# Report 4: AI + CI/CD + Testing Report (Integration Phase)

## AI Feature Integration

* Using Github Copilot to be recommended code and helped to fix bug.

## CI/CD Pipeline Setup

* Describe the CI/CD tools used (e.g., GitHub Actions, GitLab CI, Jenkins).
* Explain the pipeline steps (build, test, deploy).
* Share link to pipeline configuration (e.g., YAML file).

## Deployment Workflow

* Staging Deployment: Triggered automatically upon push to main.
* Production Deployment: Manual trigger with review.
* Frequency: Daily deployments to staging; bi-weekly releases to production.

## Collaboration and Automation

**Automation Bots**:

* GitHub bots for auto-labeling PRs.

## Lessons Learned

**Successes**:

* Automated builds reduced manual errors.
* Consistent testing ensured fewer regressions.

**Areas of Improvement**:

* Initial API model performance was suboptimal (accuracy ~60%)—later improved via retraining.