## Advance Dev Ops Assignment 2

steps to create a REST API with serverless frame Install serverless, Francwork globally using the following command on the terminal: npm install - 9 serverless This command installs the secuestess Framework on reate manage and deploy serverless applications across vocious cloud providers, including AWS.

Create a new Service with AWS Node is serverless create -- template aws - node is -- path rest-api. This command initialises a new technolo serverless service alled rest-api. It creates a folder containing basic files and a template specifically configured for building sewerless applications using Nodejs on AWS Lombda.

Navigate to the project directory?

This command changes directory into the newly created moject directory to manage files and configurations specific

our service.

nitialize Node js project and install dependendases.

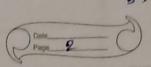
opm init -y

nom install express securerless http

the express dependency wilds the REST API and

werless - http integrates express with AWS Lambda

Q2] Case study for Sonarffile: · Create your own profile in Sonarquile for testing project quality e use sonarchoud to analyse your Github code. . Install Sonorquire Senartint en your Java Intellij IDE os Eclipse IDE and analyses your Java Code e dralyse Python project with sonorqube · Analyse Nade js project with sonarquile. dre Create your own profile in sonorquie I Download and install Sonarque from the official website Ungip the file and start the server by ounning: Min/windows -x86 -64/ start Sonar lost. This launches Sonarquire locally and can be accessed at http (cancel. 5) Edit the servenless youl file to include source: rest-api provider. name: dus suntine node; 14.x stage : der region: us-east-1 functions: handles: handles app events: path. methods: any Teacher's Sign.:



his configuration specifies the service name. Aws movider settings and defines the Lambda function with edit handlest-js to add the Express app:

wast express require ('express'):

worst serverless : require ('serverless http);

const app : express (); HITP event Engges. app get ('./ hello world', (req, res)=) res json ({ message: module exports app : serverless (app); his creates a simple Express app with a single moute helloworld and exports it in a Lambda - compatible format Deploy the service: servenless denloy
eploys the API to AWS setting up resources like
lambda and API Grateway. A URL is generated for Test the deployed API:

and https: (1 Rapi-id) execute-api (xegion) amazon aus con/

der (helloworld it returns a JSOV message: Using above command, it returns a JSON message. Redeploy after updates: serverless deploy

After modifying redeploy it to update the API with our

changes. changes. Remove the service: serverless removes The above command removes all AWS resources associated with the API ensuing that there we are me changes for unused services.

(2) Case study for sonarquie:

Create your own profile in sonarquie for testing project quality · Use Sonarchoud to analyze your Grithub cade · Install Gonardube Sonarlint in your Java Intellij IDE ar Edigse IDE and analyze your Java code
Analyze Python project with sonarquile
Analyze Nodejs project with sonarquile
Analyze Nodejs project with sonarquile
Ans Create your own profile in Sonarquile

1) Download and install Sonar Quile from the official
white urzip the file and start the server by surning thin Jaindones - x86-64/ start Sonas bat This laurches Sonorquibe locally and can be accessed at http://local host: 9000 2) Log in to Sonar Bube using the default exedentials (user-pane: admin, password: admin). After logging in, change the password. 3) Navigate to Projects tab, click on 'Create New Project assign a project key and name and generate a project taken · Use Sonar Cloud to analyze your Grithub code: 1) Sign up for songer loud from the official website I using your githule account your crithub repository and grant sonar Bute cloud 3) Add a sonar - project properties file in the soct of your superitory with the following code:

Sonar project key: (your - project - key) sonar organisation: Lyoner - organisation)

conact host wel = https://sonaccloud.io the Sander Scanner to analyse the code by sunning the following command sonar-scanner This uploads analysis results from your local.

Install Concertint in your Java IntelliJ on Edipse IDE nd analyse your Java code. Install Sonar Lint by going onto IntelliJ on Eclipse, going to Pluggins/Market place and search for Sonar Lint metall and restart your IDE

of the IDE, configure sonar Lint by linking it to our, Sonar Quie or Sonar Cloud peroject to sync the the and perofiles.

Then a Java project and use Sonaulint to analyse of will display issues directly in the IDE

thile coding.

convertint perouides seal-time feedback or code quality and on Sonarrule rules.

ralyze python project with Sonar Qube:

It up a python code in a project and ensure that Sonar Qube

running locally

curriod and configure Sonar Scanner from ite official

cluste and in the sonar-project proprenties, file

its to include the following: Sonas project key: python project Sonas language : Py Sonal Sources.

Sun the analysis of the perojects by executing the following son the project directory: sonar-scanner. The results will

	Page
	pushed to your local Sonar Rube server and the analysis is visible on the dash board.
4 1	Analyse Node JS peroject using sonarQube:  Set up a Node JS peroject  In SonarQube ensure that all Javascript / Typescript.
	from the may ket place tak in Sonar Qube
	soot and include the following in it:- sonar projectkey = node-project.
M	sonar language = js  sonar sources =  Run the analysis of the project by sonar-scanner
	Sonar Rule will analyze the Node is project and show results on the dashboard, highlighting code quality, bugs and unbrevalitities.
Q.3	In organisations managing republishine informationeture
1	donon processes Adopting a self-serve infenstructure model using Terrafolem derent volizes this responsibility:
->	In large organizations, centralized operations teams' repetitive infrastructure requests, leads to delays. Terriform provides a solution by enabling a self-service infrastruct model, enabling product teams to manage their
	Terroroform modules codify organizational standards,
	Teacher's Sign.:

MANAGE CHARLES SERVE SERVE SERVE TO THE PROPERTY OF THE PARTY OF THE P we come without the sense of the sense Manufaction of massesse to english of many promoting and boothing requests produced bottlerecks, and empowers teams to take autiful