CS 4300/5300 Software Engineering

Sprint 1 Requirements

1 Sprint 1 Objectives

Requirement	Points
Project in GitHub	20 pts
Tests implemented for new features	20 pts
80% Test coverage metrics	20 pts
CI Pipeline:	
AI Code Review using OpenAI Platform (each Pull Request)	10 pts
Running automated tests (each commit)	5 pts
Reports test coverage metrics in console (each commit)	5 pts
Deployed to a production environment	20 pts
Total	**100 pts**

2 Detailed Requirements

2.1 Project in GitHub (20 pts)

Your project must be hosted in a GitHub repository with proper structure and organization.

2.2 Tests Implemented for New Features (20 pts)

All new features developed during this sprint must have corresponding unit and/or integration tests. Additionally, you should be using behavior-driven-development using Behave.

2.3 80% Test Coverage Metrics (20 pts)

Your test suite must achieve at least 80% code coverage. In Sprint 2, metrics will be added to measure your amount/quality of testing, so start now. You should be using TDD for unit and integration tests.

2.4 CI Pipeline (20 pts total)

Your continuous integration pipeline must include:

- **AI Code Review (10 pts):** Using OpenAI Platform for each Pull Request

- **Automated Tests (5 pts):** Running automated tests for each commit

- **Coverage Reports (5 pts):** Reports test coverage metrics in console for each commit

2.5 Production Deployment (20 pts)

Your application must be deployed to a production environment and accessible via URL.

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