WEEK-5 27/06/2021

1.What is Devops?

DevOps is a set of practices that combines software development and IT operations. It is a way to get to a more continuous capability in our pipeline.

2.Write a github action to test a node.js application

name: Node.js CI  
on:  
push:  
branches: [ main ]  
pull\_request:  
branches: [ main ]  
jobs:  
build:  
runs-on: ubuntu-latest  
strategy:  
matrix:  
node-version: [10.x, 12.x, 14.x, 15.x]  
steps:  
- uses: actions/checkout@v2  
- name: Use Node.js ${{ matrix.node-version }}  
uses: actions/setup-node@v1  
with:  
node-version: ${{ matrix.node-version }}  
- run: npm ci  
- run: npm run build --if-present  
- run: npm test

3.Write a github action to test a maven application

name: Java CI  
on: [push]  
jobs:  
build:  
runs-on: ubuntu-latest  
steps:  
- uses: actions/checkout@v2  
- name: Set up JDK 11  
uses: actions/setup-java@v2  
with:  
java-version: '11'  
distribution: 'adopt'  
- name: Build with Maven  
run: mvn --batch-mode --update-snapshots verify

4.Write a github action that builds and pushes a Dockerfile to github container registry

jobs:  
build-svc:  
runs-on: ubuntu-latest  
steps:  
- uses: actions/checkout@v2  
name: Checkout repository  
- uses: pmorelli92/github-container-registry-build-push@2.0.0  
name: Build and Publish latest service image  
with:  
github-push-secret: ${{secrets.GITHUB\_TOKEN}}  
docker-image-name: my-svc  
docker-image-tag: latest # optional  
dockerfile-path: ./src/svc/Dockerfile # optional  
build-context: ./src/svc # optional