**What is SonarQube?**

SonarQube is an open-source platform developed by SonarSource for continuous inspection of code quality. Sonar does static code analysis, which provides a detailed report of bugs, code smells, vulnerabilities, code duplications.

It supports 25+ major programming languages through built-in rulesets and can also be extended with various plugins.

**Benefits of SonarQube**

Sustainability - Reduces complexity, possible vulnerabilities, and code duplications, optimising the life of applications.

Increase productivity - Reduces the scale, cost of maintenance, and risk of the application; as such, it removes the need to spend more time changing the code

Quality code - Code quality control is an inseparable part of the process of software development.

Detect Errors - Detects errors in the code and alerts developers to fix them automatically before submitting them for output.

Increase consistency - Determines where the code criteria are breached and enhances the quality

Business scaling - No restriction on the number of projects to be evaluated

Enhance developer skills - Regular feedback on quality problems helps developers to improve their coding skills

Steps to install SonarQube on local machine:

1. Download the SonarQube from <https://www.sonarqube.org/downloads/> .
2. Copy the downloaded file into any of the disks.
3. Extract the file and go to bin folder and then into the specific OS folder and now copy the path into CMD then run the command “SonarStart”.
4. Go to the browser and type localhost:9000 in url section.
5. You can login into SonarQube using admin as username and admin as password for the first time. You can change the password later.

Token: **6bde3f7e2788ac363aae4b4ead3f58e63c1e3447**

**Add this configurations to a file called sonar-scanner.properties**

# must be unique in a given SonarQube instance

sonar.projectKey=my:project

# --- optional properties ---

# defaults to project key

sonar.projectName=creditcard

# defaults to 'not provided'

sonar.projectVersion=1.0

# Path is relative to the sonar-project.properties file. Defaults to .

sonar.sources=.

# Encoding of the source code. Default is default system encoding

sonar.sourceEncoding=UTF-8

#----- Default SonarQube server

sonar.host.url=http://localhost:9000

To run SonarScanner from the zip file, follow these steps:

Expand the downloaded file into the directory of your choice. We'll refer to it as $install\_directory in the next steps.

Update the global settings to point to your SonarQube server by editing $install\_directory/conf/sonar-scanner.properties:

#----- Default SonarQube server

sonar.host.url=http://localhost:9000

Add the $install\_directory/bin directory to your path.

Verify your installation by opening a new shell and executing the command “sonar-scanner”