

Extension of CI pipeline of ProteomicsDB

Title: Continuous Integration and Testing Pipelines for ProteomicsDB

Type: BA/ internship

Category: [CI, Testing]

Programming language: [Java | Groovy]

Language: [English]

Prior experience: [basics in Programming, experience in CI and GIT is a plus]

Complexity/Risk: [low]

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Brief background description: Development of big projects like ProteomicsDB needs the assurance that each new addition or extension of the functionalities of the platform does not break the previous working state. Continuous integration (CI) on a platform can reveal such errors. Proper (unit) tests have to be declared and run upon each new code addition or git branch merge. There exist tests for many functionalities in ProteomicsDB already, using Jenkins as the CI agent that triggers specific pipelines on certain events. Currently, when creating a merge request against the develop branch of the ProteomicsDB Jenkins will trigger an automatic build of the minimal development version to make sure that all dependencies are met. The same pipeline checks for compliance with a coding style.

Brief description of the project: Your task is to design and implement separate Jenkins pipelines for testing some or all functionalities, building a minimal ProteomicsDB from specific commits, code linting, creating a release upon merging on the master branch as well as the automatic deployment of the release to a specified server. After the pipelines are in-place, specific triggers will be designed in GitLab or the Jenkins User Interface. Finally, more unit tests will be added to increase the code coverage. Jenkins groovy and Python are the main languages that are going to be used here.

Expected result: Unit tests and Jenkins Pipelines for CI in ProteomicsDB