**RAGULANDIRAN M – 22CSR157 || KONGU ENGINNERING COLLEGE**

**DAY 6 – Java Application Minikube deployment**

**Minikube Command:**

* Minikube start
* Minikube status
* Sudo nano deploy.yaml
* Sudo nano pod.yaml
* Kubectl apply -f pod.yaml
* Kubectl apply -f deploy.yaml
* Minikube service my-service
* For permission to, sudo visudo
* Kubectl get node
* Configuring config file in ~/.kube, Sudo vi config

**Sudo visudo:** update this, jenkins ALL=(ALL) NOPASSWD: ALL

Data updation in config file:

* sudo cat /home/ragu\_ubuntu/.minikube/ca.crt
* sudo cat /home/ragu\_ubuntu/.minikube/ca.crt | base64 -w 0; echo
* sudo cat /home/ragu\_ubuntu/.minikube/profiles/minikube/client.crt | base64 -w 0; echo
* sudo cat /home/ragu\_ubuntu/.minikube/profiles/minikube/client.key | base64 -w 0; echo

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**Deploy.yaml:**

apiVersion: apps/v1

kind: Deployment

metadata:

  name: my-deploy

  labels:

    name: my-deploy

spec:

  replicas: 1

  selector:

    matchLabels:

      apptype: web-backend

  strategy:

    type: RollingUpdate

  template:

    metadata:

      labels:

        apptype: web-backend

    spec:

      containers:

      - name: my-web

        image: ragu162004/webapp1:latest

        ports:

        - containerPort: 9000

---

apiVersion: v1

kind: Service

metadata:

  name: my-service

  labels:

    app: my-service

spec:

  type: NodePort

  ports:

