Trabalho Prático nº2

Configuration Management Plan

Version <1.0>

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Configuration Management Plan

# Introduction

[The introduction of the **Configuration Management Plan** provides an overview of the entire document. It includes the purpose, scope, definitions, acronyms, abbreviations, references, and overview of this **Configuration Management Plan**.]

## Purpose

[Specify the purpose of this **Configuration Management Plan.**]

O projeto consiste na elaboração da parte prática no âmbito da disciplina de Engenharia de Software II, trabalho elaborado em época contínua de avaliação.

## Scope

[A brief description of the scope of this **Configuration Management Plan**; what model it is associated with and anything else that is affected or influenced by this document.]

o projeto consiste na elaboração de um motor de pesquisa criado pelo nosso grupo que através da introdução de uma frase, irá processar a informação e será capaz de filtrar as informações de modo a encontrar ficheiros com grande grau de apoximação com o pesquisado.

## Definitions, Acronyms, and Abbreviations

[This subsection provides the definitions of all terms, acronyms, and abbreviations required to properly interpret the **Configuration Management Plan**. This information may be provided by reference to the project’s Glossary.]

CCB Configuration Control Board

CI Configuration Item

CM Configuration Management

CSA Configuration Status Accounting

PDL Project Documentation Library (BitBucket Repository)

PSL Project Software Library (BitBucket Repository)

Commit Apply staged changes to a branch

Merge Combine 2 branches

Branch A separate path of development

Master The development branch from which release branches emerge

Repo The code and document repository (aka PSL/PDL)

Repo Owner The CCB Librarian

BitBucket Remote repository host

Push Move changes from a local repository to the remote repository

Pull Move changes from the remote to a local repository

Testers List An email list of approved pre-official-release users.

Merge Request A Merge Request is a re-submittal of a change request by a developer once the

changes that are indicated on the change request are done on a branch.

CM Leader The head of the configuration management team.

Configuration Control Board The CCB are those responsible for enforcing the following of change control procedures.

CCB Leader The head of the CCB chosen by the CM Leader.

CCB Librarian A member of the CCB who controls access to the PSL and PDL.

Change Request Basically, a BitBucket Issue.

Change Request Form A form used by developers to request changes to the PSL or PDL. This form is accessed via the BitBucket Downloads Page. The form is copied into BitBucket tickets/issues to be filled out and submitted.

Version Number Unique identifier of a release.

Configuration Identification The process of tracking project components.

Configuration Item Any item associated with the project, i.e. files.

Developer All project members who develop or design code.

Project Documentation Library The official location of all project documentation.

Project Software Library The official location of all project code.

Project Teams The project teams consist of a Project Management Team, Configuration management Team, and Quality Assurance Team.

## References

[This subsection provides a complete list of all documents referenced elsewhere in the **Configuration Management Plan**. Identify each document by title, report number (if applicable), date, and publishing organization. Specify the sources from which the references can be obtained. This information may be provided by reference to an appendix or to another document.]

1. [1] Los Alamos National Lab Software Configuration Management Plan for the Sequence Annotation Toolkit, Robert Leach, February 2, 2001
2. [2] Los Alamos National Lab Software Configuration Management Plan for XBase Internet Application, Thomas Brettin, May 23, 2000
3. [3] IEEE Std 828-1990 IEEE Standard for Software Configuration Management Plans
4. <https://www.infoq.com/br/articles/spotify-escalando-agile?fbclid=IwAR0P-hZANvRDKeic-C3GKGOXP2j3dfLgPRWb8_z0vBMCHueSv9BzXboRFDw>
5. <https://blog.crisp.se/wp-content/uploads/2012/11/SpotifyScaling.pdf?fbclid=IwAR0hL2Rd92BZpzqwWMGwk01J0BJgwVNOgcwqVf0tD-33HuJyfriENQWycuw>
6. <http://www.scrumcasestudies.com/adobe/?fbclid=IwAR1Zwe9zWlhmFjc2N624v3Rvq4Zia5Iuorz3c_jtBsMJQsTSBjp4C1SkNyU>
7. <http://blogs.adobe.com/agile/files/2012/08/Adobe-Premiere-Pro-Scrum-Adoption-How-an-agile-approach-enabled-success-in-a-hyper-competitive-landscape-.pdf?red=a&fbclid=IwAR2WlzLNpq6HEIT_d_6ENsXQajiZqCSjkD499gTDuQBOi03QJZ25P0k2nPg>
8. <http://www.scrumcasestudies.com/intel/?fbclid=IwAR0IXl48kEonTa25423vps-L0R9Ush4oWlm8vcZuMSUuHcGyNB7-nlc9VxI>
9. IEEE Std 828-1990 IEEE Standard for Software Configuration Management Plans

## Overview

[This subsection describes what the rest of the **Configuration Management Plan** contains and explains how the document is organized.]

Este documento irá conter toda a organização feita pelo nosso plantel de forma a conseguir elaborar o projeto de forma concreta e dentro dos prazos estabelecidos, ira conter também todas as ferramentas que utilizaremos para a resolução do projeto e em que situações irão ser utilizadas as mesmas. Irão também aqui ser descritas todos os métodos a ser implementados, bem como as baselines do projeto e todas as configurações do mesmo.

