CEBU INSTITUTE OF TECHNOLOGY UNIVERSITY

COLLEGE OF COMPUTER STUDIES

DOCUMENT MANAGEMENT SYSTEM

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Abstract

In this system it let the user know the importance of a document management system for future use. They will find this system interesting because they can access and retrieve files and/or documents whenever they need it. It will also prevent authorized changes to documents from employees who were not able to register.

The document management system of Carmen Copper Corp. will allow the user to access and retrieve files and/or documents. The system will be web base and needs registration before use.

In this system the user can create guidelines for document and data control, record keeping, review and approval and updating documents and to access and retrieve files and/or documents in the future. It ensures the availability of documents when needed and prevention of unauthorized changes to documents. Also in this system, it prevents the use of unapproved or obsolete version of documents or files.

Software Requirements Specifications

For

Document Management System

Signature

MEMBERS	POSITION	SIGNATURE
Jheoganni Canda	Team leader, Programmer	
Ferrer Vincent C. Rosales	Programmer, Graphics Designer	
Honeylette V. Tingson	Graphic Designer, Tester	
Neldi Mar K. Cañizares	Documentation Officer, Tester	
Chatelyn Villareal	Graphic Designer	

Change History

Date	Primary Author	Description
July 25, 2014	Neldi Mar K. Cañizares	Initial version
August 8, 2014	Neldi Mar K. Cañizares	First Revision

Preface

This is the software requirements specifications (SRS) document for a document management system of the machine shop department of the Carmen Copper Corporation. In particular, the document details focused the specifications for the system's entire scope. The document will address the work completed by us group members. The intended audience of the SRS are users, system consultants and as per request the end-user. The goal of this project is to let the employees create guidelines for document and data control, record keeping, review and approval and updating documents. Also, any future maintenance staff should be aware of the information contained herein. However, foreknowledge of certain computer systems and basic knowledge of computers is an asset to understanding the SRS.

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1. Introduction

1.1. Purpose

The purpose of this document is to present a detailed description of the Document Management System for the Carmen Copper Corp., including user interface. This will explain the purpose and features of the system, the interfaces of the system, how to use the system and the benefits of using the system. The SRS document details all features upon which team have decided with reference to the manner and importance of its implementation.

The objective of this system is to let the user to , while he/she develops his skills as well as to give awareness to the user about the existing operating systems and platform of the applications that are commonly used today.

1.2. Scope

In this system the user can create guidelines for document and data control, record keeping, review and approval and updating documents and to access and retrieve files and/or documents in the future. It ensures the availability of documents when needed and prevention of unauthorized changes to documents. Also in this system, it prevents the use of unapproved or obsolete version of documents or files.

1.3. Definitions, Acronyms and Abbreviations

Table 1.1.1 Definition of Terms

Term	Definition
CIT – U	Cebu Institute of Technology – University
ccs	College of Computer Studies
End User	The person who uses a product.
SRS	Software Requirements Specification
User Interface	It is the space where interaction between humans and machines occurs. The goal of this interaction is effective operation and control of the machine on the user's end, and feedback from the machine, which aids the operator in making operational decisions.

1.4. References

• IEEE-SA Standards Board. (1998). *IEEE Recommended Practice for Software Requirements Specifications*. Software Engineering Standards Committee of the IEEE Computer Society.

1.5. Overview

The SRS is organized into two main sections. The first is The Overall Description and the second is the Specific Requirements. The Overall Description will describe the requirements of the SRS from a general high level perspective. The Specific Requirements section will describe in detail the requirements of the system.

The SRS is describing into two chapters, the first one is the Overall Description, the first chapter will tell its definition of the flow of the system and the function the system. The second chapter is the Specific Requirements, the second chapter tells about the requirements needed by the system in each step. These two chapters should be interacting with each other so that it will understand easily the system being implemented.

2. Overall Description

2.1. Product perspective

In this system it let the user know the importance of a document management system for future use. They will find this system interesting because they can access and retrieve files and/or documents whenever they need it. It will also prevent authorized changes to documents from employees who were not able to register.

2.2. Product functions

The document management system of Carmen Copper Corp. will allow the user to access and retrieve files and/or documents.

2.3. User characteristics

The user must be computer literate.

2.4. Constraints

An employee must register first before she/he can access the system.

2.4. Assumptions and dependencies

This system will run using a web browser.

3. Specific Requirements

3.1. External interface requirements

3.1.1. User interfaces

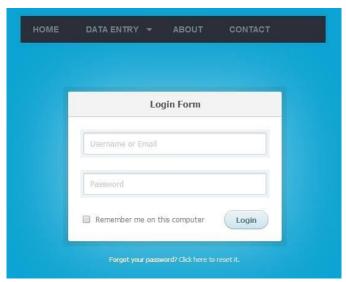


Figure 3.1.1.1 Login Form



Figure 3.1.1.2 Data Entry Menu



Figure 3.1.1.3 Equipment Maintenance Menu



Figure 3.1.1.4 IMS Document Menu

3.1.2. Hardware interfaces

The system will only run using personal computer or laptop.

3.1.3. Software interfaces

Majority of the code in this system shall be written in various web scripting languages such as PHP, CSS, MySQL.

3.1.4. Communications interfaces

This can be accessed by all the employees that registered in this system. They need to have an internet connection for them to access.

3.2 Functional requirements



Figure 3.2.1 Use case 1



Figure 3.2.2 Use case 2

3.2. Performance Requirements

In order to achieve better performance and minimize incompatibility issues, the system must be updated, and it can only run in a web browser.

3.4. Design constraints

This system is only compatible in web browsers or desktop.

3.5. Software system attributes

The system should never crash or hang, other than as the result of an operating system error. There are no specific availability requirements. All code shall be fully documented. Each function shall be commented with pre- and post-conditions. The code should be modular, to permit future modifications. Anticipated updates include changes to the sets of objects. These should be stored in a separate data file, rather than embedded in the program code. This system should be portable to any web browsers.

3.6. Other requirements

No other requirements.

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Signature

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Chatelyn Villareal Graphic Designer, Tester		

Change History

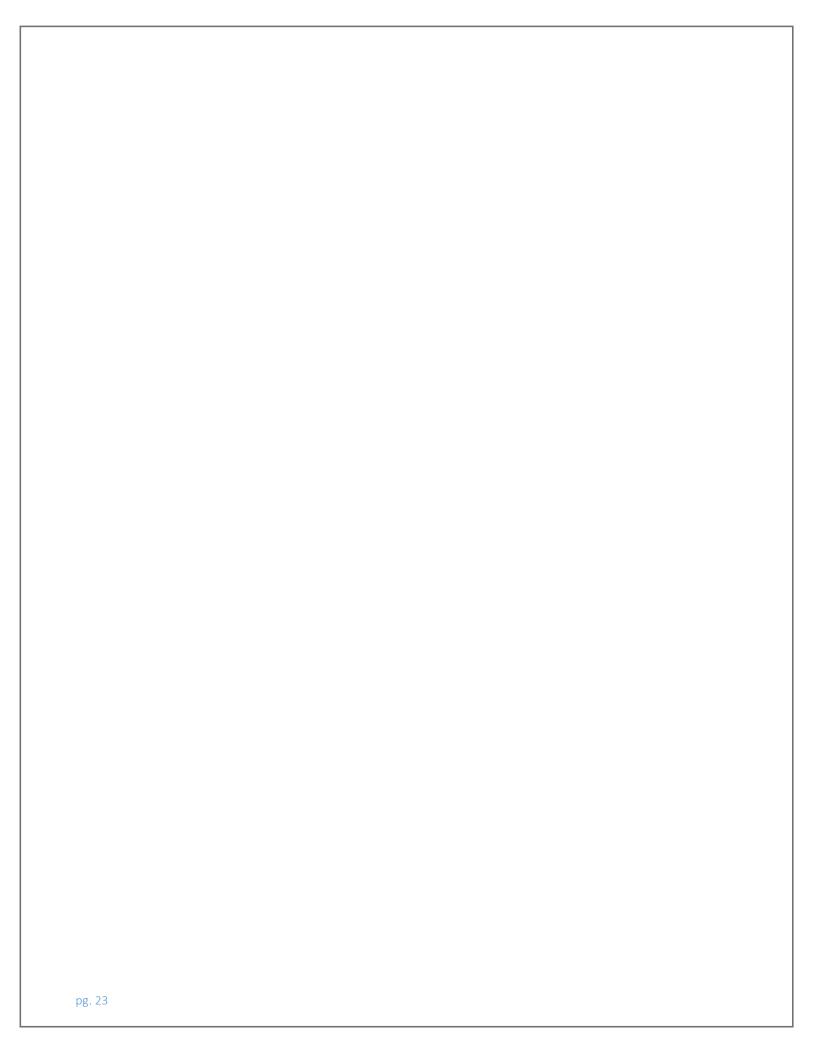
Date	Primary Author	Description
August 1, 2014	Neldi Mar K. Cañizares	Initial version
August 8, 2014	Neldi Mar K. Cañizares	First revision

Preface

This document contains the Software Project Management Plan (SPMP) of a document management system of the machine shop department of the Carmen Copper Corporation. The main aim is to let the employees create guidelines for document and data control, record keeping, review and approval and updating documents, while he/she develops his skills as well as to give awareness to the user about the existing operating systems and platform of the applications that are commonly used today.

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4. Overview

4.1. Project Summary

1.1.1. Purpose, scope and objectives

The purpose of the project is to analyze the requirements of, design, implement, and maintain the software for both the application user and the developing team in accordance to the requirements and features specified the SRS document.

The scope of this project is that the user can create guidelines for document and data control, record keeping, review and approval and updating documents and to access and retrieve files and/or documents in the future. It ensures the availability of documents when needed and prevention of unauthorized changes to documents. Also in this system, it prevents the use of unapproved or obsolete version of documents or files.

The objective of this project is to provide the employees of the machine shop an easy way to access relevant documents or information about the machineries or equipments that they are using.

1.1.2. Assumptions and constraints

The group aims to finish this system at the last week of September 2014 for the completion of the Software Project course. Majority of the code in this system shall be written in various web scripting languages such as PHP, CSS, MySQL. Upon deployment of the system to the client, the system should be a standalone in pc environment with its own UI with the database. The system shall be implemented smoothly in desktop computers. This system will run using a web browser.

1.1.3. Project deliverables

All of the items listed in this subsection are the deliverables provided prior to completion of the project.

- Software documentation
- Project documentation
- o Software Requirements Specification (SRS)
- o Software Project Management Plan (SPMP)

- o Software Design Description (SDD)
- o Software Test Documentation (STD)

As part of the project, the developing team will deliver the following artifacts:

- Systems Requirement Specification (SRS) document (including a list of features within the scope

of the Studio project) and the Quality Assurance requirements.

- Architecture and (high and low level) design documents for customer validation and verification.
- Status reports (throughout the project lifecycle) on a weekly or case-by-case basis.
- Project Management Artifacts such as the Software Project Management Plan.
- All other artifacts that the team might have generated that add value to the final deliverable.

1.1.4. Schedule and budget summary

Document Management System

No further budget needed, resources and other requirements are attainable without spending any amount.

