

Session 3

Terraform is a IAAC (AWS)

Whenever we want to create a cloud resources like ec2 , vic , subnets , internet gateway , load balancer , db servers any resource

You want to create by using automation or script we are using terraform

Install terraform on your windows machine

We have to set terraform path on the windows machine

Configure was credential from cli (command line interface)

Install was cli

Aws

Users

Create user

Put name

Next

	Type	Attached via	
	<u>AmazonEC2FullAccess</u>	AWS managed	Directly
	<u>AmazonVPCFullAccess</u>	AWS managed	Directly

Create user

Security credentials

Create access key

Vs code

When you are writing terraform write we have to use different blocks

First one is provider blocks ... provider blocks defines in which cloud we are doing automation

We have to write resource blocks resource block is nothing but like what kind of resource that we want to create on cloud ... ec2 instance vic loadbalcner

Next step we have to define the variable blocks ... variable blocks are nothing but we want to pass any paprameter the we have to pass variable blocks

There are 3 types of variables

Next blocks : output.tf file if we want to print output in console like public ip address and private ip or vpc name / id

When we are creating instance using terraform script makesure this 5 parameter we pass

The first parameter is amazon id

2. Instance type
3. Key pair name
4. storage
5. Instance name

When we execute the command called terraform plan command

Vic should contain name and ip address

What is docker :

Docker is a containerisation tool which can help us to create portability of app so use resource effectively to create platform independent app we are going with a docker

Docker is going to perform os level virtualisation techniques

We are going to use docker to reduce the cost of the servers , to run the app wherever we want we are going to do something it is called as the docker

Application is divided into the module called as the micro services each and every micro service has a separate docker file , image , container

Every micro service application is deployed in a container

Monolithic app is nothing but it is a single tier architecture which means web server app server db server we are combining together and we are deploying in a single server

Issues with the monolithic app

If any module goes down the complete app goes down because it is a tightly coupled nature

If one service goes down the entire app will go down that is a reason we are moving towards the micro services

What is micro services :

It is broken down app into the independent services that's called loosely coupled app

If any one service goes down only customer is not able to access the service

Remaining services will go as it is

Build once run everywhere