Employee Expense Management System (EMS) Case-Study:

Abstract: Application will have react web based user interface which shall provide following features:

- Registration Form for new employee addition with proper validations error messages in case any

- Login screen for Employee /Manager

- Manager must able to list employee information

- Employee must able to login and add expense related tp internet/travel/medical etc

- Manager able to view all the expenses applied by employees , he can apprive or reject

Based on amount allocated for each type – medical -50000, travel -5000 internet 2000 etc

-Manager can also able to add his own expense.

- Save the project in Git, use Docker and Kubernetes too and deploy the same on AWS too

Front-end- react

BackEnd: (Microservices / RestWebservice)

ManagerService

EmployeeService

EurekaService

Modules:

- EMS Front-end Module

- EMS Back-end Module

- Redirection to third party applications if required

Technical specification:

- Front-end to be developed using latest version of React.js with proper validation error messages

- Multiple Front-end components to show all backend database activities.

- Backend to be developed using Spring Boot, Data JPA or Hibernate

- There must be at least 2 different micro-services

- Employee Services

- ManagerService

- Proper usage of exception handling wherever required

- Communication will be done through JSON between React/ SpringBoot / MySQL

- Postman for verification of all messages

Screenshots:

Testing

Jenkins

Postman

Code coverage

Outputscreens

Technology Stack:

- Java

- Spring Boot

- Spring JPA/REST/Exception Handling

- Hibernate for Validations

- TypeScript

- React

- MySQL

- PostMan

- Deployment and Build Creation using Git/Docker/Kubernetes/Jenkins/AWS /SonarQube