[Table 1.1.5] Schedule Allocation Plan

Milestone	Date (initiation / completion)		
Proposal	July 11, 2014		
Confirmation	July 22, 0214		

July 26, 0214 System Requirements Specifications August 2, 2014 Software Project Management Plan Software Design Document August 9, 2014 Software Test Document August 16, 2014 Increment 1 August 23, 2014 Increment 2 August 30, 2014 September 6, 2014 Increment 3 Increment 4 September 13, 2014 Software Output Presentation September 20, 2014 **Final Documents** September 27, 2014

4.2. Evolution of plan

Document Management System

[Table 1.2.1] Evolution Plan

Version	Primary Author(s)	Description of Version	Date Expected
Draft	Neldi Mar K. Cañizares	Initial draft created for distribution and review comments	July 25, 2014
Preliminary	Neldi Mar K. Cañizares	Second draft incorporating initial review comments, distributed for final review	August 8, 2014
Prerelease	TBD	Third draft that is about to be released to the customer	TBD
Final	TBD	First complete draft, which is placed under change control	TBD
Revision	TBD	Revised draft, revised according to the change control process and maintained under change control	TBD

5. References

Corresponding:

- Chapter 4 Budgetary Control. Retrieved August 8, 2014, from www.fao.org/docrep/w4343e/w4343e05.htm
- IEEE-SA Standards Board. (1998). *IEEE Recommended Practice for Software Project Management Plans*. Software Engineering Standards Committee of the IEEE Computer Society.
- Wayne, B. (1995). Fundamentals of Budgeting for Nonfinancial Managers
 Budgeting and the Planning and Control Process. Retrieved August 8, 2014, from www.flexstudy.com/catalog/schpdf.cfm?coursenum=9531a

6. Definitions

This clause of the SPMP shall define, or provide references to, documents containing the definition of all terms and acronyms required to properly understand the SPMP.

DB Database

GUI Graphical User Interface

POI Point of Interest

RUP Rational Unified Process

SDD Software Design Description

SOW Statement of Work

SPMP Software Project Management Plan

SRS Software Requirements Specification

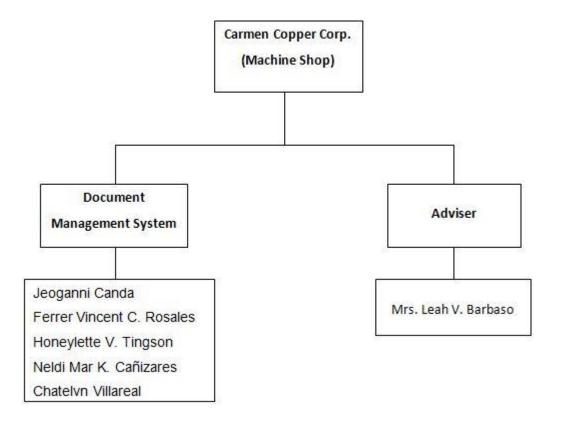
TBD To be decided

7. Project organization

This clause of the SPMP shall identify interfaces to organizational entities external to the project; describe the project's internal organizational structure; and define roles and responsibilities for the project.

7.1. External interface

Document Management System



[Fig 4.1.1] External Interface

7.2. Internal structure

This project is to be conducted by the Document Management System team using the technology learned from different courses of Information Technology and experiences on creating programs. The way the team applies what we learned will be checked and advised by mentors from different senior programmers from different fields and by the adviser of the Software Project Course so that the team may produce a more advanced system.

4.3. Roles and responsibilities

Document Management System

This section describes the organization of the Document Management System as decided by the team during a continuous role definition exercise. It is important to note that this is not a comprehensive list of responsibilities. It is the outcome of an initial team role building session. This section will be updated as the project progresses.

[Table 4.3.1] Roles and Responsibilities

Role	Responsibilities
Team Leader	Software project planning and monitoring Milestone and schedule planning and monitoring
	Set and communicate the team meeting agendas. Risk Management. Maintain Project log book.
Programmer	The one in charge of the program for the game Plans and designs the templates and user Interface of the software Write and test codes and then rewrite and refine it if required. Analyzes the current system status then develops it towards the end of the project.
Documentation Officer	Milestone and schedule planning and monitoring Set and communicate the team meeting agendas Software project planning and monitoring The one in charge with the document reports.
Graphic Designer	Think of ideas and produce graphic art and visual materials to effectively communicate information. Illustrators conceptualize and create illustrations to represent information through images.

[Table 4.3.2] Role Allocation

ROLE	MEMBERS
_	_

Team leader, Programmer	Jheoganni Canda
Programmer, Graphics Designer	Ferrer Vincent C. Rosales
Graphic Designer, Tester	Honeylette V. Tingson
Documentation Officer, Tester	Neldi Mar K. Cañizares
Graphic Designer, Tester	Chatelyn Villareal

8. Managerial process plans

This clause of the SPMP shall specify the project management processes for the project. This clause shall be consistent with the statement of project scope and shall include the project start-up plan, risk management plan, project work plan, project control plan, and project closeout plan.

8.1. Start-up plan

8.1.1. Estimation plan

Jobs for each of the three months will be divided into short term phase based on the delivery of the project artifacts and counted as milestones.

Each phase will cover part of the Work Breakdown Structure that was created at the beginning of the project. Excel-based Work-Distribution Tool will be used to produce and to track a schedule that includes milestones and resource allocations for the project.

At the beginning of each phase, the team will have work distribution list to define the tasks and the schedule. The team will assess its status once a week and update and distribute the schedule accordingly. Every artifact will be reviewed by using formal review methods including walkthrough and inspection at the end of each phase.

8.1.2. Staffing plan

[Table 5.1.2.1] Staff Plan

Name	Affiliation to project
Jheoganni Canda	Team leader, Programmer
Ferrer Vincent C. Rosales	Programmer, Graphics Designer
Honeylette V. Tingson	Graphic Designer, Tester
Neldi Mar K. Cañizares	Documentation Officer, Tester
Chatelyn Villareal	Graphic Designer, Tester

5.1.3. Resource acquisition plan

All necessary hardware, software, and CASE tools for the project are already available. The system will be delivered through web / internet connection.

5.1.4. Project staff training plan

Additional staffs and trainings are not needed in this system since the user interface will be designed to help the user use the application without difficulties. Instructions and tips are already provided in the system so there is no need to explain the part any further.

8.2. Work plan

This clause of the SPMP shall specify the work activities, schedule, resources, and budget details for the software project.

8.2.1. Work activities

Following table shows our work activities during this course.

[Table 5.2.1.1] Work activities

Week 1	Meet and determined the requirements and updates.
WCCK 1	incet and determined the requirements and appeares.
Week 2,3	Start the planned system and produce the output.
Week 4	Show the unfinished or on-going output to the client. Purpose is to determine whether the client wants to add more option or updates to the software.
Week 5-10	Finalize all the revised output and conduct software testing to determine bugs and errors in the software.

8.2.2. Schedule allocation

The work duration allocated for this project is only intended within one semester of this year. From months July to September, the team intends to give fulltime participation on this project if possible. Although, our schedules in classes conflict with each other, we are trying to set dates and time where we could work together and discuss further development.

5.2.3. Resource allocation

Each team member will work separately on their assigned tasks or duties. Meetings will be conducted once a week or whenever necessary, to give updates and feedbacks on the on-going development.

5.2.4. Budget allocation

[Table 5.2.4.1] Budget allocation

Requirements Workflow	500php
Analysis Workflow	1,500php
Design Workflow	1,500php
Implementation(1) Workflow	1,000php
Testing(1) Workflow	2,500php
Pre-Final Output Workflow	1,000php
Implementation(2) Workflow	1,000php
Testing(2) Workflow	2,500php
Final Output Workflow	3,500php
TOTAL	15, 000php

5.3. Control plan

Major changes that affect the milestones or the budget have to be approved by the team leader and documented. There is no outside quality assurance personnel involved. The benefits of having someone other than the individual who carried out the development do the testing will be accomplished by each person testing, another person work products. A member is responsible for ensuring that the project is completed on time and within budget. This will be accomplished through daily meetings with the team members. At each meeting, all members will present the day's progress and problems. The team leader will determine whether they are progressing as expected and whether they are following the specification document and the project management plan. Any major problems faced by the members will immediately be reported to the leader.

5.3.1. Requirements control plan

All requirements and details of the Document Management System of Carmen Copper Corp. were stated and have been documented in the SRS. If there will be any changes or updates, final revision will be discussed and will be released.

5.3.2. Schedule control plan

The proposed schedule is already plotted in and has been strictly followed. No other schedule shall be added. The assigned member responsible in assigning of tasks and gathering of information about the individual tasks for each team member and creates a plan for each project phase at the beginning of the phase. Deadline for the submission of each task will be a week after the task is assigned. Any finished task will be sent online. In case of a failure of one group member in accomplishing his task, the whole team is responsible for this condition and has to finalize the said section.

5.3.3. Budget control plan

The proposed budget is stated already in (5.2.4 Budget Allocating) and has been strictly followed. This will be the exact value for each budget workflow. No other budget shall be added on the implemented software.

5.3.4. Quality control plan

The main task of the quality assurance manager is the Quality Control Plan document. The improvised software is being under watch for unexpected errors and bugs. It has been prioritized to avoid the decrease performance which will affect the quality of the software. The Team is pledge to be always on alert and carefully implement each of the said tasks that has been given. To ensure the quality of the overall software, the team is only implementing based what the client has been defined and what is stated in the overall SPMP. Quality assurance managers play a crucial role in the project by ensuring that the system meets certain standards of quality. They plan, direct or coordinate quality assurance programs and formulate quality control policies. They also work to improve a team efficiency and profitability.

5.3.5. Reporting plan

Reporting and Information Matrix

The Reporting and Information Flow Matrix below explains the standards schedule for reporting and meetings.

 Action
 Weekly
 Monthly

 Status Meetings
 Project Team Meeting
 Project Team & Client

 Reports
 Completed Tasks
 Summary of Standard Reports

 Details on Schedule Tasks for Next Week
 Reports

[Table 5.3.5.1] Reporting plan

5.3.6. Metrics collection plan

Each team member will report on tasks assigned, tasks done or not done, problems, hours planned, actual hours, and future plans at every weekly status meeting. The Team Leader/Manager will consolidate the data and will analyze the efforts spent per developer every week. Each team member will submit an individual report about the developer's individual progress and productivity. Every week our team will meet to update the progress of individual's assigned task.

5.3.7. Risk management plan

The purpose of the Risk Management Plan is to identify, analyze and rank risk factors. Once factors have been identified, then these will be analyzed for impact and consequences and ranked accordingly plans will be put in place for contingencies and tracking and control measures will be put in place. Risk management is an ongoing task, as influencing conditions a rarely stagnant during the course of the project.

5.3.8. Project closeout plan

This section describes the nature of activities that will be used to close out the project when it is completed. Our team will ensure the proper closeout of the project in October 2014.

6. Technical process plans

This clause of the SPMP shall specify the development process model, the technical methods, tools, and techniques to be used to develop the various work products; plans for establishing and maintaining the project infrastructure; and the product acceptance plan.

6.1 Process Model

The team will use a step-by-step approach on developing the system. Each stage will last for a predefined time period and its output will be an intermediate work product or deliverable.

6.2 Methods, tools, and techniques

The methods and techniques listed in this table will be evaluated and applied in specific areas of the project as appropriate:

[Table 6.2.1] Methods and Techniques

Category	Methods and Techniques		
Requirements Elicitation	Elicitation from existing Excel-based TSP Support Tool Meetings Interviews Brainstorming		
Formal Specification and Analysis	Analyzing what models would be created in order to model the structural aspects of the requirement and design. Use cases to define requirements.		
Prototype	Two UI prototypes to validate a technical or design decision. This is different from the development cycle's construction effort, which is geared towards the final deliverable. Pilot system as Iteration 1 to validate a technical or design decision.		
Estimation	Function Point method for conversion from Function Point count to effort may be used for size estimation and project scope definition.		

[Table 6.2.2] Methods and Techniques

Category	Tools

Operating System	Windows XP, Vista, 7, 8
Development languages and databases	Language: JavaScript, PHP, CSS, MySQL
Document	All document will be written using Microsoft Word
Project Planning and Tracking	Microsoft Office Project 2010

6.3 Infrastructure Plan

The hardware used is owned by the team themselves. The place for production would be most of the time in the CIT U school premises. In addition, the available resources for the team are copiers, meeting rooms, and other standard office equipment.

