

CS 4300/5300 Software Engineering

Sprint 4 Requirements

1 Sprint 4 Objectives

Requirement	Points
Individually - Delivered Peer Feedback	12 pts
Project in GitHub	0 pts
Features with tests	10 pts
80% Test coverage metrics	15 pts
CI Pipeline:	
AI Code Review using OpenAI Platform (each Pull Request)	2.5 pts
Running automated tests (each commit)	1.5 pts
Reports test coverage metrics in console (each commit)	1.5 pts
PyLint and/or Flake8: Linting scans w/ reports	5 pts
Dependabot: Dependency Vulnerability Scans w/ reports	5 pts
Deployed to a production environment:	
Custom domain name (no subdomains unless you own TLD)	5 pts
CD Pipeline that runs when code is merged into main	2.5 pts
NEW: 100% of vulnerabilities and linter findings addressed/fixed	20 pts
NEW: 5 Minute Marketing Video uploaded to YouTube	20 pts
Total	100 pts

2 Detailed Requirements

2.1 Individually - Delivered Peer Feedback (12 pts)

Each team member must deliver constructive peer feedback to teammates.

2.2 Project in GitHub (0 pts)

Your project must continue to be maintained in GitHub (no points assigned as this is now expected).

2.3 Features with Tests (10 pts)

All features developed during this sprint must have corresponding tests.

2.4 80% Test Coverage Metrics (15 pts)

Your test suite must maintain at least 80% code coverage.

2.5 CI Pipeline (15.5 pts total)

Your continuous integration pipeline must include:

- **AI Code Review (2.5 pts):** Using OpenAI Platform for each Pull Request
- **Automated Tests (1.5 pts):** Running automated tests for each commit
- **Coverage Reports (1.5 pts):** Reports test coverage metrics in console for each commit
- **Linting (5 pts):** PyLint and/or Flake8 linting scans in CI pipeline with reports
- **Dependency Scans (5 pts):** Dependabot dependency vulnerability scans in CI pipeline with reports

2.6 Custom Domain (5 pts)

Your application must be deployed to a production environment with a custom domain name. No subdomains are allowed unless you own the top-level domain.

2.7 CD Pipeline (2.5 pts)

Code must continually be deployed to production environment using automated GitHub Actions when merged into main.

2.8 **NEW:** Vulnerabilities and Linter Findings Fixed (20 pts)

100% of vulnerabilities identified by Dependabot and all linter findings from PyLint/Flake8 must be addressed and fixed.

2.9 **NEW:** Marketing Video (20 pts)

Create and upload a 5-minute marketing video to YouTube showcasing your application. Loom offers free screen recording options.

See the Common Sprint Requirements document for planning, development, demo, and submission requirements.