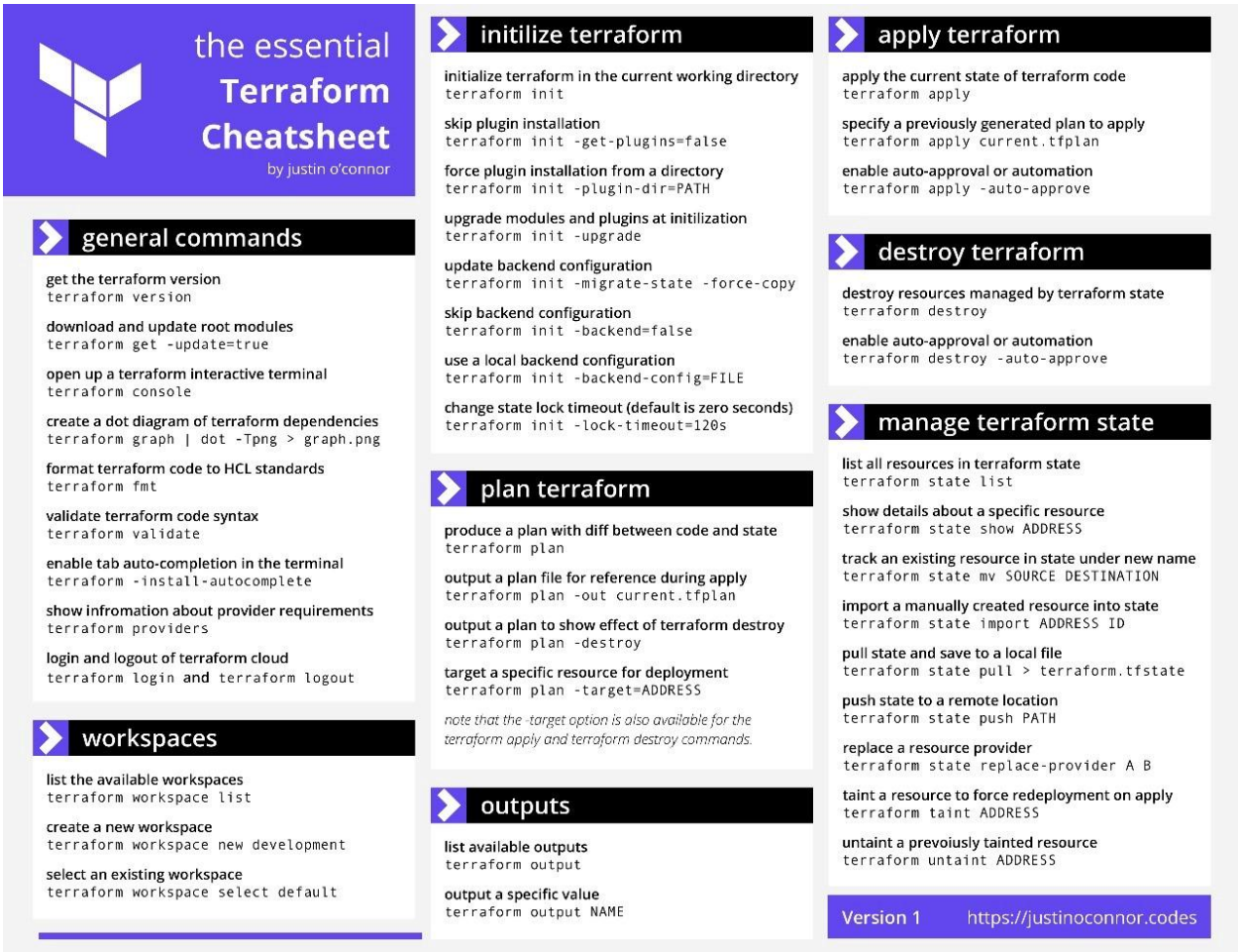
SAHASRAN M – 22CSR167

Devops day 5 terraform

Terraform Configuration



terraform { required_providers { aws = { source = "hashicorp/aws" version = "5.92.0"

```
  }
 }
} provider "aws" {

#Configuration Options

}

Terraform Version: terraform {
required_providers { aws = {
source = "hashicorp/aws"
    version = "?? 5.0"
  }
 }
}

#Configure the AWS Provider
provider "aws" { region = "us-
east-1" }
```

Create a VPC

```
resource "aws_vpc" "example" { cidr_block =
"10.0.0.0/16"
} region = "us-east-1" resource
"aws_vpc" "myvpc" { cidr_block =
"10.0.0.0/16" tags = {    Name =
"demovpc"
 }
resource "aws_subnet" "pubsub" { vpc_id
= aws_vpc.myvpc.id cidr_block =
"10.0.1.0/24" availability_zone = "us-east-
1a"

tags = {    Name =
"sn1"
 }
}
```

Internet Gateway resource

```
"aws_internet_gateway" "tfigw" {   vpc_id =
aws_vpc.myvpc.id
tags = {     Name =
"tfigw"
 }
} resource "aws_route_table" "tfpubrt" {
vpc_id = aws_vpc.myvpc.id route {
cidr_block = "0.0.0.0/0"
   gateway_id = aws_internet_gateway.tfigw.id
 }
tags = {
   Name = "tfpublicroute"
 }
} resource "aws_route_table_association" "pubsn1" {
subnet_id      = aws_subnet.pubsub.id   route_table_id =
aws_route_table.tfpubrt.id
}
resource "aws_route_table_association" "pubsn2" {
subnet_id      = aws_subnet.pub_sub.id   route_table_id =
aws_route_table.tfpubrt.id
}
resource "aws_eip" "tfeip" {   domain = "vpc"
} resource "aws_nat_gateway" "tfnat" {
allocation_id = aws_eip.tfeip.id   subnet_id
= aws_subnet.pub_sub.id
tags = {     Name = "gw
NAT"
 }
} resource "aws_route_table" "tfprirt" {
vpc_id = aws_vpc.myvpc.id route {
cidr_block = "0.0.0.0/0"
   gateway_id = aws_nat_gateway.tfnat.id
 }
```

```
tags = {
   Name = "tfprivateroute"
 }
} resource "aws_security_group" "allow_tfsg" { name
= "allow_tfsg" description = "Allow TLS inbound
traffic" vpc_id = aws_vpc.myvpc.id ingress {
description = "HTTPS " from_port  443 to_port
 443 protocol = "tcp" cidr_blocks =
["0.0.0.0/0"]
} ingress { description =
"HTTP " from_port  80
to_port  80 protocol
= "tcp" cidr_blocks =
["0.0.0.0/0"]
} ingress { description = "SSH"
from_port  22 to_port 
22 protocol = "tcp"
cidr_blocks = ["0.0.0.0/0"]
} egress { from_port  0
to_port  0 protocol =
"1" cidr_blocks = ["0.0.0.0/0"]
} tags = {
Name = "TfsecurityGroup"
} } resource "aws_instance" "pub_ins" { ami = "ami-
0fc5d935ebf8bc3bc" instance_type = "t2.micro" subnet_id
= aws_subnet.pub_sub.id vpc_security_group_ids =
[aws_security_group.allow_tfsg.id]
key_name = "David"
associate_public_ip_address = "true" }


#terraform init
#terraform validate
#terraform plan
#terraform apply
#terraform destroy
```