

## SIT223 task 6.1c: Amit Kafe – pipeline definition

### Continuous Integration and Deployment with Jenkins and GitHub

```
pipeline {
    agent any

    environment {
        DIRECTORY_PATH = '/Users/amitkafe/Documents/university/year 2/trimester
2/SIT223/task 5.1'

        TESTING_ENVIRONMENT = 'practicetest'

        PRODUCTION_ENVIRONMENT = 'Amit-Production'
    }

    stages {
        stage('Build') {
            steps {
                echo "Fetch the source code from the directory path: ${env.DIRECTORY_PATH}"

                echo "Compile the code and generate any necessary artifacts"

            }
        }

        stage('Test') {
            steps {
                echo 'Running unit tests'

                echo 'Running integration tests'

            }
        }

        post {
            success {
                mail to: "amitkafe5@gmail.com",

                subject: "Test Stage: Successful",
```

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        body: "The Test stage was successful."
    }
    failure {
        mail to: "amitkafe5@gmail.com",
        subject: "Test Stage: Failed",
        body: "The Test stage failed."
    }
}

stage('Code Quality Check') {
    steps {
        echo 'Checking the quality of the code'
    }
}

stage('Security Scan') {
    steps {
        echo 'Running security scans'
    }
    post {
        success {
            mail to: "amitkafe5@gmail.com",
            subject: "Security Scan: Successful",
            body: "The Security Scan was successful."
        }
        failure {
            mail to: "amitkafe5@gmail.com",
            subject: "Security Scan: Failed",
            body: "The Security Scan failed."
        }
    }
}
```

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    }  
  }  
}  
stage('Deploy') {  
  steps {  
    echo "Deploy the application to the testing environment:  
${env.TESTING_ENVIRONMENT}"  
  }  
}  
stage('Approval') {  
  steps {  
    echo 'Waiting for manual approval...'  
    sleep 10  
  }  
}  
stage('Deploy to Production') {  
  steps {  
    echo "Deploying the code to the production environment:  
${env.PRODUCTION_ENVIRONMENT}"  
  }  
}  
}  
post {  
  success {  
    mail to: "amitkafe5@gmail.com",  
    subject: "Build Status: Successful",  
    body: "The entire pipeline execution was successful."  
  }  
  failure {
```

mail to: "amitkafe5@gmail.com",

subject: "Build Status: Failed",

body: "The pipeline execution failed."

}

}

}