Adding Maps and Lookups in your Terraform files

The lab files can be found @ https://github.com/satyensingh/terraform-assignment-resources.git

In the repo you will find main.tf, outputs.tf, and variables.tf.

Add a new variable called env. Set a description to “env: dev or prod”.

Convert the type from image\_name to map.

Change the default to use key/value pairs. Set dev to ghost:latest and prod to ghost:alpine.

Convert container\_name to a map. Change the default to use key/value pairs. Set dev to blog\_dev and prod to blog\_prod.

Convert ext\_port to a map. Change the default to use key/value pairs. Set dev to 8080 and prod to 80.

Now initialize Terraform.

Setup the Development environment

Create a workspace called dev.

Generate a Terraform plan. Output the plan and call it tfdev\_plan. Pass in a variable called env and set it to dev.

Apply tfdev\_plan.

Setup the Production environment

Create a workspace called prod.

Generate a Terraform plan. Output the plan and call it tfprod\_plan. Pass in a variable called env and set it to prod.

Apply tfprod\_plan.

Verify both environments work

Open a browser and navigate to the public IP. This should pull up the production environment.

Open a browser tab and navigate to the public IP on port 8080. This should pull up the development environment.

------------------------------------main.tf-----------------------------------------

terraform {

  required\_providers {

    docker = {

      source  = "kreuzwerker/docker"

      version = "2.12.2"

    }

  }

}

provider "docker" {

  host = "npipe:////.//pipe//docker\_engine"

}

# Download the latest Ghost Image

resource "docker\_image" "image\_id" {

  name = var.image\_name[var.env]

}

# Start the Container

resource "docker\_container" "container\_id" {

  name  = var.container\_name[var.env]

  image = docker\_image.image\_id.latest

  ports {

    internal = 2368

    external = var.ext\_port[var.env]

  }

}

--------------------------------variables.tf--------------------------------------

#Define variables

variable "env" {

  description = "env: dev or prod"

}

variable "image\_name" {

  description = "Image for container."

  type = map

  default = {

    dev = "ghost:latest"

    prod = "ghost:alpine"

  }

}

variable "container\_name" {

  description = "Name of the container."

  type = map

  default = {

    dev = "blog\_dev"

    prod = "blog\_prod"

  }

}

variable "ext\_port" {

  description = "External port for container."

  type = map

  default = {

    dev = 8080

    prod = 80

  }

}

-----------------------------------------outputs.tf-------------------------------------

#Output the IP Address of the Container

output "ip\_address" {

  value       = docker\_container.container\_id.ip\_address

  description = "The IP for the container."

}

output "container\_name" {

  value       = docker\_container.container\_id.name

  description = "The name of the container."

}

--------------------------------screenshot------------------------------------------------------------