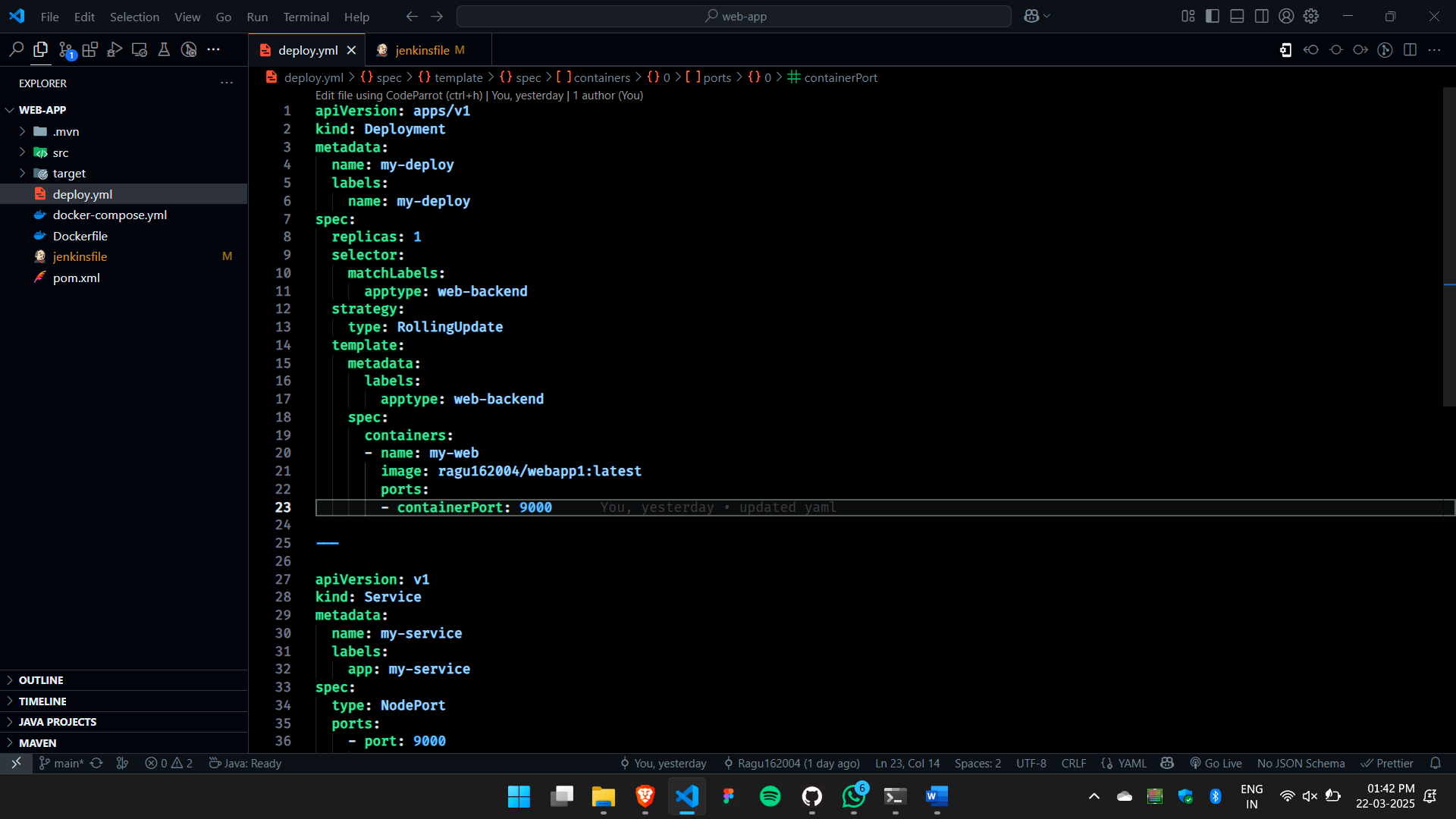
    - port: 9000

      targetPort: 8080

      nodePort: 30002

  selector:

    apptype: web-backend



**Pipeline Script:**

pipeline {

    agent any

    tools {maven "maven"}

    stages {

        stage('SCM') {

            steps {

                git branch: 'main', url: 'https://github.com/Ragu162004/web-app.git'

            }

        }

        stage('Build-clean') {

            steps {

                sh 'mvn clean'

            }

        }

        stage('Build-validate') {

            steps {

                sh 'mvn validate'

            }

        }

        stage('Build-complie') {

            steps {

                sh 'mvn compile'

            }

        }

        stage('Build-package') {

            steps {

                sh 'mvn package'

            }

        }

        stage('build to images') {

            steps {

                script {

                    sh 'docker build -t ragu162004/webapp1 .'

                }

            }

        }

        stage('push to hub') {

            steps {

                script {

                    withDockerRegistry(credentialsId: 'docker\_cred', toolName: 'docker', url: 'https://index.docker.io/v1/') {

                              sh 'docker push ragu162004/webapp1'

