LO5: Conduct reviews, inspections, and design and implement automated testing processes

5.1 Identify and apply review criteria to selected parts of the code and identify issues in the code

Reviewing the codebase involves identifying and addressing issues before testing. Techniques such as self-code reviews due to the nature of the project and static code analysis are utilized to assess code quality, identify bugs, and ensure adherence to coding standards like following camel casing convention for variable and function naming.

5.2 Construct an appropriate CI pipeline for the software

The CI pipeline for the pizza drone project encompasses stages like code compilation, unit testing, integration testing, deployment, performance testing, security testing, and production deployment. Each stage is meticulously designed to automate code integration and testing processes seamlessly in Github action in main.yml[1].

5.3 Automate some aspects of the testing

Automation is crucial for efficiently testing software functionalities in aspects like order validity, flight path generation, and drone attribute monitoring to ensure accurate and reliable delivery operations.

5.4 Demonstrate the CI pipeline functions as expected

The effectiveness of the CI pipeline is demonstrated through evidence of its proper functioning. This includes successful execution of automated tests, detection and resolution of issues, and seamless deployment of code to production environments under actions in Github.

References:

1. https://github.com/weijuinlee/PizzaDronz/blob/master/.github/workflows/main.yml