6.4 Product Acceptance Plan

The customer with signing appropriate acceptance documents accepts every milestone of the project formally. The user may install the application being delivered and can also perform an acceptance test right after each phase ends. This may result in additional requests for changes and improvements.

7. Supporting process plans

This clause of the SPMP shall contain plans for the supporting processes that span the duration of the software project. These plans shall include, but are not limited to, configuration management, verification and validation, software documentation, quality assurance, reviews and audits, problem resolution, and subcontractor management. Plans for supporting processes shall be developed to a level of detail consistent with the other clauses and subclauses of the SPMP. In particular, the roles, responsibilities, authorities, schedule, budgets, resource requirements, risk factors, and work products for each supporting process shall be specified. The nature and types of supporting processes required may vary from project to project; however, the absence of a configuration management plan, verification and validation plan, quality assurance plan, joint acquirer-supplier review plan, problem resolution plan, or subcontractor management plan shall be explicitly justified in any SPMP that does not include them. Plans for supporting processes may be incorporated directly into the SPMP or incorporated by reference to other plans.

7.1. Configuration management plan

The Team's configuration management plan is a part of a separate document. Any concern about the process of the project shall be logged on this document. Every progress of the project shall be noted on the said document. The customer is also notified with every detail of the progress. Requests for changes of the customer is also noted the document.

7.2. Verification and validation plan

Traceability analysis

In this stage of the plan, a member must verify the originating requirements and so as their resulting system features. Created requirements will be decomposed and refined through a system's life cycle. This also allows verification of all the properties set forth in the concept. Requirement specifications may also have been carried forward to the design specification and later be implemented with the code.

Evaluation

Evaluation ascertains the value or worth of an item and help to assure that a system meets its specifications. Evaluations are performed by many persons across all life cycle phases, on both interim and final software products, and may be either a comprehensive or selective assessment of a system. Evaluations are used through all phases and for all type of software products, including user documents, manuals, and other project documents. These may be of many forms, such as text or graphic representations, and in various media, such as paper, magnetic tape, diskette, and computer files.

Interface analysis

When information is passed across a boundary, there is always the possibility of losing some information or alerting the information content. The task of interface analysis serves to ensure the completeness, accuracy, and consistency of these interfaces. Interface requirements at the design and implementation phases should be identified analyzed at the functional, physical, and data interface level.

Testing

Verification and validation plan of the software includes testing. Testing can be helping on verifying the software, while testing, one may encounter some errors. Encountered errors will be noted, after errors are noted. Debugging will immediately commence. Testing is performed at several points in the life cycle, starting from the requirement phase up to the test phase. The various test activities are listed below:

Component Testing

Testing conducted to verify the implementation of the design for one software elements or a collection of software elements

Integrating Testing

An orderly progression of testing in which software elements, hardware elements, or both are combined and tested until the entire system has been integrated.

System Testing

The process of testing an integrated hardware and software system is to verify that the system meets its specified requirements.

Acceptance Test

Formal testing conducted to determine whether or not a system satisfies its acceptance criteria and to enable the customer to determine whether or not to accept the system.

This section explains out V&V plan for each phase of software development.

[Table 7.2.1] V&V Plan

Phase	V&V Input	V&V Tasks	V&V Output
Requirements	SRS Interface requirements documentation User documentation	Requirements traceability analysis Requirements evaluation	Requirements phase tasks reporting Test plan: System

		Requirements interface analysis	- Acceptance
		Test plan generation	
Design	SRS Interface requirements documentation Interface design documentation User documentation	Design traceability analysis Design evaluation Interface analysis Test plan generation Test design generation	Design phase task reporting Test plan Component Integration Test design Component
			Integration System acceptance
Implementation	Source Code listing Executable code Interface design documentation User documentation	Code traceability analysis Code evaluation Interface analysis Documentation evaluation Test case generation Test procedure generation Component test execution	Implementation phase task reporting Test cases Component Integration System Acceptance Test procedure Component Integration - System
Test	Source code listing Executable code User documentation	Test procedure generation Integration test execution System test execution Acceptance test execution	Test phase task reporting Test procedure Acceptance Anomaly report V&V phase summary

Installation and	Installation package	Installation	Installation and
Checkout		configuration audit	checkout phase task
		V&V final report generation	reporting

7.3. Documentation plan

There are a number of documents that will be produced during the lifetime of the project. All documents are responsibility of the project team members. The lists of documents that will be created and maintained under version control include:

Project Proposal

Confirmation Letter

Software Requirements Specification (SRS) – defines the functionality that is required by the client.

Software Project Management Plan (SPMP) – defines the project management plan.

Software Test Documentation (STD) – defines the testing of the project on documentation.

Software Design Description (SDD) – defines the project design description.

Status Report

Use Case Diagram

Use Case Description

7.4. Quality assurance plan

The Team assures that every detail on the requirements is followed upon processing the software. Plans, standards, procedures and guidelines made by the Project Manager must be strictly followed. Critical Thinking, Inspections, Reviews, Auditing and Assessments should be done by each one of the Team Members so that a Good Quality Software may successfully be implemented.

7.5. Reviews and audits

The SPMP specifies the plan, schedule and methods to be used in conducting the project reviews and audits. So far, the only products that were created are documents and the initiation of the project. It is expected that in the future the details about the review and audits will be maintained within the team's QA plan. And most of the reviews will be provided at the final stage of this project.

7.6. Problem resolution plan

For the problems encountered, it will be noted in order to improve the project. A series of test will

be taken to thoroughly check the software. Evaluate and retest all the information and data gathered for the quality and stability of the software.

7.7. Subcontractor management plan

Not applicable to group's project.

7.8. Process improvement plan

Process improvement plan is not applicable at the moment, since it will be done as a part of the final project evaluation and lessons learned phase. The process improvement plan will be created at that time.

7.9. Additional Plans

The group leader will assemble the group for a meeting if there are any additional plans.

8. Plan Annexes

Annexes may be included, either directly or by reference to other documents, to provide supporting details that could detract from the SPMP if included in the body of the SPMP.

Gantt chart

	Task Name ▼	Duration 🕶	Start 🔻	Finish 🔻	Predecessor: -	Resource Names 💌
1	△ Document Management System	71 days?	Wed 6/25/14	Wed 9/24/14		
2	■ Project Proposal	0 days	Fri 7/11/14	Fri 7/11/14		
3	Analyzed proposed project	0 days	Fri 7/11/14	Fri 7/11/14		Documentation Officer,P
4	Present written proposal	0 days	Fri 7/11/14	Fri 7/11/14	3	Team Leader
5	◆ Project Requirements	2 days?	Sat 7/19/14	Mon 7/21/14		
6	Making confirmation letter	1 day?	Sat 7/19/14	Sat 7/19/14		Documentation Officer
7	Present confirmation letter	1 day?	Mon 7/21/14	Mon 7/21/14		
8	■ Software Requirements Specification	6 days?	Mon 7/21/14	Mon 7/28/14		
9	Requirements elicitation (1st phase)	0 days	Mon 7/21/14	Fri 7/25/14		Team Leader
10	Start of SRS	1 day?	Thu 7/24/14	Thu 7/24/14		
11	Software Requirement Specification Presentation	1 day	Mon 7/28/14	Mon 7/28/14		Team Leader, Project Tea
12	■ Software Project Management Plan	4 days?	Wed 7/30/14	Mon 8/4/14	11	
13	Analyze necessary functions	0 days	Wed 7/30/14	Thu 7/31/14		Team Leader
14	Estimation Plan	1 day?	Wed 7/30/14	Wed 7/30/14		Team Leader
15	Start SPMP	1 day	Fri 8/1/14	Fri 8/1/14	14	Documentation Officer
16	Software Project Management Plan Presentation	1 day?	Mon 8/4/14	Mon 8/4/14		Project Team Members
17	■ Software Development and Design	6 days?	Mon 8/4/14	Mon 8/11/14		
18	Task assignments	2 hrs	Mon 8/4/14	Mon 8/4/14		Team Leader
19	Start of SDD	0 days	Wed 8/6/14	Wed 8/6/14		Documentation Officer
20	SDD finished	0 days?	Sun 8/10/14	Sun 8/10/14		Documentation Officer
21	Presentation of SDD document	1 day?	Mon 8/11/14	Mon 8/11/14		Project Team Members
22	■ Software Test Document	71 days?	Wed 6/25/14	Wed 9/24/14		
23	Tasks assignments	3 hrs	Mon 8/11/14	Mon 8/11/14		Team Leader
24	Start of STD	14 days?	Wed 8/13/14	Mon 9/1/14		Team Leader,Documents
25	SDD Finished	1 day?	Sun 8/17/14	Mon 8/18/14		Team Leader, Documents
26	Presentation of STD document	1 day?	Mon 8/18/14	Mon 8/18/14		Project Team Members
27	Update the WBS	1 day?	Tue 8/19/14	Tue 8/19/14		Team Leader

Figure 8.1 Gantt chart

△ Testing	1 day?	Wed 8/20/14	Wed 8/20/14		
Develop unit test plans	1 day?	Wed 8/20/14	Wed 8/20/14		Tester
Develop integration test plans	1 day?	Wed 8/20/14	Wed 8/20/14	29	Tester
▲ Unit Testing	1 day	Thu 8/21/14	Thu 8/21/14		
Review code	4 hrs	Thu 8/21/14	Thu 8/21/14		Tester,Tester
Identify problems	8 hrs	Thu 8/21/14	Thu 8/21/14		Tester
Modify code	3 hrs	Thu 8/21/14	Thu 8/21/14		Tester
Re-test modified code	3 hrs	Thu 8/21/14	Thu 8/21/14	33	Tester
Unit testing complete	0 hrs	Thu 8/21/14	Thu 8/21/14		Tester
▲ Integration Testing	71 days?	Wed 6/25/14	Wed 9/24/14		
Increment 1	1 day?	Sat 8/23/14	Sat 8/23/14		Project Team Members
Increment 2	1 day?	Sat 8/30/14	Sat 8/30/14		Project Team Members
Increment 3	1 day?	Sat 9/6/14	Sat 9/6/14		Project Team Members
Increment 4	1 day?	Sat 9/13/14	Sat 9/13/14		Project Team Members
Test module integration	2 hrs	Mon 9/15/14	Mon 9/15/14		Tester
Identify problems	1 hr	Tue 9/16/14	Tue 9/16/14		Tester, Programmer
Modify code	3 hrs	Wed 6/25/14	Wed 6/25/14		Programmer
Re-test modified code	1.5 hrs	Wed 6/25/14	Wed 6/25/14		Programmer, Tester
Integration testing complete	1 day	Wed 9/17/14	Wed 9/17/14		Tester, Project Manager
Final Presentation	1 day?	Wed 9/24/14	Wed 9/24/14		Project Team Members
Deployment	1 day	Wed 9/24/14	Wed 9/24/14		
Determine final deployment strategy	3 hrs	Wed 9/24/14	Wed 9/24/14		
Deploy Learning Module	2 hrs	Wed 9/24/14	Wed 9/24/14		
Deployment complete	0 hrs	Wed 9/24/14	Wed 9/24/14		

Figure 8.2 Gantt chart

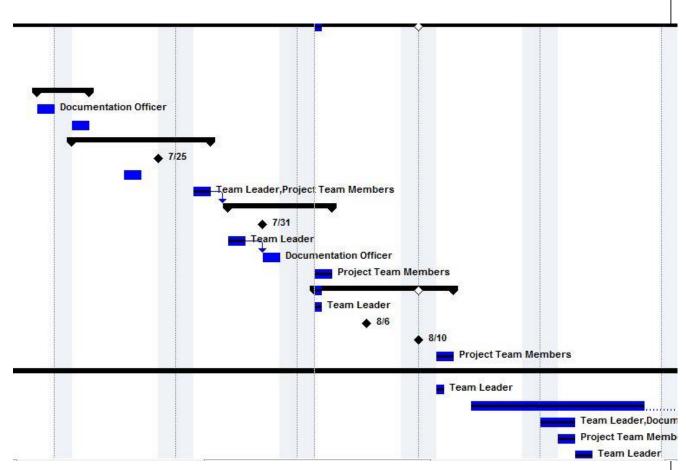


Figure 8.3 Gantt chart

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Software Design Description

for

Document Management System

Signature

MEMBERS	POSITION	SIGNATURE
Jheoganni Canda	Team leader, Programmer	
Ferrer Vincent C. Rosales	Programmer, Graphic Designer	
Honeylette V. Tingson	Graphic Designer, Tester	
Neldi Mar K. Cañizares	Documentation Officer, Tester	
Chatelyn Villareal	Graphic Designer	

Change History

Date	Primary Author	Description
August 8, 2014	Neldi Mar K. Cañizares	Initial version
August 14, 2014	Neldi Mar K. Cañizares	First Revision
October 10, 2014	Neldi Mar K. Cañizares	Final Version

Preface

The following Software Design Description (SDD) shall provide thorough information regarding the overall design of the system. Through this, the audience will have an overview on the initial design of the Document Management System.

