DevOps Engineer - Case Study

TCS wants you to analyze, recommend and perform a DevOps Practices implementation. Automate and streamline sample application with Devops Engineering Practices, including continuous integration, configuration management, continuous delivery, and automated quality assurance. The key objectives of your analysis and recommendations are:

- Create an Spring Boot Application and configure the inbuilt server port to 8885.
- Write Junit5 test cases for Spring Boot Application.
- Create a GitHub Repository and push the code to GitHub repository.
- Integrate Git plugin in jenkins pipeline to checkout the code.
- Implement Continuous Integration and Automation of Build, Test and Package.
- Implement a tool to analyse the quality of code (Sonar plugin)
- Implement Automation of Docker image creation.
- Implement authentication on docker registry.
- Implement Automation of pushing the docker image to docker registry.
- Implement email alerts for bad builds.
- Implement auto configuration of tomcat or aws ec2 instance.(using Ansible)
- Implement Automation of deployment on tomcat or aws ec2 instance.
- Implement Auto trigger of the jenkins cicd pipeline.

Note : The evaluation will be done on the provided Jenkin's environment. Once you are ready with the application on your local, please configure and test it according to the Jenkins environment.

Date of Submission : 11th May 2020