

## 1. Risk Management System:

### Technology stack:

Angular 4

Java/J2EE

Oracle/MS-SQL

Web services

Scheduler

Use Case: Companies usually apply for credit with organizations like banks or other companies in day to day life. The companies which lend credit have to cautiously assess risk associated with the credit. Multiple factors like company's financial condition, Past payment history, suits and liens, geographical factors etc need to be considered while lending credit.

You are building a web application which will be used by multiple users like financial analysts who would like to evaluate an application, end users who want to apply for credit. The system should have capability to

- Submit an application (end user will do this)
- Run automated policies to decide whether to approve the credit or reject it(You have come up with a set of policies which get triggered on every submitted application to decide whether to approve or decline.
- Sent a notification to end user of approval or rejection.
- Also build web-services for users who would not want to use GUI and instead just want to apply for credit directly using exposed API endpoints.
- Financial analysts would like to see a dashboard showing them quick overview of top ten companies with outstanding credit.

### **Continuous Integration and Deployment**

- Setup jenkins and create a build job for generating application artifacts
- Create a docker image , use docker-maven plugin for building docker image and push it to dockerhub
- Setup minikube cluster and run your application on it.