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inarlament of many their Obeate your own profile in Sonarque gram the official mebsite 6. Log into sonarqube using the default redont (username: adimpdmin, passured: admin) c. Navigate to project tob, click an create new assign a praject key and name and genrate project taken. 3 Use sanazquée to analyse your Crithub code. a. Sign up for Sonar aud from the official w truens duttin ruey gridu b. In sanarchand under projects > Create project chasse your Github repository and grant



5 Edit the serverless um file to include

service: rest-api

planider?

name: aus

rintime: nadejs 14.1

stage: der

region: US- est- east-1

Aunitions

app:

handler: handler app

the events:

- http:

on hopath: /os

method: any

This configuration specifies the service name AWS possider settings and defines the lambda Junction with HTTP event trigger.

Edit handler is to add the Express app

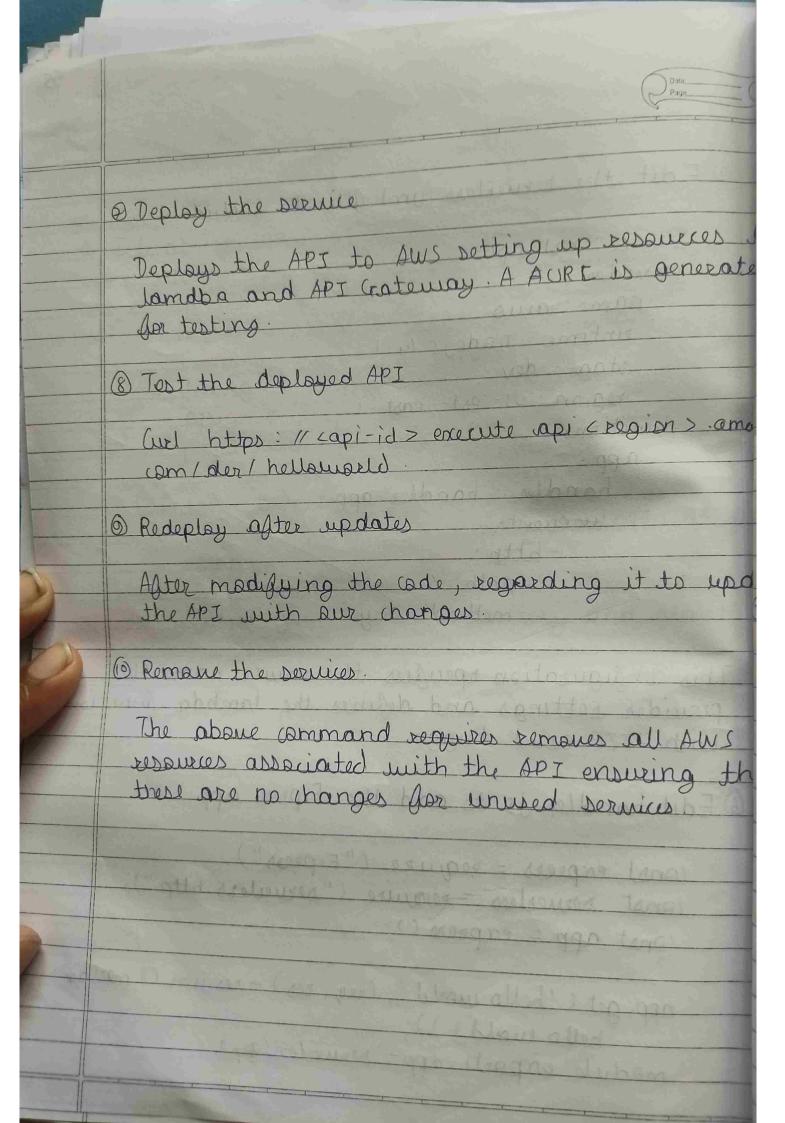
const express = require ("Express")

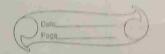
const serverless = remuire ("serverless http");

() constapp = express ()

app. get ('hello world', (rey, res) > resison ({ massage: hello world"}));

medule exports app = Dernerless (app).





Case study for Sanarqube

reate your own profile in sonarqube a Dounload and install sonarqube do Brom the official subsite, unsip the file and start the server by surning:

- b. Log in to sonarqube using the default admin) redentials (user name: admin, passuard: admin)
- c. Navigate to projects tab, dick an 'create new project' assign an project key and name and generate a project taken.
- Use Senarcland to analysis your Github cade a Sign up for Sonar Cloud from the official mebsite using your Github account.
  - b. In sanarclaud under projects treate project choose your github repository and grant sanarclaud access to it
  - c. Add a sanar projects properties like in the rost of your reposity with the Jollaning code

Sanar project key: ¿ your - project key? Danar . arganisation: ¿ your - arganisation >

Datu\_Page\_

- 3 Use sanarscanner to analyse the cade key by sunning the following command sonar scanne This uploads analysis results from your location to sonar cloud.
- @ Install Sonar lint in your Java Intelli J pe Elej and analyse your Java code
  - a Install sonarlint by going anto IntelliJ or Eclipse going to Plugins/Market place an Search for Sonarlint it install and restart
  - b. In the IDE configure sonarlint by linking your sonarqube on or Sonar Cloud project to the rules and profiles.
    - c. Open a Jana project and rice worsa Sanarlint analyse it. It will display issues directly in IDF while cooling.
- 3 Analyse python project with sprarques. a. Set up a python code in a project and en that sprarqube is running locally
  - 60 Daunhard and configure sonar scanne from its official mebsite and in the son project properties tile, edit to idude the following



- 6 Analyse Nade is project mith Sanniquese a Set up a Nade is project
  - 6. In sonarcube, ensure that all Jas/TS
    plugins have been installed Plugins can be
    installed from the marketplace tab in
    sonarcube.
  - c- Geate sonar project properties file in your project root and include the following in it

sonar project key = node project sonar · language = is sonar · sources = ;

d. Run the analysis of the project by executing
the sanax - scarner command.
Sanarque will analyse the Noole is project and
show results on the dashbard highlighting
code quality, bugs and wilnerabilities

23 In organisations managing repetitive infrastruct requests strain centralisad aperations teams, s down process adopting a self-serve infrastructure model using terraform decentralisation this responsibility, empowering produce teams to mane their own infrastructure > OIn large organisations often rely on centralize operations teams to handle repetitive infrastruce of This centralized approach can lead to delays, in service deployment inefficiencies, and boolenecks in service deployment 3 Using Terraform, organisations can implement o self-service infrastructure model, enabling pro teams to manage their own infrastructure O Terraform modules codify organizational star ensuring consistent, secure, and compliant infra deployment 3 These test reusable modules allows teams to o sorvices officiently, fallowing best practicy. 6) Terrappin dans can integrate with ticketing systems tike sominenou to autamate the of infrastructure requests 1) This integration streamlines the process generating and tracking requests. 18 The self service made enhaces agility, sodu sperational battlenecks, and emparuers team take control of their infrastructure

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