Setting up AWS

[Getting Started With AWS Cloud | Step-by-Step Guide](https://www.youtube.com/watch?v=CjKhQoYeR4Q&t=105s)

aws setup 
•z User 
MFA 
Free tier 
Billing alarm 
•z CLI access 
SSH 

What are the things required to setup a http server / EC2 instance.

Ami, Key pair, instance type, security group.

Setting up K8s cluster in AWS

To build the K8s cluster, build and deploy the code out to the K8s cluster.

We'll be creating 2 different pipelines.

07 - This will be responsible for creating our K8s clusters in AWS.

The code for 07 (pipeline that we would run) would be inside configuration/iaac/k8s/

This folder contains the K8s script that we would want to run to be able to create K8s cluster.

We would require a deployment functionality as well and this take taken care by config/k8s/deployment.yaml (this file is needed to deploy the application currency -excahange) app.

This contains the configuration for the currency excahnge app. This contains a simple service and a deployment for the currency exchange app.

This image would be run as part of 08 pipeline code.

08 will build a docker image from src code, and after that we do k8s apply using this deployment.yaml.

All the infrastructure related changes are handled by iaac that is 07.

All the code related and deployment related changes are handled by 08.

What are the things we need to take care to provision K8s cluster via code.

* We need to make use of module. (Terraform modules to create EKS (elastic Kubernetes Cluster) and the worker instance on AWS is found in github repository terraform-aws-modules/terraform-aws-eks)
* Inside module we need to mention source, cluster name, cluster version
* We need to change the subnets according to our configuration in AWS. We can also make it dynamic by using data providers in terraform.
* We need to have default VPC.

To set up service connections use the following screenshot setting

A screenshot of a computer

Description automatically generated

Things I need to focus and understand id

How to setup a cluster.

How to setup EC2 instance / HTTP server.

How to setup a VM

Remember the first docker throttler task where, I was trying to replicate using docker image by building our own UBI.

From registry pull the ubi image and on it replace our binary using docker exec.