Name: - Bhagyesh . B. Potij 8011: - 36 O.1) create RES Api with the serveriess framework Ans Here are the serveral steps to be follower to create REST APT using serveriess framework 1. install serveless frame work 1= Run nem install-9 Serveriess to install the framework globally on your machine

2. create a new project generate a new serveriess project using the following command

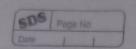
command

Serveriess create -- template aus-hodeis-

cd my-rest-api

3. Define API Endpoints:open the serveriess ymi file and define
your REST API with Functions

Implement the logic for each endpoins 4. write function. in the handler is s module.exports get I tems = a sync (event) => 2 88448n & 18 Status Code: 200, 10 body : Json stringify (& message: List or Items "b), 3, 1 x00 200pm 223174492 1103201.1 SEXVELLESS to install the food 5. Deploy the API may no wood of Deploy the API to Aws using the output exerte a view project Commandiravas med a stayana the temporal command SCHVENIESS DEPICY Chitest the April -After deployment you will socive on a gateway URL you can test the APE Using curl or postmon Command language 199 201190. 8 spen the seaved 1855 Aut Line and get C481 https:// y04-api-481/items



(9.2) Case study of tech Innovator tag its

Ans tech-innovator Ita is a global leader in developing multimedia and entertainement application the company provide software solution for video streaming content exection and editing tools with a diverse stack including java, ABC media solution manage serveral large-scale projects developed by distributed team across different regions

solution: - so naraube

1. Automated code analysis

1) songraube was integrated into the company Jenkins CZICD pipeline allowing for automated code analysis including by yulnerabilities, and code smell

2. Quality gate and rule

1) Tech innovator Ltd define cystom quality gate to enforce standard for acceptable code quality these gate ensure that code with critical vulnerabilities or high technical debt rations could have be merge or deployed

3. Technical Debt reduction:

1) with sonaraube technical debt tracking feature the team able to quantify the effort required to fix issues in their code this about the company to prioritize technical debt reduction alongside new feature development

4. code Dupication and complexity

1) sonoraube provided insights into code

duplication area of high complexity the

platform detailed reports herped develope

refactor code to reduce complexity and

climinate redundant code this improve

the overall performance of the application

and reduce bygs realited to complexity

unmaintainable code

5. increased developes Productivity

1) By automating code quality check on reducing technical debt, developes at Jech innovated Ltd Solution able to focul more on innovation feature realted the fixing by g and dealing with performance issue

0.3

Ans

Implementing a self-scave infrastructure moder using terraform con significantly Statemine operations with large organisation Here's Structures approach to achieve

il centralized operations

- Address repetitive in Frast ructure request from Product teams by Using terraform

2) Create terraform modules:

· Develop reusable modules that define Standards for deploying and managing infrastructure/

3) Empower product teamin

· Set up a senf-service postal where tea can initiate request using Prederine modules enabling them to manage the infrastry independently

4) Integrate resigform coud

· Connect terraform could with ticket System like sequice now to gytomate require terraform can provision the