Software Configuration Management Plan

College Complaint Management System

1. Introduction

1.1 Purpose

The purpose of this Software Configuration Management Plan (SCMP) is to define the procedures and activities used to manage and control changes in the *College Complaint Management System* throughout its development lifecycle.

1.2 Scope

This plan applies to:

- Source code
- Design documents
- Requirement documents
- Test cases
- Project reports

It ensures that all project artifacts are identified, controlled, tracked, and audited.

1.3 SCM Objectives

- Maintain consistency of project artifacts
- Control changes systematically
- Track software versions
- Ensure integrity of the system

2. Configuration Identification

Configuration Identification is the process of identifying and defining configuration items (CIs) that need to be managed under SCM.

In this project, the configuration items include:

- Requirement documents (SRS)
- Design documents
- Source code files
- Test cases and test reports
- Project reports

Each configuration item is uniquely identified using:

- Version numbers (v1.0, v1.1, etc.)
- File names
- Date of modification

This ensures that the correct version of a document or software is used at all times.

3. Configuration Control

Configuration Control manages and controls changes made to configuration items after they are baselined.

The change control process includes:

- Submitting a change request
- Evaluating the impact of the change
- Approving or rejecting the change
- Implementing the approved change

Only authorized personnel such as the project guide or team lead can approve changes. This prevents unauthorized modifications and ensures stability of the software product.

4. Configuration Status Accounting

Configuration Status Accounting involves recording, tracking, and reporting the status of configuration items throughout the project.

This activity provides information such as:

- Current version of documents and code
- History of changes made
- Approved and pending change requests
- Status of configuration items

Status reports help project managers and stakeholders monitor project progress and understand the impact of changes

5. Configuration Audits

Configuration Audits are conducted to verify that configuration items are correct, complete, and comply with defined standards.

Two types of audits are commonly performed:

- Functional Configuration Audit (FCA): Verifies that the software meets functional requirements.
- Physical Configuration Audit (PCA): Ensures that documents and code match the approved versions.

Audits help in identifying errors, inconsistencies, and deviations early, ensuring quality and reliability of the software.