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9. Introduction

9.1. Purpose

The purpose of this document is to provide a visual representation and the specific details of the application's architecture and design. This document specifies each of the functions of the learning application. Aside from specifying the functionalities, this document contains diagrams of the different functions and user interfaces as visual representation. The potential audience of this document are the learners that need to get to know how the learning application works.

This document also serves as a systems reference manual for running system once it is implemented, and is the primary reference for application migrations, support and maintenance.

The intended audiences for the document are the employees of the Power Electrical Department (Carmen Copper Corporation).

9.2. *Scope*

The objectives of the application are the following:

- To create guidelines for document and data control, record keeping, review and approval and updating documents
- Ensure the availability of documents when needed
- Ensures prevention of unauthorized changes to documents
- Prevents the use of unapproved or obsolete version of documents or files

This document is limited to the application's design and architecture. With regards to this, the document contains a description about the breakdown of the application's contents. This document shows the decomposition of the overall task by topic. The arrangement of the discussion is showed in this document for the learners to understand the way the system collaborates. Besides describing how searching and solving the case work and its implementations, this document also specifies the application's interactive interface in the best possible way.

9.3. Definitions and Acronyms

DFD - Data Flow Diagram

ERD - Entity-Relationship Diagram

Module - is a logically self-contained and discrete part of a larger computer program

SDD - Software Design Description

SRS - Software Requirements Specification

10. References

- IEEE-SA Standards Board. (1998). *IEEE Recommended Practice for Software Design Description*. Software Engineering Standards Committee of the IEEE Computer Society.
- System Design

By Ministry of Environment, Ministry of Agriculture and Lands Information Management Branch

Software Design Description Version 1.1, Web Accessible Alumni Database

By Michael J. Reaves

11. Decomposition Description

This section offers several views on how to decompose the total structure of the Document Management System project. Emphasis will be put on general modularity and processes.

11.1. Module Decomposition

11.1.1. Administrator Module Description

The administrator GUI allows the administrator to input documents by adding, updating and saving documents.

Table 3.1.1 [Administrator Module Description]

Identification	Administrator
Туре	Module
Purpose	To allow the Administrator to perform major functions such as: adding, updating and
	saving documents.

11.1.2. User Module Description

The user GUI allows the user to search, retrieve and to submit documents to their respective head.

Table 3.1.2 [User Module Description]

Identification	User
Туре	Module
Purpose	To allow the user to search, retrieve and to submit documents to their respective head.

11.2. Concurrent Process Decomposition

11.2.1. Profile Creation Process

Identification: Profile Creation Process

Type: Web Based File

Purpose: To login before the user can access the system.

Function: Creates a unique profile for individual users of the game.

Lifetime: The duration of the software's life cycle.

Subordinates: Notepad++ & Komodo

11.2.2. Search Data Process

Identification: Search Data Process

Type: Application

Purpose: To search documents in the document bank

Function: Search

11.2.3. Delete Data Process

Identification: Delete Data Process

Type: Application

Purpose: Deletes documents

Function Deletes

11.2.4. Search Data Process

Identification: Search Data Process

Type: Application

Purpose: To search ordered products

Function: Search

11.3. Data Decomposition

11.3.1. Administrator Entity Description

Table 3.3.1 Administrator Entity Description

Attribute Name	Attribute Type	Size
Username	String	20
Password	String	30

11.3.2. User Entity Description

Table 3.3.2 User Entity Description

Attribute Name	Attribute Type	Size
Username	String	30
Password	String	30

12. Dependency Description

The dependencies attribute should identify the relationship of the entity with other entities. It describes the nature of each interaction that may involve initiation, order of execution, data sharing, creation, duplicating, usage, storage or destruction of other entities.

12.1. Inter-module Dependencies

12.1.1. Dependent Modules

Table 4.1 Inter-module Dependencies

Dependencies	Reason(s)
Administrator	The administrator can update the system if ever the client or user wants to. This module let the administrator navigate the entire code of the system for further changes.

12.2. Inter-process Dependencies

Table 4.2 Inter-process Dependencies

Dependencies	Reason(s)	
Registration	The users information will be used to log-in.	
Input	This process will allow the administrator to input log-in, customer's information, documents that are sorted manually, a hard copy into the system for future use.	
Search	This process will search the administrator the documents they need.	
Delete	This process will delete documents that are inputted in the system.	

12.3. Data Dependencies

Table 4.3 Data Dependencies

Dependencies	Reason(s)
Username	This must be given uniquely so that user can use the system. The username that the user registered is needed to log in.
Password	Use to identify if the administrator is authorized.

13. Interface Description

13.1. Module Interface

13.1.1. Administrator Module Description

Table 5.1.1 – Administrator Module Description

Identification	Administrator	
Туре	Button/Link	
Description	This will allow the user to register employee information or input documents to be placed in the document bank.	
Function/s	clickInput(),clickSearch(), clickUpdate(), clickDelete().	

13.2. Process Interface

5.2.1. Login

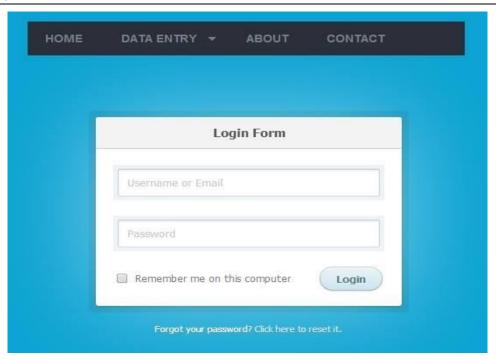


Figure 5.2.1.1 Login Form

Interface where the user will log in, in order for him/her to access the system.

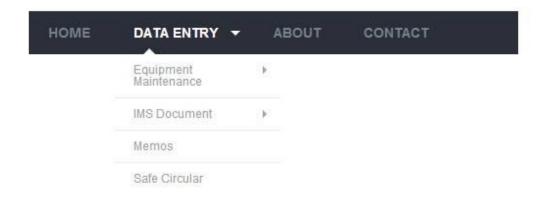


Figure 5.2.2.1 Data Entry Menu

Interface that shows the data entry menu. a drop down menu that includes equipment maintenance, IMS document, memos and safe circular.

5.2.3. Equipment Maintenance Menu

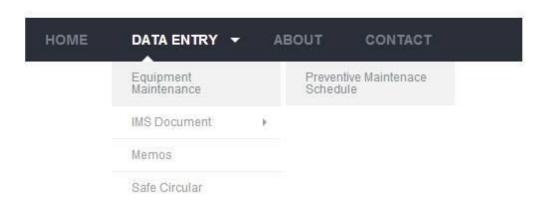


Figure 5.2.3.1 Equipment Maintenance Menu

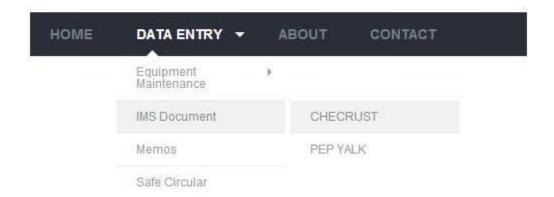


Figure 5.2.4.1 IMS Document Menu

5.2.5. Data Entry Form

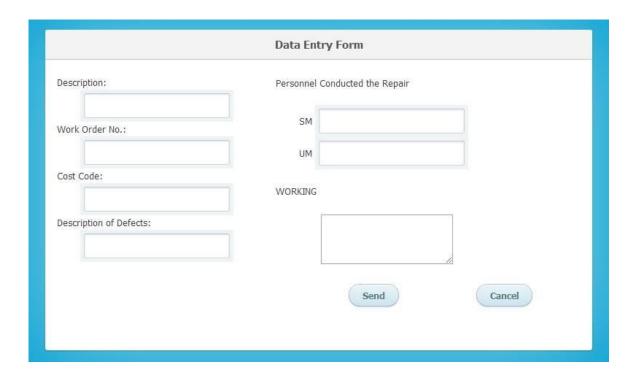


Figure 5.2.5.1 Data Entry Form

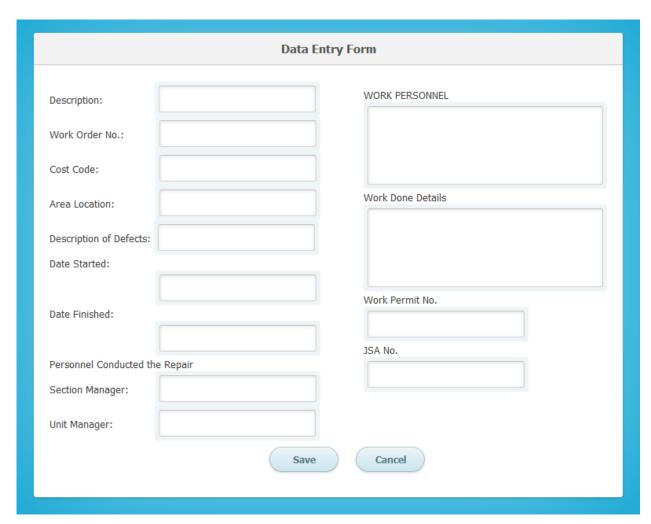


Figure 5.2.5.2 Data Entry Form

EQUIPMENT MAINTENANCE REC	CORDS	
WORK ORDER NO.		
DEPARTMENT		
AREA / LOCATION / SECTION	Please fill out	this
DESCRIPTION OF EQUIPMENT / MA	CHINE	
COST CODE		
FOREMAN		
GENERAL FOREMAN		
MAINTENANCE TYPE		
-		
Proceed		