                    }

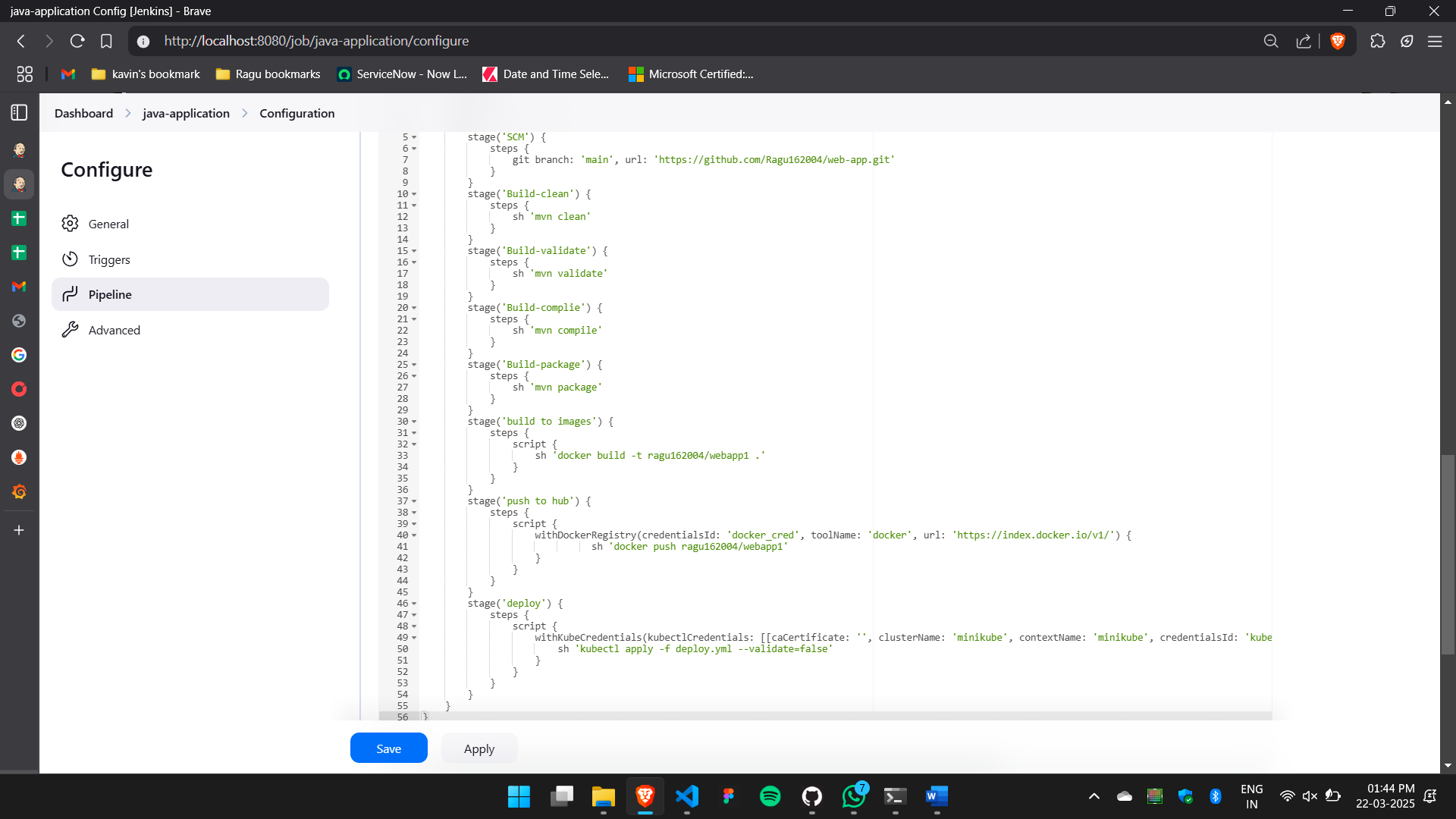
                }

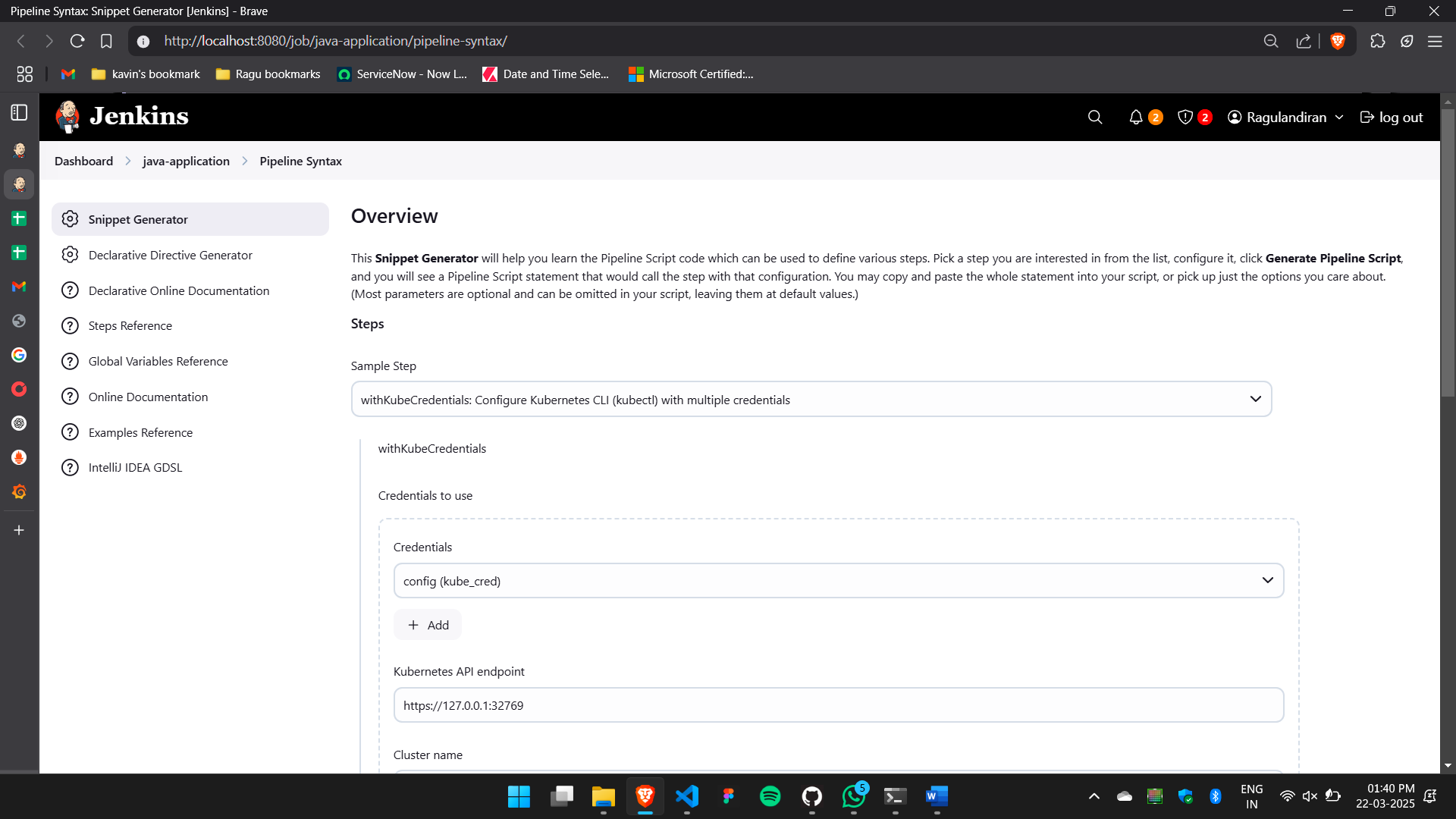
            }

        }

    }

}



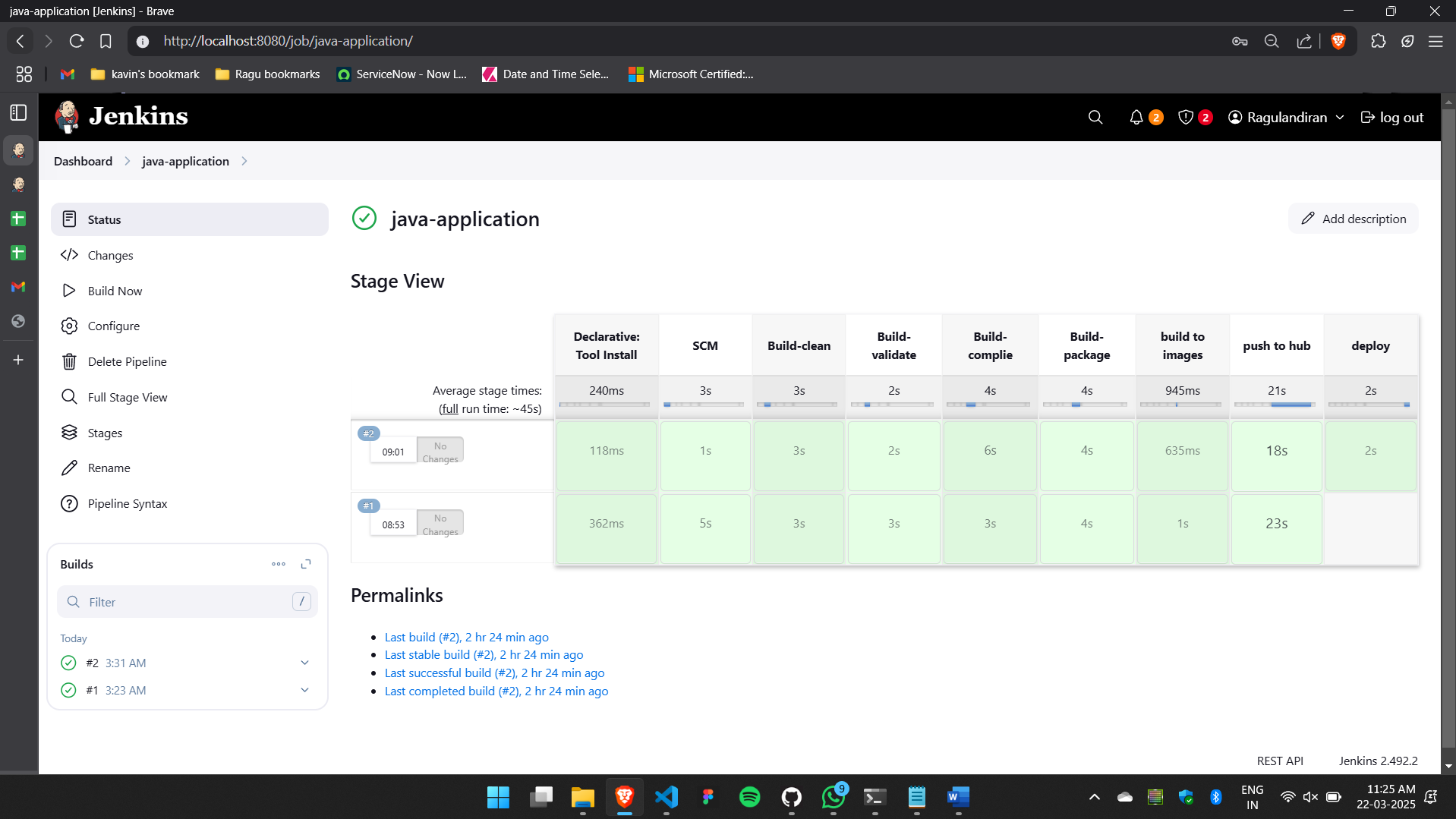


**Stages:**

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**Stage View of pipeline project:**

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* Minikube srv my-service

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