"  
  branch     = "development"  
}
```

Your Mission

Send an email to the Professor with this subject **[Infra & Arch] Terraform Lab** including these:

- A github repo URL with the code in Terraform.
- The evidence that you run the **apply command** with success.

```
Plan: 0 to add, 1 to change, 0 to destroy.  
  
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_launch_template.app_lt: Modifying... [id=lt-05296efab0e4cd072]  
aws_launch_template.app_lt: Modifications complete after 1s [id=lt-05296efab0e4cd072]  
  
Apply complete! Resources: 0 added, 1 changed, 0 destroyed.  
> aws autoscaling start-instance-refresh --auto-scaling-group-name terraform-20210917102241036000000003  
{  
  "InstanceRefreshId": "eb9b2885-eeb8-4920-b7bf-215867c90c2e"  
}  
> █
```

- The url of the repository that you created using IaC.