Figure 5.2.5.3 Data Entry Form

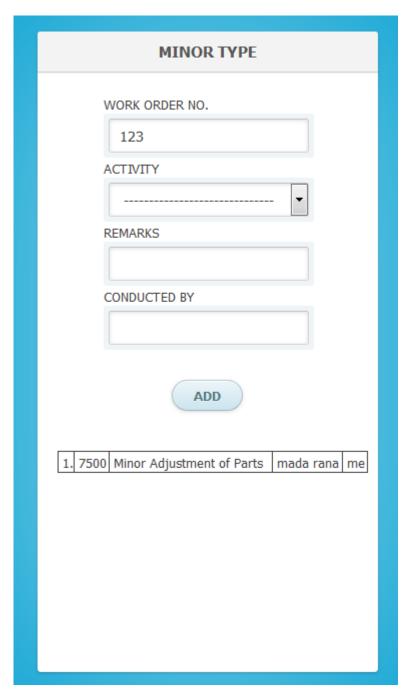


Figure 5.2.5.4 Data Entry Form

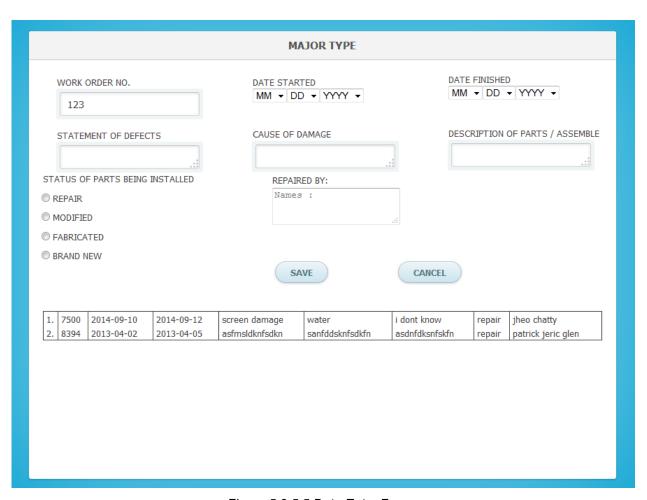


Figure 5.2.5.5 Data Entry Form

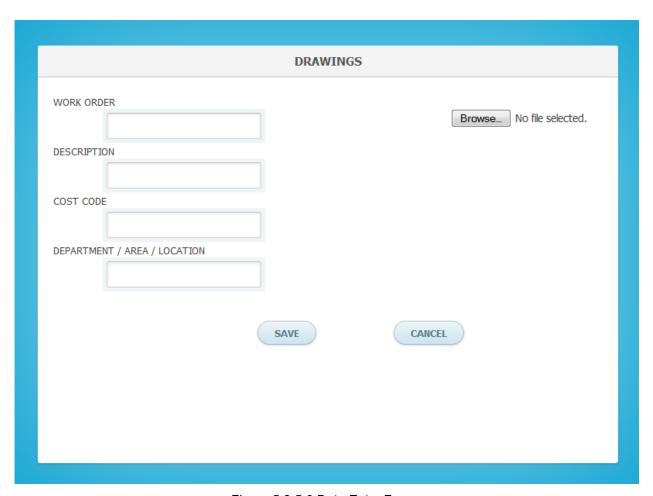


Figure 5.2.5.6 Data Entry Form

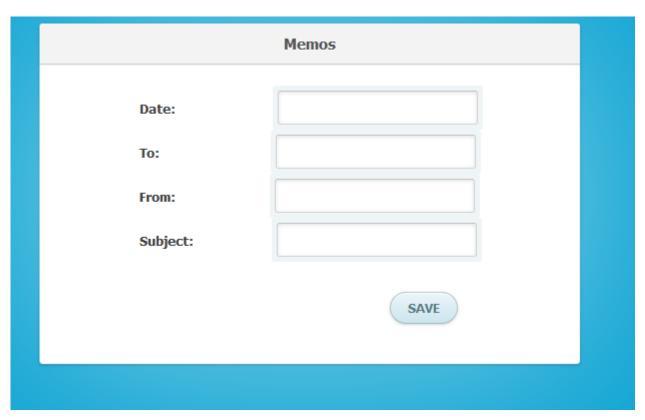


Figure 5.2.5.7 Data Entry Form

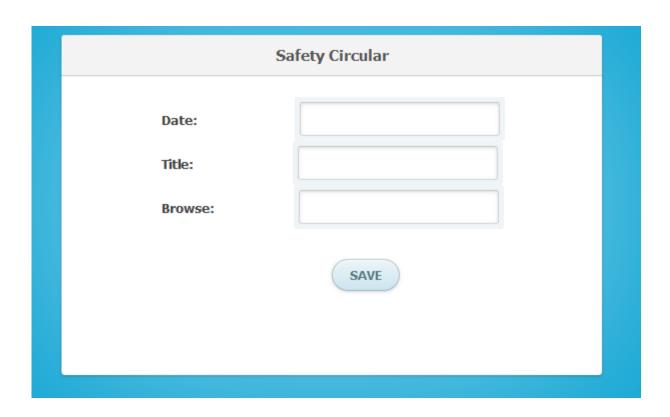


Figure 5.2.5.8 Data Entry Form

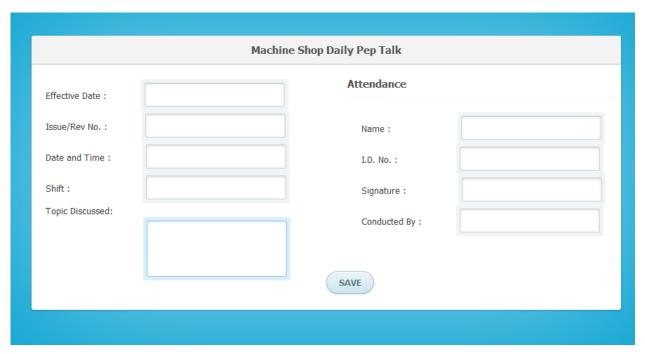


Figure 5.2.5.9 Data Entry Form

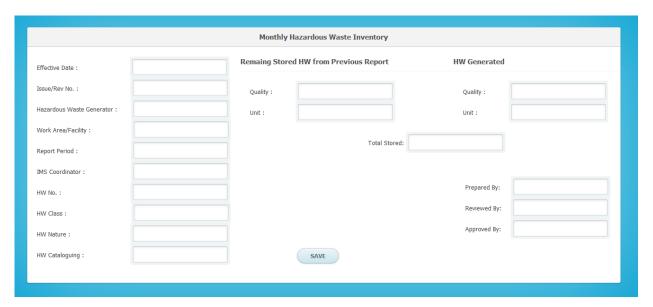


Figure 5.2.5.10 Data Entry Form



Figure 5.2.5.11 Data Entry Form

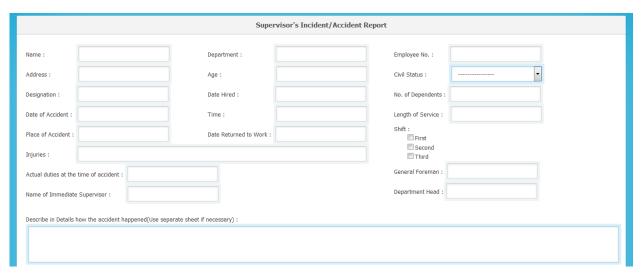


Figure 5.2.5.12 Data Entry Form

Incident, No	nconformity, Corrective & I	Preventive Action Rep	ort(INCPAR)	
INCPAR No. :		Date of Occurence:		
Issued By :		Date of Issuance:		
Discipline 1: Team/Proponents				
Discipline 2: Problem Statement: Issuing D	epartment/Division:			
Discipline 3: Root Cause Analysis				
Why? (Root Cause)				
Course of flows out				
Cause of flow-out				
Discipline 4: Containment Plan/Correc	ction			
Discipline 5: Corrective Action				
HIRADC Reference/Date Prior to Implemen	ntation:			
Discipline 6: Implementation & Verific	ation of Effectiveness of Corrective	Actions		
Date:	Clos	se or Open?		
Details of Verification:	Nex	t Verification Date:		
Discipline 7: Action to Prevent Occure	ence (Preventive Action)			
Discipline 8: Approval				
Reviewed By:		Approved By:		

Figure 5.2.5.13 Data Entry Form

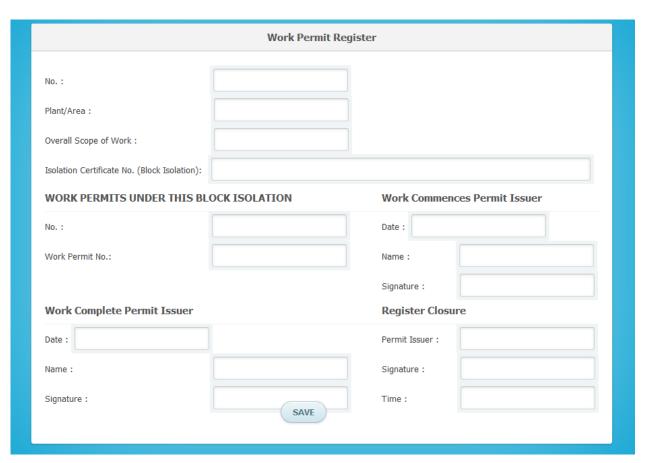


Figure 5.2.5.14 Data Entry Form

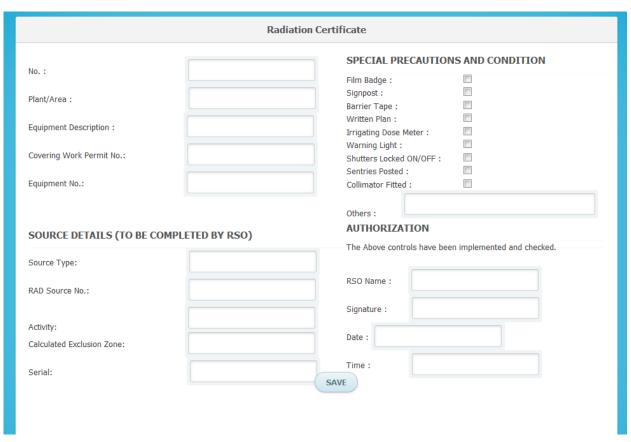


Figure 5.2.5.15 Data Entry Form

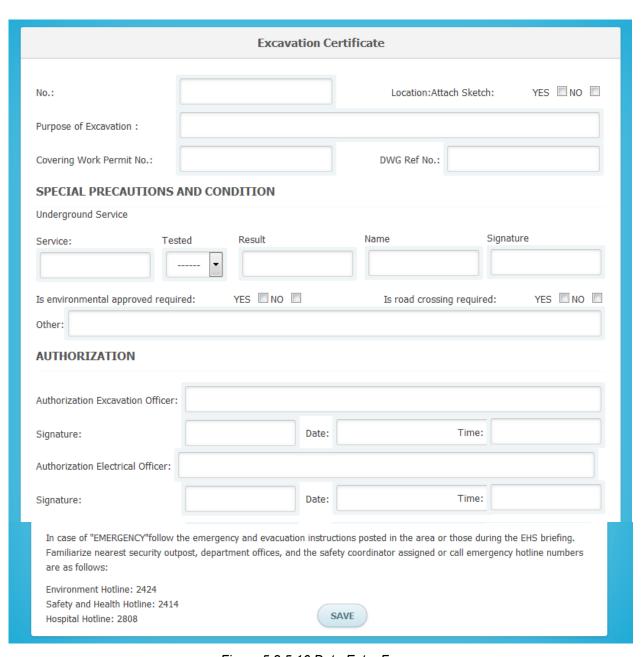


Figure 5.2.5.16 Data Entry Form

Working at Heigh	ts Certificate
No.: Section A - WORK ARRANGEMENT	
Prepared By: Description of Work:	Position: Exact Location:
Section B - PRECAUTION TAKEN Due to an alternative method of accessing and or performing this pleing unavoidable or impractical the following items have been chestick the appropriate box 1. Will the work area support the weight? 2. Is a Sentry/Stand-by Required? 3. Have communications been tested and proven successful? 4. Are personnel competent in usage of Personnel Fall Protection Estables and safe for use? 6. Is all Personnel Fall Protection Equipment current and tagged? 7. Has pre-use inspection of the PPE been conducted by the operate Section C - RESCUE PLAN (tobe filled out in conjuct	ecked and precuations will be taken. YES N/A Guipment? Guipment?
 How many persons will be working at height? Is access for emergency vehicles affected or blocked? Can a patient be brought to ground without lifting equipment? 	Affected

