Ira A. Fulton Schools of Engineering
Arizona State University

CSE 566: Software Project, Process and Quality Management

Software Configuration Management Project

Purpose

The goal of this project is to help you acquire a deeper understanding of software configuration management and how it can be extended to managing configuration resources. In addition, you will learn about the SCM functions provided by the Git tool.

Objectives

Learners will be able to:

- Define configuration-as-code in DevOps.
- Discuss the importance of configuration-as-code in DevOps.
- Understand what type of support the popular tool Git provides for the SCM functions of identification, control, auditing and status accounting.

Technology Requirements

- Word processor
- PDF option to convert the typed document

Project Description

Using the *Your Name_CSE 566_Software Configuration Management Project_Template* compose a three-part paper:

Part 1: Configuration-As-Code in DevOps (250-500 words or ½ - 1 page)

- Research and define configuration-as-code in DevOps.

- Discuss the importance of configuration-as-code in DevOps.
- Cite references where used in your paper.

Part 2: Support Tools for SCM Functions (250-500 words or ½ - 1 page)

- Review documentation for the Git Software Configuration Management tool.
- Describe what support the tool provides for each of the SCM functions (identification, control, auditing, status accounting).
- Cite references where used in your paper.

Part 3: References (3-5 research-based references)

- Using IEEE or ACM style, list the references you used in your project paper

Formatting Specifications

The *Your Name_CSE 566_Software Configuration Management Project_Template* has the established formatting with a header for your identification information (Your Name) and the session you are taking this course (e.g., Spring B 2022), headings, subheadings, line spacing, font sizes, margins, and a sans serif font. These specifications were set up to support the use of assistive technologies, such as screen readers.

In-text citations and paraphrased references within the body of your paper should be in IEEE or ACM style. Whichever style you choose, your References page must be in the same style.

Submission Directions for Project Deliverables

You are given a limited number of attempts to submit your best work. The number of attempts is given to anticipate any submission errors you may have in regards to properly submitting your best work within the deadline (e.g., accidentally submitting the wrong paper). It is not meant for you to receive multiple rounds of feedback and then one (1) final submission. Only your most recent submission will be assessed.

You must submit your Software Configuration Management Project deliverable in the appropriate submission space in the course. Learners may **not** email or use other means to submit any project for review, including feedback, and grading.

The Software Configuration Management Project includes **one (1)** deliverable:

1. **Written Final Project Paper:** Your Software Configuration Management Project must be a single PDF with the correct naming convention: *Your Name_CSE 566_Software Configuration Management Project*. You are required to use the provided *Your Name_CSE 566_Software Configuration Management Project_Template*.

Evaluation

Please review the rubric for how this project will be graded. The rubric can be viewed directly in your course, through the submission space for this project. Project papers will be evaluated based on each criterion and will receive a total score.

Prior to starting any graded coursework, learners are expected to read through the rubric so they know how they will be assessed. You are encouraged to self-assess your responses and make informed revisions before submitting your final work. Engaging in this learning practice will support you in developing your best work.

Project papers missing any part of the project will be graded based on what was submitted against the rubric criteria. Missing parts submitted after the deadline will not be graded.

Review the course syllabus for details regarding late penalties.

Scoring Criteria
The learner describes what "configuration-as-code" means and why it is important in DevOps.
The learner describes what support Git provides for each of the SCM functions: identification, control, auditing, and status accounting.
The learner includes references and cites them.