Project Implementation: Node.js Codebase Gap Analysis with SonarQube

Step 1: Set up SonarQube Instance

Local Setup

1. Download SonarQube:

• Visit the SonarQube Download Page and download the Community Edition.

• Extract the downloaded archive to your preferred directory.

2. Start SonarQube:

• Navigate to the SonarQube directory and run the startup script (e.g., bin/[your\_os]/sonar.sh).

• Access the SonarQube web interface at http://localhost:9000.

Docker Setup

1. Run SonarQube Docker Container:

docker run -d --name sonarqube -p 9000:9000 -p 9092:9092 sonarqube

This command starts a SonarQube Docker container with exposed ports.

Step 2: Install Relevant SonarQube Plugins for Node.js

1. Install SonarScanner for Node.js:

• Follow the official SonarScanner for Node.js installation guide.

• Ensure Node.js is installed on your system.

Step 3: Configure SonarQube Properties

1. Create sonar-project.properties File:

• In the root of your Node.js project, create a file named sonar-project.properties.

• Configure the file with project details and settings:

propertiesCopy code

sonar.projectKey=my-nodejs-project sonar.projectName=My Node.js Project sonar.projectVersion=1.0 sonar.sources=. sonar.exclusions=node\_modules/\*\*, coverage/\*\* sonar.sourceEncoding=UTF-8

Step 4: Integrate the Provided Node.js Codebase with SonarQube

1. Run SonarScanner:

• Open a terminal in your project directory.

• Execute the following command:

sonar-scanner

2. This command triggers the analysis and sends the results to your SonarQube instance.

Snapshots:

A screenshot of a computer

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A screenshot of a computer

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Code Snippets:

A screen shot of a computer

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A computer screen shot of a program

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