4. List rescue equipment required and checks the current availability.		
5. List other external resources required.		
6. How many ERT members are required to implement the procedure?		
Are they availability? NO/YES T		
7. General Comments:		
I have inspected the job and discussed the rescue plan with the work tear required Emergency/Response/Safety Coordinator:	m and can implement the above rescue plar	n if
I have read, fully understand and will comply with all conditions stated on fall arrest equipment Name:	this work at height certificate Personal wor	king with
Tall arest equipment name.		
I acknowledge that all preparatory work has been completed and that wo	rk is safe to proceed General Foreman Nam	ne:
In case of "EMERGENCY"follow the emergency and evacuation instructions Familiarize nearest security outpost, department offices, and the safety conumbers are as follows:		
Environment Hotline: 2424		
Safety and Health Hotline: 2414		
Hospital Hotline: 2808		
SAVE		

Figure 5.2.5.17 Data Entry Form

5.2.5. Work Form

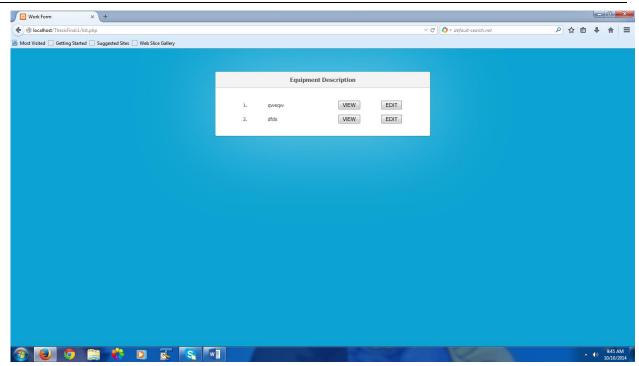


Figure 5.2.5.1 Work Form

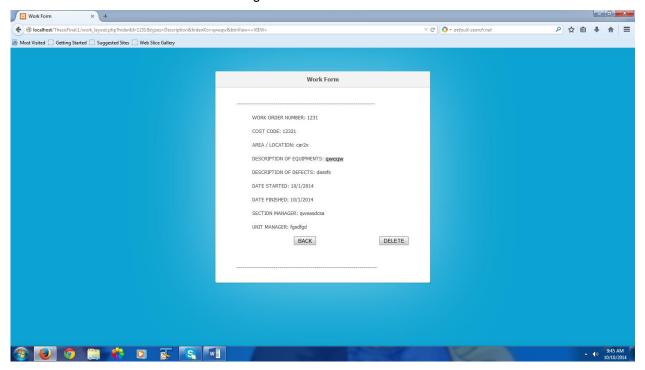


Figure 5.2.5.2 Work Form

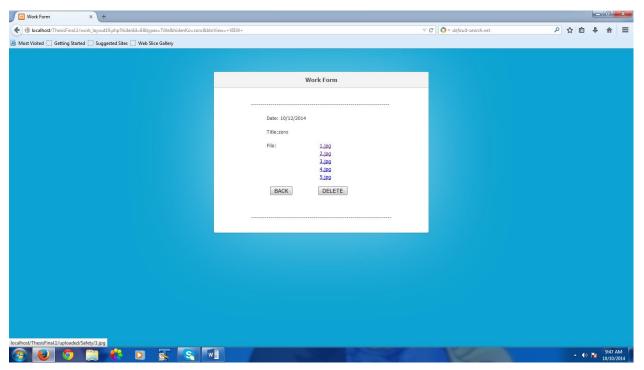


Figure 5.2.5.3 Work Form

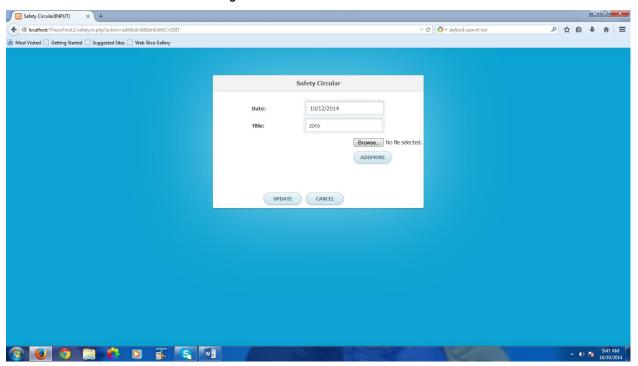


Figure 5.2.5.4 Work Form

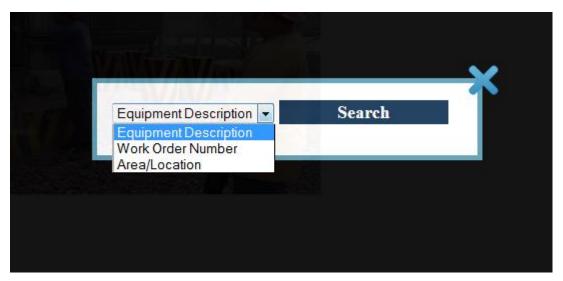


Figure 5.2.6.1 Search

5.2.7. Data Entry Form

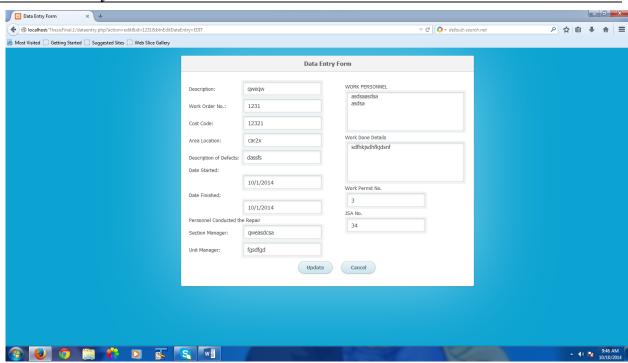
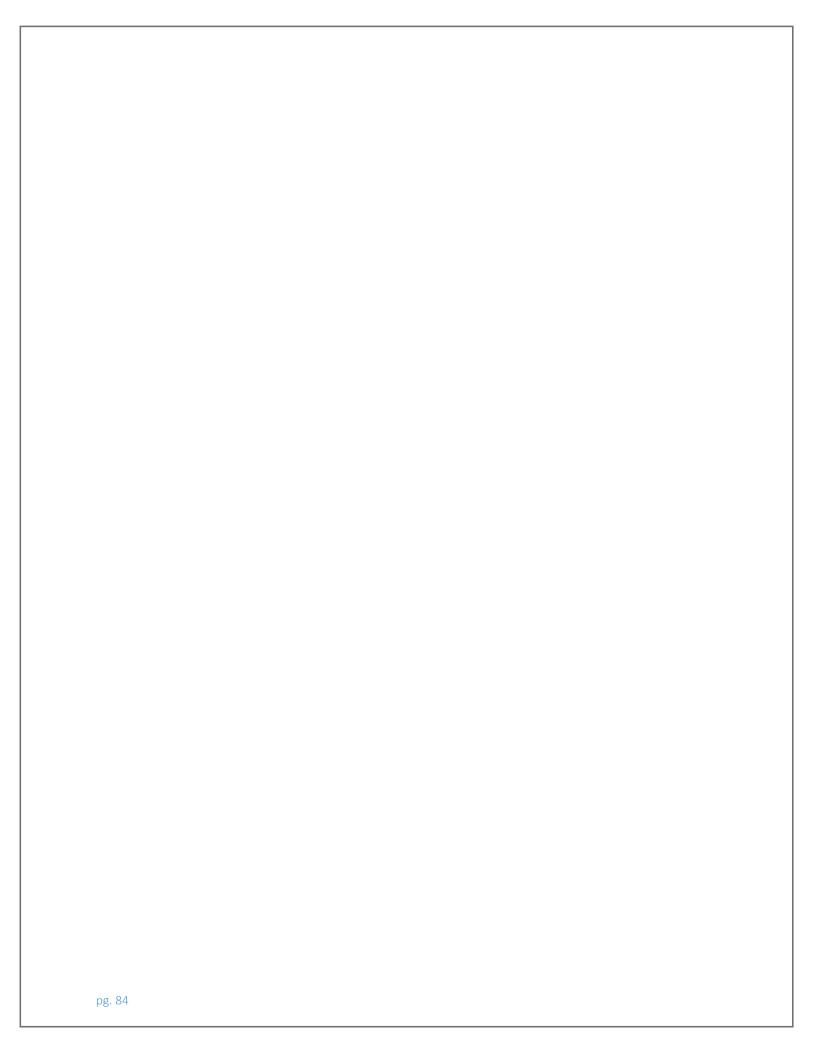


Figure 5.2.7.1 Data Entry Form



14. Detailed Design

14.1. Module Detailed Design

14.1.1. User Module Detail

Table 6.1.1. User Module Detail

Attribute	Туре	Purpose
Username	String	Use to identify the user before accessing the system.
Password	String(encrypted)	Use to identify if the administrator is authorized.

14.1.2. Administrator Module Detail

Table 6.1.2. Administrator Module Detail

Attribute	Туре	Purpose
Username	String	Use to identify the administrator who administers.
Password	String(encrypted)	Use to identify if the administrator is authorized.

14.2. Data Detailed Design

14.2.1. Data Entity Detail

Table 6.2.1 Name Entity Detail

Attribute	Туре	Purpose
Username	String	Use to identify the user
Password	String(Encrypted)	For security purpose

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17. Annexes

- 9.1. Data flow diagram (optional)
- 9.2. Class diagram
- 9.3. Sequence diagram / Communication diagram
- 9.4. User interface design

