

Assignment 5

Quality Assurance & Automation

Objectives:

- Practice writing Acceptance Criteria
- Practice testing automation
- Implement CI pipeline for building and testing your code on every push

Assignment deliverables

Preparation

- Write Acceptance criteria for 5 of the non-trivial user stories you already implemented
- Explore the tools (testing frameworks, linters, ...) that exist for your technological stack
- Discuss in the team what tests you are going to write and when
- Select which tools you will use in your project for testing
- During sprint execution practice TDD and implement at least 5 unit tests for your code.
- Create GitLab CI pipeline, which will contain
 - Linting of source code
 - Building testable snapshot (if needed)
 - Testing
 - Reports on linting and coverage
 - Steps for the other tools you chose

Deliverables

Submit a PDF containing the following:

- Acceptance criteria for the selected user stories.
- Link to your GitLab ci pipeline.
- Justified list of tools that you use.
- Link to the spring milestone with implemented tests and functionality
- Screenshots of testing reports (linter report, coverage report, ...)
- Retrospective on the process and customer collaboration

Evaluation criteria

Your Sprint delivery will be evaluated based on:

- Provided acceptance criteria
- Implemented unit tests
- GitLab CI pipeline
- Provided testing reports

Extra points will be awarded for additional (justified) tools and for teams which have close to 100% test coverage. Please note, that apart from the 5 unit tests, you can implement and integrate other types of automated testing into your pipeline.