**Project Title: Testing Code Coverage**

**Project objective:**

Use Jenkins to set up a multistage pipeline that will push, compile, unit test, and measure code coverage for a given program with JaCoCo.

**Background of the problem statement:**

You’re a DevOps engineer at HungryHippo, a web- and mobile-based app development company that helps users order food from various restaurants in their cities. The company is trying to analyze the review sentiments and classify the reviews accordingly. The backend developers are developing a project that will extract words from reviews and analyze it to identify the sentiment. You are required to develop a microservice that counts the words in a given review and design a full Jenkins pipeline to compile, test, and evaluate the code coverage. Your pipeline has to compile this code, run a unit test, and evaluate the code coverage. The pipeline is expected to scale and run seamlessly as more microservices are added to the project.

**You must use the following:**

* **Java:** To create a program for counting the number of words in a sentence
* **Git:** As a version control system for the program
* **Jenkins:** To create the multistage pipeline
* **Spring boot:** To create the project structure
* **Maven**: To compile the program
* **JaCoCo**: To test the code coverage and publish the results

**Following requirements should be met:**

* The pipeline should be defined as a Jenkinsfile and be committed to the SCM
* The pipeline should have stages for compilation, testing, and publishing code coverage results
* The pipeline should use the JaCoCo plugin commands in the Pipeline script to publish the code coverage results