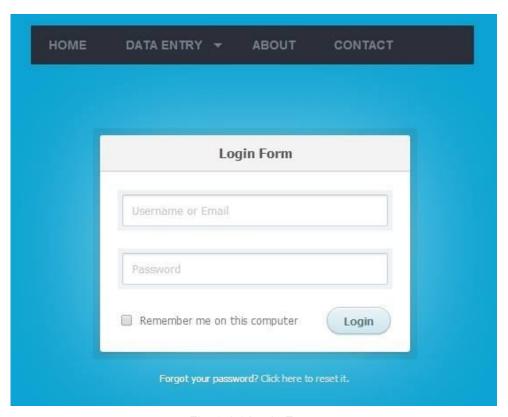


Fig. 9.4.1 Login Form

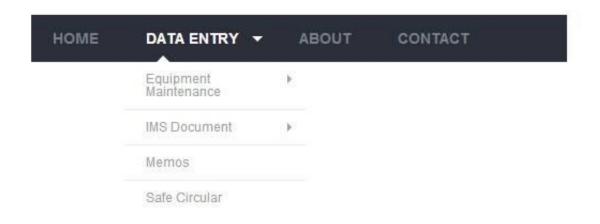


Fig. 9.4.2 Data Entry Menu

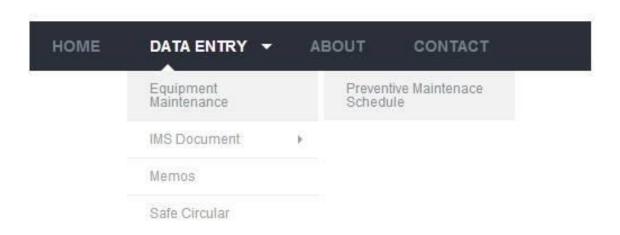


Fig. 9.4.3 Equipment Maintenance Menu

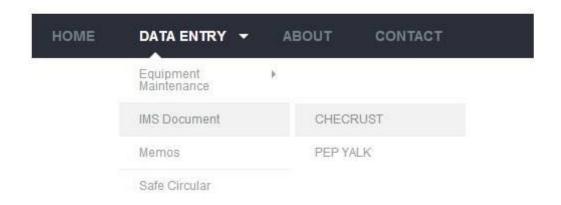


Fig. 9.4.4 IMS Document Menu

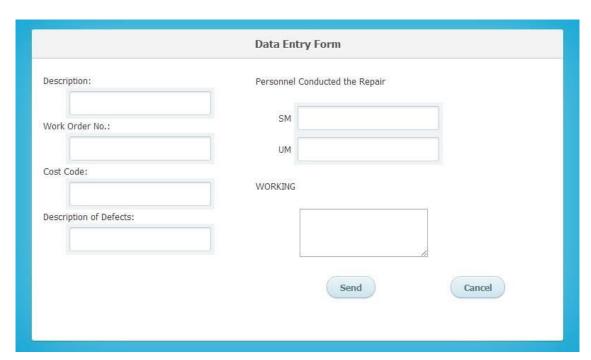


Fig. 9.4.5 Data Entry Form

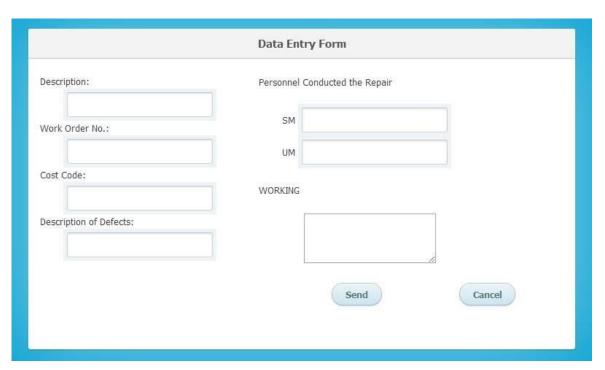


Fig. 9.4.6 Data Entry Form

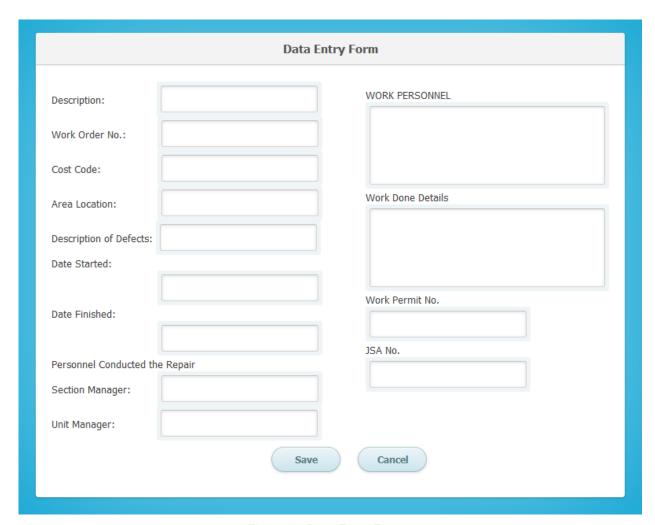


Fig. 9.4.7 Data Entry Form

EQUIPMENT MAINTENANCE RE	CORDS	
WORK ORDER NO.	1	
DEPARTMENT]	
AREA / LOCATION / SECTION	Please fill out th	nis
DESCRIPTION OF EQUIPMENT / MA	CHINE	
COST CODE	1	
FOREMAN		
GENERAL FOREMAN		
MAINTENANCE TYPE		
Proceed		

Fig. 9.4.8 Data Entry Form

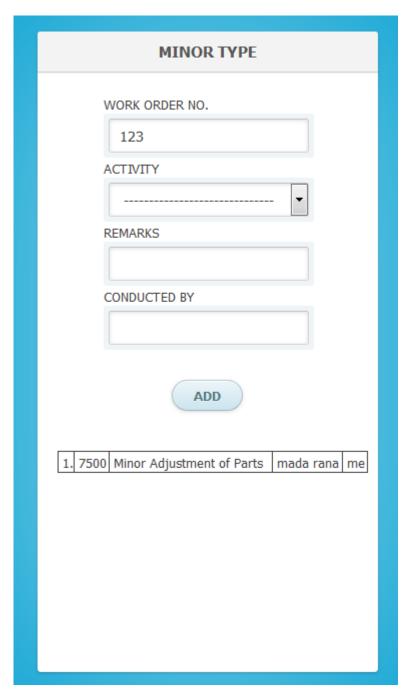


Fig. 9.4.9 Data Entry Form

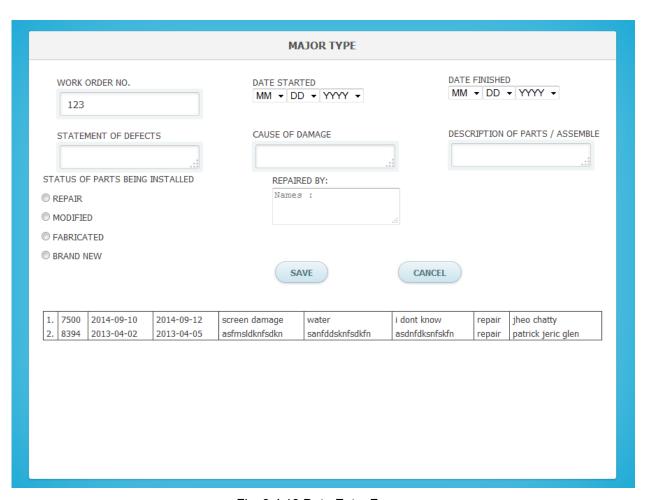


Fig. 9.4.10 Data Entry Form

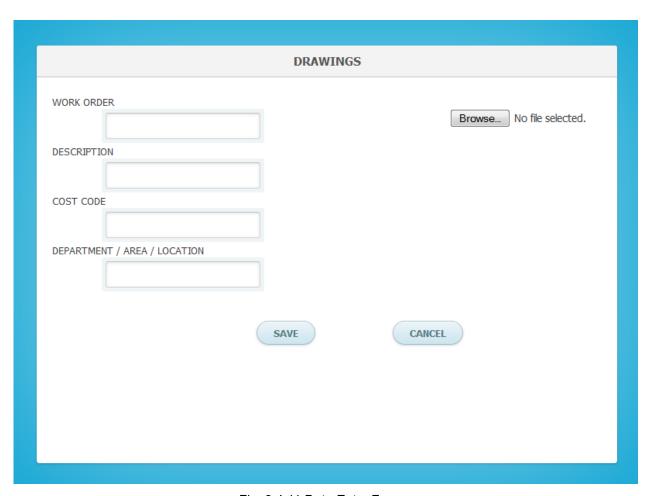


Fig. 9.4.11 Data Entry Form

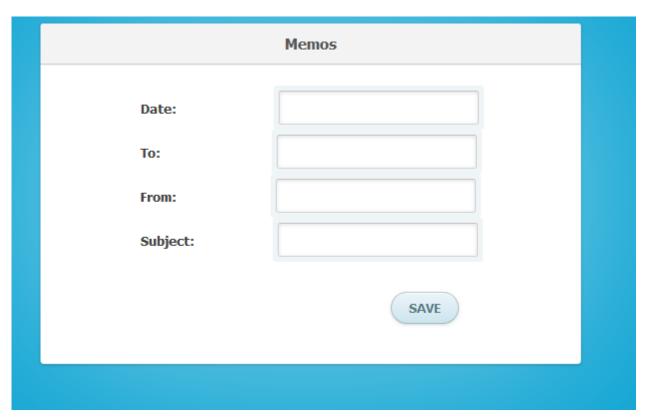


Fig. 9.4.12 Data Entry Form



Fig. 9.4.13 Data Entry Form

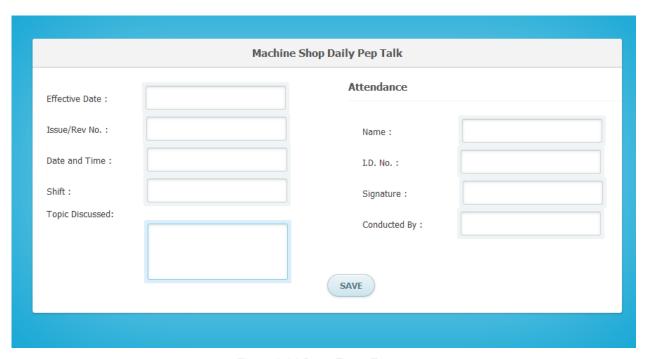


Fig. 9.4.14 Data Entry Form

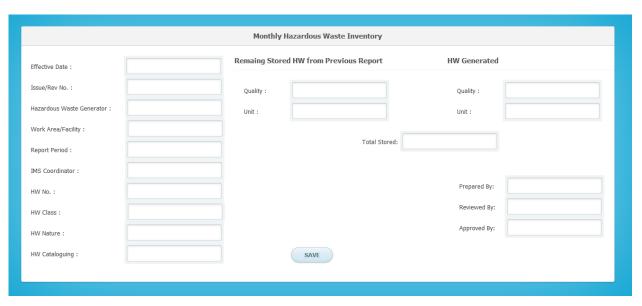


Fig. 9.4.15 Data Entry Form



Fig. 9.4.16 Data Entry Form

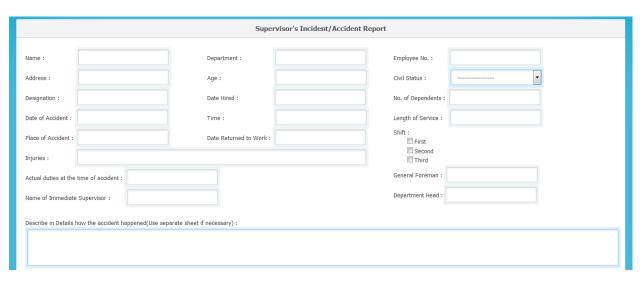


Fig. 9.4.17 Data Entry Form

	Inclu	ent, Nonconformity, Cor	rective & Preventive Act	ion Report(II	NCPAR)	
NCPAR N	D. :		Date of Occ	ırence:		
issued By			Date of Issu	anco:		
			Date of ISSU	unce.		
Discipline	e 1: Team/Proponents					
)iscipline	e 2: Problem Statement: 1	ssuing Department/Division	1:			
	e 3: Root Cause Analysis ot Cause)					
. (
Cause of	flow-out					
	Discipline 4: Containment N	an/Correction				
	Discipline 4: Containment Pla	an/Correction				
	Discipline 4: Containment Pk	an/Correction				
	Discipline 4: Containment Pla Discipline 5: Corrective Active					
		on				
	Discipline 5: Corrective Active Activ	on	of Corrective Actions			
	Discipline 5: Corrective Active Activ	on Dimplementation:	of Corrective Actions Close or Open?			
	Discipline 5: Corrective Active Activ	on Dimplementation:				
	Discipline 5: Corrective Active Activ	on Dimplementation:	Close or Open? Next Verification Date:			
	Discipline 5: Corrective Active Activ	on Implementation: 8. Verification of Effectiveness	Close or Open? Next Verification Date:			
	Discipline 5: Corrective Active Activ	on Implementation: 8. Verification of Effectiveness	Close or Open? Next Verification Date:			
Disciplin	Discipline 5: Corrective Active Activ	on Implementation: 8. Verification of Effectiveness	Close or Open? Next Verification Date:			
Disciplir Reviewe	Discipline 5: Corrective Active HIRADC Reference/Date Prior to Discipline 6: Implementation Date: Details of Verification: Discipline 7: Action to Prevente 8: Approval	on Implementation: 8. Verification of Effectiveness	Close or Open? Next Verification Date:			

