System Configuration Management Plan

For

Audarya

Version 1.0

Group no. IT#03

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Revision History

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
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# Introduction

## Software Configuration Management (SCM) is a procedure to identify and control major software changes, ensure that change is being properly implemented, and report changes to any other personnel or clients who may have an interest. Software Configuration Management manages the effect of changes throughout the software process. The Software Configuration Management plan contains:

* The resources used for tracking and controlling changes in the software.
* The roles and responsibilities of different members in the SCM activities.
* Controlling and managing changes to the SCM plan.
* There are some procedures to be followed while making any changes to the project.

## Purpose

The purpose of this document is to provide rules and guidelines for the storage and of all documents that are created during this project. Additionally it will give naming and layout conventions for all documents and describe the identification of all major documents. The purpose of Software Configuration Management (SCM), in general, is to establish and maintain the integrity of work products using:

* Configuration Identification
* Configuration Control
* Configuration Status
* Account Configuration Audit

# Management

## This section identifies the roles and responsibilities of individuals and groups that participate in the SCM process.

## Roles and Responsibilities

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Description |  | Member Responsible |
|  |  |
|  |  |  |
|  |  | |  |
|  | The Project Manager should be | |  |
|  | aware of all the changes made | |  |
|  | to the documents and Make sure | |  |
| Project Manager | team members are knowledge- | | Ayush Saxena |
|  | able of SCM concepts and tech- | |  |
|  | niques and that they are applied | |  |
|  | to project activities |  |  |
|  |  | |  |
|  | project CMM will prepare the | |  |
|  | SCM Plan with assistance from | |  |
|  | the Project Manager. | The |  |
| Configuration Man- | CMM is responsible for creat- | | Shaik Sameer |
| ager | ing and/or updating the SCM | |  |
|  | Plan, as well as communicating | |  |
|  | the contents of the plan to the | |  |
|  | project team. |  |  |
|  |  | |  |
|  | They are responsible for the | |  |
|  | changes related to the UI and | |  |
| Frontend Developers | design of the project to the back- | | Frontend Team |
|  | end developers and the other | |  |
|  | team members. |  |  |
|  |  | |  |
|  | They are handling the changes | |  |
|  | related to backend | |  |
| Backend Developers | to fkenollow the procedure for | | Backend Team |
|  | making changes in the code, de- | |  |
|  | ned in the SCM plan, using the | |  |
|  | configuration tool specified |  |  |
|  |  |  |  |

## Applicable Policies, Directives and Procedures

We have created a separate Gmail account for our project team where all the members have been added. All relevant documents are to be added and stored on the Google drive of this Gmail account. Documents should immediately be available to the developers.

Changes made to any of the work products are communicated through Whatsapp messages.

Updated source-code should always be tested and must not contain any simple errors. Revision conflicts are to be resolved by the developers themselves as soon as possible. Communication with other developers is advised.

# SCM Activities

Software Configuration Management (SCM) activities information identifies all functions and tasks required to manage the configuration of the software system as specified in the scope of the Plan. Both technical and managerial SCM activities shall be identified.

## Configuration Identification

Purpose of Configuration Identification is to define the functional and physical characteristics of a CI in sufficient detail so that it may be developed, tested, evaluated, produced, competitively procured, accepted, operated, maintained, and supported. Throughout the software development process, the development team is going to produce a large number of artifacts. Thus every artifact has to be identified, named and described. The following section will describe these details of various configuration activities.

### Document Configuration Identification

All documents which are created throughout the software development process should follow the same naming convention. The names of the document should be able to identify

* The document belongs to which project team.
* Name of the document.
* Version of the document.

The document author must ensure that the document created by him or her should have a name which should be intuitive and should tell the reader what the basic idea of the document is.

## Configuration Control

Configuration Control defines the following steps:

* Analysis and evaluation of changes.
* Requesting changes.
* Verification, Implementation of changes.

### Requesting changes

Specifies the procedures for requesting a change to baseline CI and information to be documented. All the documents for our project that we made are put on Gmail account of our group and are shared with all the other members so that they can view them from anywhere and also dynamically make changes to the documents. Whenever someone wants to make any changes to any of the documents, he/she has to provide a note, requesting for the changes, so that other readers can review them.

### Evaluating changes

If a member of our team requests to change any of the documents then it is evaluated by the review team. After evaluation, the decision is made to either incorporate the changes or reject the request made by the member. For any Changes made to a code file, the changes are evaluated by the review team. After evaluation, the request is either accepted or rejected based on the evaluation results.

### Implementing changes

After implementing the changes in the document, the modified document gets saved automatically on the drive. All the member needs to do is to communicate the changes to the rest of the team.

**Resources:**

Google Drive Google Drive is a free document storage tool. Every Gmail user has a drive account as well where one can store important documents and other things. Google Drive provides global access to any documents shared between people on the drive.

# Plan Maintenance

A person who is responsible for monitoring the Software Configuration Management Plan is called Configuration Manager. The Software Configuration Management Plan has to be updated on the introduction of new Software Configuration Management guidelines or the modification of the old guidelines. The Plan should be reviewed at the start of each project software phase, changed accordingly, and approved and distributed to the project team. Changes made related to the Software Configuration Management Plan are evaluated and approved by the review team. After removing and modifying the Software Configuration Management Plan, the changes made are communicated to all the team members along with the new, modified Software Configuration Management Plan.

# References

* IEEE Std 828 TM-2005 (Revision of IEEE Std 828-1998) IEEE Standard for Software Configuration Management Plans.
* IEEE Std 828 Software Configuration Management.
* IEEE Std 1042 Guide to Configuration Management Plan.