Contribution ID: **6** Type: **Workshop**

Collaborative Software Development

Wednesday, August 29, 2018 1:00 PM (5 hours)

Writing maintainable software is a prerequisite in many fields. Especially when working in projects with many members it is essential to

- write readable software and documentation,
- enable versioning of software,
- ensure correctness of software,
- enable automated tests of software, and
- enable agile workflows based on issue tracking.

However, the goals of maintainable software are not only relevant when working in teams, but also in private projects. This makes the topic relevant for anybody that needs to write and maintain software.
Based on experiences from projects in academia and industry, this tutorial introduces tools and concepts to enable maintainable software projects in collaborative environments. While we try to give a broad overview on different topics, we also flexibly provide in-depth information depending on your feedback during the course. We cover topics such as version control and organisation of software with git, concepts of unit testing and test-driven development, tools supporting continuous integration as well as the integration into wikis and ticket systems.

Throughout this tutorial you will learn how to efficiently integrate different tools and concepts to enable maintainable software. After the course, you will have a basic setup that can be adapted to your specific needs.

This course is a hands-on tutorial and requires basic knowledge in Python programming. For best learning experiences and an overview on encompassing software development processes, we suggest the combined participation in the workshop Introduction to Python and Collaborative Software Development.

Summary

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Session Classification: Tutorials