Project Fingerpaint

SCMP-0.1

Software Configuration Management Plan

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Abstract

This is the Software Configuration Management Plan (SCMP) of Group Fingerpaint. It is part of the Software Engineering Project (2IP35) of the Eindhoven University of Technology. This document is based on the standards of the European Space Agency [1].

In this document, the configuration of the project is documented. This includes software used, conventions concerning versioning, naming and storage of documents, use of libraries and some other project related agreements.

Contents

Document Status Sheet

Document Status Overview

General

Document title:	Software Configuration Management Plan
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Document History

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General

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Changes

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-	-	Initial version.

Chapter 1

Introduction

This chapter will explain the purpose of this document as well as what the scope of this document is. That is, what the purpose of this document is and how it is related to other documents in the project.

1.1 Purpose

The purpose of this document is to set rules and guidelines to which all project members should adhere. This will concern the versioning, identification and layout of all documents that are created for this project. All major documents should adhere to strict rules, while for other documents, such as files containing code, guidelines are set that are more loose.

This document should be read as a reference. It can be used when a developer or project member is not sure about how to do something as a mainstay.

1.2 Scope

In this project, the following configuration items (CIs) will be produced:

- Architectural Design Document (ADD);
- Detailed Design Document (DDD);
- Software Configuration Management Plan (SCMP);
- Software Project Management Plan (SPMP);
- Software Quality Assurance Plan (SQAP);
- Software Requirements Document (SRD);
- Software Transfer Document (STD);
- Software User Manual (SUM);
- Software Verification and Validation Plan (SVVP);
- User Requirements Document (URD);

- Code;
- Test plans for a number of phases. In particular:
  - Unit Test Plan (UTP);
  - System Test Plan (STP);
  - Integration Test Plan (ITP);
  - Acceptance Test Plan (ATP).
- Product Backlog.

1.3 List of definitions

2IP35	The Software Engineering Course.
ADD	Architectural Design Document
ATP	Acceptance Test Plan
BCF	"Bureau Computer Faciliteiten"
CM	Configuration Manager
DDD	Detailed Design Document
ITP	Integration Test Plan
SEP	Software Engineering Project
SCMP	Software Configuration Management Plan
SPMP	Software Project Management Plan
SQAP	Software Quality Assurance Plan
SRD	Software Requirements Document
STD	Software Transfer Document
STP	System Test Plan
SUM	Software User Manual
SVVP	Software Verification and Validation Plan
TU/e	Eindhoven University of Technology
URD	User Requirements Document
UTP	Unit Test Plan

1.4 List of references

[1] ESA, *ESA Software Engineering Standards.* ESA, March 1995.

[2] Group Fingerpaint, "Conventions about coding style and software," *SEP*, 2013.

Chapter 2

Management

In this chapter it is specified which project member has what function. Also, the responsibility a team member has in a function is explained. Finally, some general responsibilities are explained.

2.1 Organisation

The team members involved in configuration management are the configuration manager (CM) and vice CM. The project members that have been assigned these roles are named in the SPMP.

2.2 Responsibilities

The CM and vice CM are responsible for copying documents to the master and archive library at the right moments, as mentioned in chapter 4. They are in general responsible for the contents of the master and archive library. Another task for them is creating and updating document templates, although this task can be delegated.

The CM is primarily responsible for configuration management, although he or she can delegate tasks to the vice CM, in which case the vice CM is responsible. Whenever the CM is (temporarily) not available, the vice CM should take over the tasks of the CM, including the responsibility for these tasks.

Finally, all project members are responsible for the documents they work on. This means that they update the document status sheet and make sure the latest version of the document they work(ed) on is available in the development repository (refer to chapter 4, section 4.1.1). When multiple group members work on the same document, they share the responsibility and additionally are responsible for the combined consistency of the document. Also, they should make sure that the repository remains in a "workable" state. That is, they should solve possible merge conflicts together.

2.3 Interface Management

The FINGERPAINT application will be developed using an external virtual server provided by the BCF. In case of failure of this server, the CM will contact BCF and let them resolve the issue. BCF is in this case supposed to have expert knowledge and have the means to resolve issues.

In general, the CM can help other project members when they have trouble with some software that is used (refer to chapter 6). However, the CM may delegate this task to other group members who have more expertise on the subject.

2.4 SCMP Implementation

In this project, we will have only one SCMP document, contrary to what is described in the ESA standard [1]. Thus, this document will not contain a planning for every phase of the project. Instead, refer to the SPMP for the planning of the phases.

2.5 Applicable Procedures

Project specific conventions such as coding style and committing conventions are described in the CaCSaS document [2].

Every non-code document has to be created using LaTeX and should start with an `\input` of the `style.tex` file that can be found in the `project-docs` and `sep-docs` repositories (note that this file should always be the same in both repositories). This will ensure a consistent style. Every document should start with a `\fingerpainttitlepage{}` call, followed by an abstract and then the `\tableofcontents`.

Each document should have a "main" `.tex`-file that `\input`s separate `.tex`-files that each contain a chapter. This enables project members to work on the same document more efficiently, as working on different chapters will not cause any merge conflicts.

As noted in section 2.3, the CM can assist when project members experience problems with LaTeX.

Chapter 3

Configuration Identification

3.1 Naming Conventions

3.2 Baselines

Chapter 4

Configuration Control

4.1 Library Control

4.1.1 Development Library

4.1.2 Master Library

4.1.3 Archive Library

4.2 Media Control

4.3 Change Control

4.3.1 Development Library

4.3.2 Master Library

4.3.3 Archive Library

Chapter 5

Status Accounting

Chapter 6

Tools, Techniques and Methods

Chapter 7

Supplier Control

Chapter 8

Records Collection and Retention