

Unit 8: Software Maintenance and Quality Control

Prerequisites: [Review](#)

Learning Objectives

For businesses which provide software products and services, improved code quality leads to better user experiences, higher customer satisfaction and retention, and lower maintenance costs. In this unit, we'll learn ways to control and improve the quality of our applications.

Discussions and Notes

- Version Control, Developer Collaboration, and Code Reviews:
 - [The git Utility](#), revisited
 - [Git Branch Operations](#)
 - [GitHub Pull Request \(PR\) Workflow](#)
- [Python Code Style](#)
- [Code Documentation](#):
 - [Python Docstrings](#)
- [Code Refactoring and Simplification](#)
- [Automated Testing](#):
 - [The pytest Package](#)
- [Continuous Integration](#):
 - [The Travis CI Platform](#)
- [Code Quality](#):
 - [The Code Climate Platform](#)

Activities and Exercises

- ["Code Simplification" Exercise](#)
- ["Testing 1, 2, 3" Exercise](#)
- ["Continuous Integration 1, 2, 3" Exercise](#)
- ["Codebase Cleanup" Assignment](#)