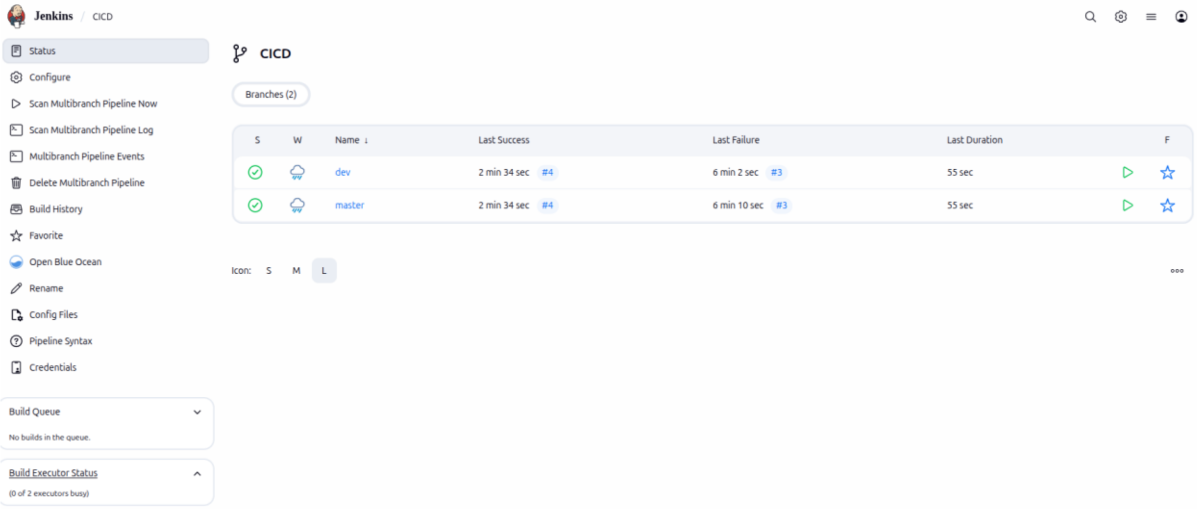
Lab3: Continuous Integration and Delivery using Jenkins

Creacion del jenkinsfile multibranch

```
// Jenkinsfile (para multibranch CICD)
@Library('epamlab3') _

pipeline {
 agent any
 environment {
  // por defecto, la variable PORT será seteada en 'script' según BRANCH_NAME
  IMAGE_NAME = "myapp-${env.BRANCH_NAME}-${env.BUILD_NUMBER}"
 }

 stages {
  stage('Prepare') {
   steps {
    script {
     if (env.BRANCH_NAME == 'master') {
      env.APP_PORT = '3000'
     } else if (env.BRANCH_NAME == 'dev') {
      env.APP_PORT = '3001'
     } else {
      env.APP_PORT = '3001' // default
     }
     echo "Branch: ${env.BRANCH_NAME} -> PORT=${env.APP_PORT}"
    }
   }
  }

  stage('Checkout') {
   steps {
    checkout scm
 }
}

stage('Build') {
 steps {
  // Ajusta a tu build: ejemplo Node.js
  sh '''
   if [ -f package.json ]; then
    npm ci
    npm run build || true
   fi
  '''
 }
}

stage('Test') {
 steps {
  sh '''
   if [ -f package.json ]; then
    npm test --silent || echo "tests may have failed"
   fi
  '''
 }
}

stage('Build Docker Image') {
 steps {
  script {
   sh "docker build -t ${IMAGE_NAME} -f ./Dockerfile ."
  }
 }
```

```
  }

  stage ('Push and Deploy') {
   steps {
    dockerPipeline(
     image: "${IMAGE_NAME}",
     triggerDeploy: true
    )
   }
  }
 }

post {
  always {
   echo "Pipeline finalizado para ${env.BRANCH_NAME}"
  }
}
}
```



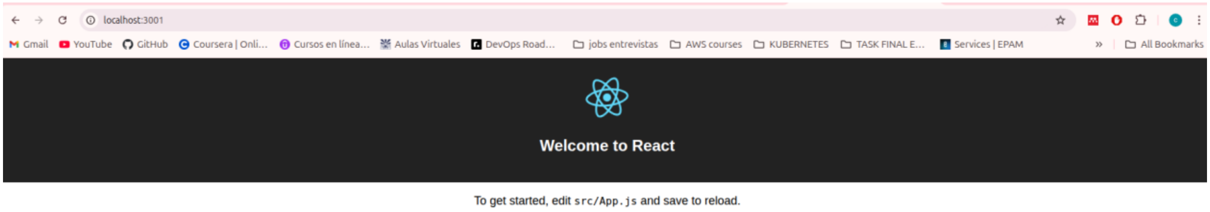
No builds in the queue.

(0 of 2 executors busy)

S	W	Name ↓	Last Success	Last Failure	Last Duration	F
✓		dev	2 min 34 sec #4	6 min 2 sec #3	55 sec	▷ ☆
✓		master	2 min 34 sec #4	6 min 10 sec #3	55 sec	▷ ☆

Escenarios de app web con localhost:3000 main branch y localhost:3001 dev branch

Repositorio de GitHub: https://github.com/cmlavaut/epamlab3.git



Welcome to React

To get started, edit `src/App.js` and save to reload.

Configuración del dockerPipeline.groovy para utilizarlo en sharedLib Jenkins

```
def call(Map config) {
  pipeline {
    agent any

    stages {

      stage('Login Docker Hub') {
        steps {
          withCredentials([usernamePassword(credentialsId: 'dockerhub-credentials', usernameVariable: 'USER', passwordVariable: 'PASS')]) {
            sh "echo $PASS | docker login -u $USER --password-stdin"
          }
        }
      }

      stage('Push Image') {
        steps {
          sh "docker push ${config.imageName}"
        }
      }

      stage('Trigger Deploy Pipeline') {
        when { expression { return config.triggerDeploy } }
        steps {
          script {
            def branch = env.BRANCH_NAME
            if (branch == "master") {
              build job: "Deploy_to_master", parameters: [string(name: 'IMAGE_NAME', value: config.imageName)]
            } else if (branch == "dev") {
              build job: "Deploy_to_dev", parameters: [string(name: 'IMAGE_NAME', value: config.imageName)]
            }
          }
        }
      }
    }
  }
}
```