# Software Configuration Management

## Organization, Responsibilities, and Interfaces

[Describe who is going to be responsible for performing the various Configuration Management (CM) activities described in the CM Process Discipline.]

O nosso grupo de trabalho vai tratar da configuração das ferramentas em conjunto. Uma vez que esta configuração envolve uma maquina virtual que mantem as ferramentas utilizadas uniformizadas faz sentido que todos os membros estejam envolvidos da sua configuração de modo a todos saberem como trabalhar e gerir as ferramentas.

Como tal, todos os membros do grupo têm a responsabilidade de saber não só configurar como tambem trabalhar com as ferramentas utilizadas.

## Tools, Environment, and Infrastructure

[Describe the computing environment and software tools to be used in fulfilling the CM functions throughout the project or product lifecycle.

Describe the tools and procedures required used to version control configuration items generated throughout the project or product lifecycle.

Issues involved in setting up the CM environment include:

* anticipated size of product data
* distribution of the product team
* physical location of servers and client machines]

A infraestrutura utilizada neste projeto consiste numa maquina virtual que vai servir para centralizar as ferramentas necessárias para a realização do mesmo.

Como ferramentas vamos ter:

-O YouTrack, ferramenta issue tracker para desenvolvimento usando metodologias ágeis;

-O Jenkins que vai permitir implementar conceitos de Continuous Integration como builds e testes automáticos;

-O IntelliJ como ambiente de desenvolvimento;

-A linguagem Java que vai ser utilizada para o desenvolvimento do motor de pesquisa e especificação de testes;

-A framework jUnit para codificação dos testes especificados;

-A plataforma GitHub que serve para hospedagem do codigo-fonte.

A equipa vai trabalhar em conjunto na configuração de modo a ser mais facil obter um uso uniforme das ferramentas implementadas.

# The Configuration Management Program

## Configuration Identification

### Identification Methods

[Describe how project or product artifacts are to be named, marked, and numbered. The identification scheme needs to cover hardware, system software, Commercial-Off-The-Shelf (COTS) products, and all application development artifacts listed in the product directory structure; for example, plans, models, components, test software, results and data, executables, and so on.]

### Project Baselines

[Baselines provide an official standard on which subsequent work is based and to which only authorized changes are made.

Describe at what points during the project or product lifecycle the baselines are to be established. The most common baselines would be at the end of each of the Inception, Elaboration, Construction, and Transition phases. Baselines could also be generated at the end of iterations within the various phases or even more frequently.

Describe who authorizes a baseline and what goes into it.]

## Configuration and Change Control

### Change Request Processing and Approval

[Describe the process by which problems and changes are submitted, reviewed, and dispositioned.]

### Change Control Board (CCB)

[Describe the CCB membership and the procedures for processing change requests and approvals to be followed by the CCB.]

## Configuration Status Accounting

### Project Media Storage and Release Process

[Describe retention policies, and the back-up, disaster, and recovery plans. Also describe how the media is to be retained—online, offline, media type, and format.

The release process describes what is in the release, who it is for, and whether there are any known problems and any installation instructions.]

### Reports and Audits

[Describe the content, format, and purpose of the requested reports and configuration audits.

Reports are used to assess the “quality of the product” at any given time in the project or product lifecycle. Reporting on defects based on change requests may provide some useful quality indicators and, thereby, alert management and developers to particularly critical areas of development. Defects are often classified by criticality (high, medium, and low) and could be reported on the following basis:

* Aging (Time-based Reports): How long have defects of the various kinds been open? What is the “lag time’’ between when defects are found in the lifecycle and when they are fixed?
* Distribution (Count Based Reports): How many defects are there in the various categories by owner, priority or state of fix?
* Trend (Time-related and Count-related Reports): What is the cumulative number of defects found and fixed over time? What is the rate of defect discovery and fix? What is the “quality gap” in terms of open as opposed to closed defects? What is the average defect resolution time?]

# Milestones

[Identify the internal and customer milestones related to the project or product CM effort. This section includes details on when the **Configuration Management Plan** itself is to be updated.]

# Training and Resources

[Describe the software tools, personnel, and training required to implement the specified CM activities.]

Como ferramentas vamos ter:

-O YouTrack, ferramenta issue tracker para desenvolvimento usando metodologias ágeis;

-O Jenkins que vai permitir implementar conceitos de Continuous Integration como builds e testes automáticos;

-O IntelliJ como ambiente de desenvolvimento;

-A linguagem Java que vai ser utilizada para o desenvolvimento do motor de pesquisa e especificação de testes;

-A framework jUnit para codificação dos testes especificados;

-A plataforma GitHub que serve para hospedagem do codigo-fonte.

Como pessoal de desenvolvimento vamos ter os 3 elementos que constituem o nosso grupo do projeto.

Este projeto não necessita nenhum treino para alem do conhecimento adequirido durante as aulas da disciplina.

# Subcontractor and Vendor Software Control

[Describe how software developed outside of the project environment will be incorporated.]

Vai ser utilizada uma maquina virtual desenvolvida pelos professores responsaveis pela cadeira e vão servir para incorporar todos os outros programas de forma centralizada.

O nosso grupo não tem qualquer influência sobre a funcionalidade desta maquina e ela apenas vai servir como plataforma de ligação para o projeto.