

# 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
<b>CI Pipeline:</b>	
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
<b>Deployed to a production environment:</b>	
Custom domain name (no subdomains unless you own TLD)	5 pts
CD Pipeline that runs when code is merged into main	2.5 pts
<b>NEW:</b> 100% of vulnerabilities and linter findings addressed/fixed	20 pts
<b>NEW:</b> 5 Minute Marketing Video uploaded to YouTube	20 pts
<b>Total</b>	<b>100 pts</b>

### 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.*