Fig. 9.4.18 Data Entry Form

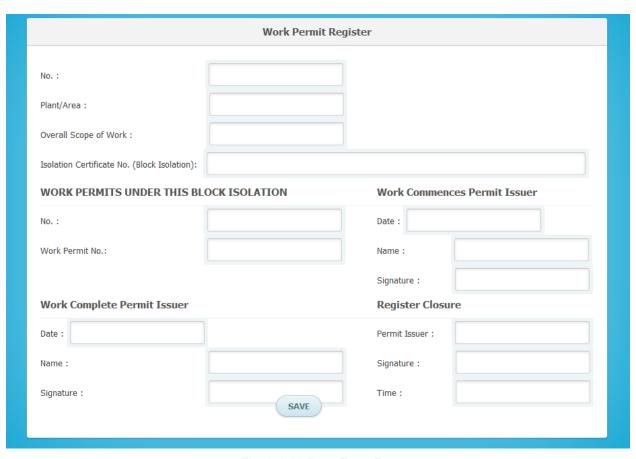


Fig. 9.4.19 Data Entry Form

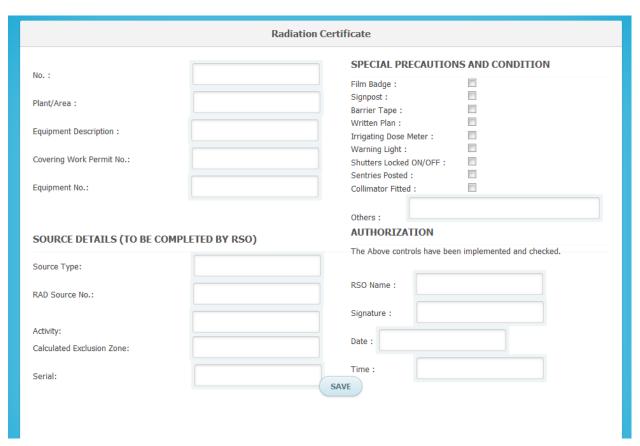


Fig. 9.4.20 Data Entry Form

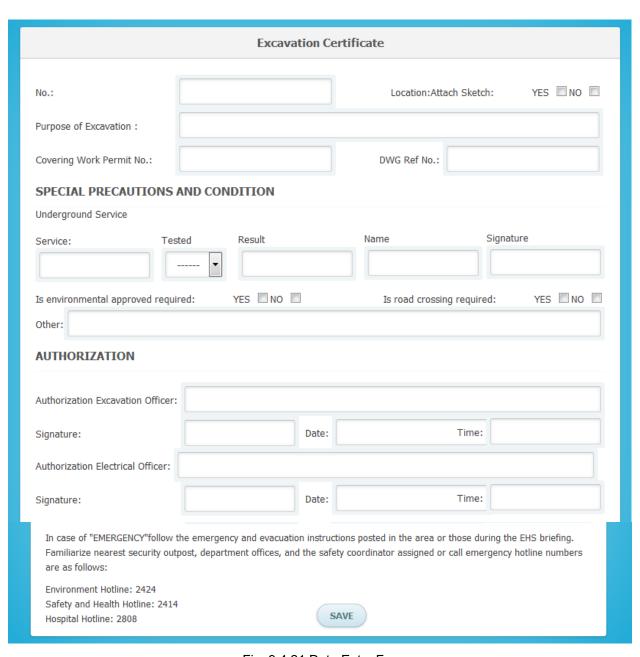


Fig. 9.4.21 Data Entry Form

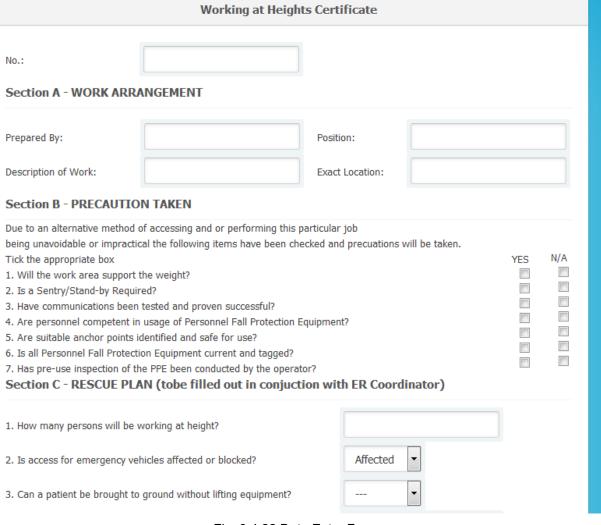


Fig. 9.4.22 Data Entry Form

4. List rescue equipment required and checks the current availability.	
5. List other external resources required.	
6. How many ERT members are required to implement the procedure?	
Are they availability? NO/YES ▼	
7. General Comments: I have inspected the job and discussed the rescue plan with the work team required Emergency/Response/Safety Coordinator:	and can implement the above rescue plan if
I have read, fully understand and will comply with all conditions stated on t fall arrest equipment Name:	his work at neight certificate Personal working with
I acknowledge that all preparatory work has been completed and that work	k is safe to proceed General Foreman Name:
In case of "EMERGENCY" follow the emergency and evacuation instructions Familiarize nearest security outpost, department offices, and the safety connumbers are as follows:	
Environment Hotline: 2424 Safety and Health Hotline: 2414 Hospital Hotline: 2808	
SAVE	

Fig. 9.4.23 Data Entry Form

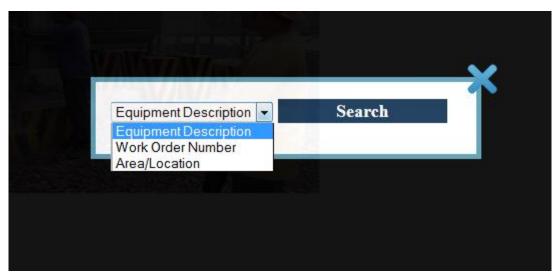


Fig. 9.4.24 Search

		Work Form	
WB#:			
COST C	ODE:		
DESCRI	PTION OF EQUIPMENTS:		
DESCRI	PTION OF DEFECTS:		
DATE S	TARTED:		
DATE F	NISHED:		
SECTIO	N MANAGER:		
UNIT MA	ANAGER:		
PE	RSONNEL:		
	1.		
	2. 3.		

Fig. 9.4.25 Work Form

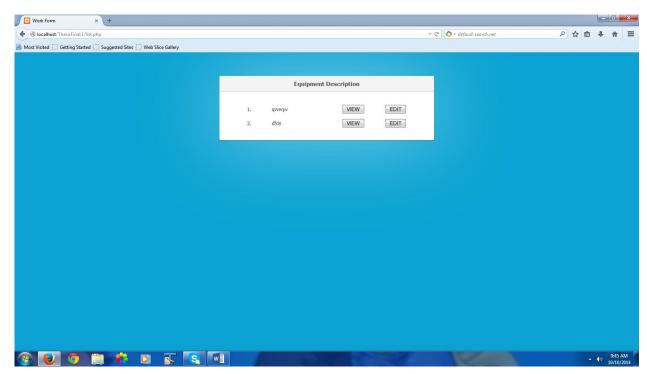


Fig. 9.4.26 Work Form

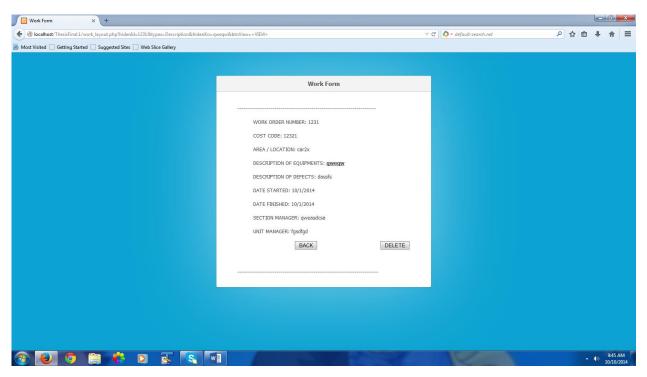


Fig. 9.4.27 Work Form

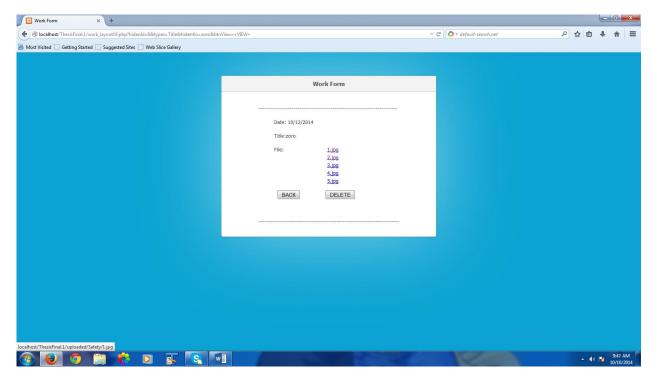


Fig. 9.4.28 Work Form

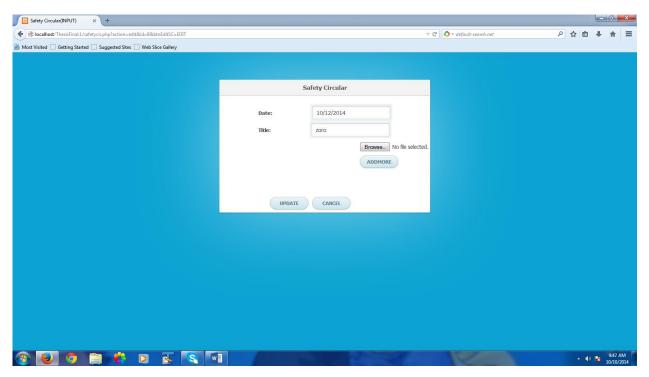


Fig. 9.4.29 Work Form

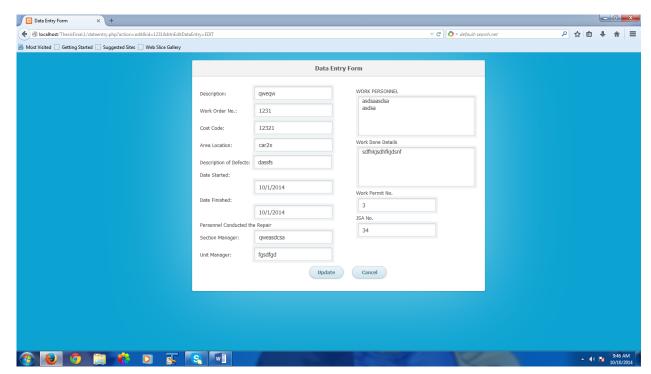
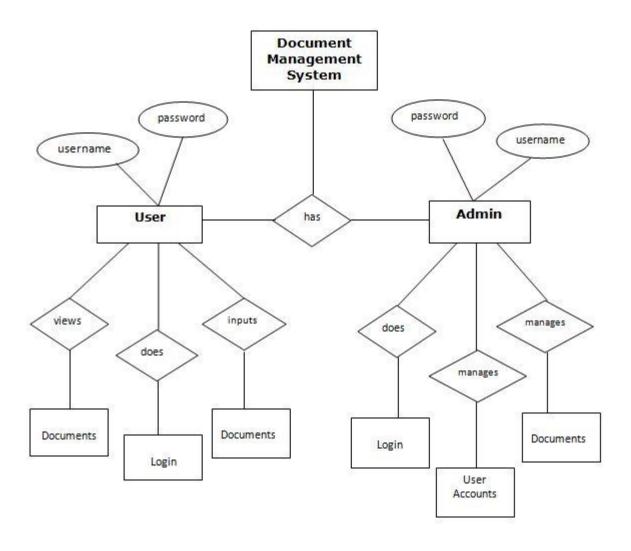
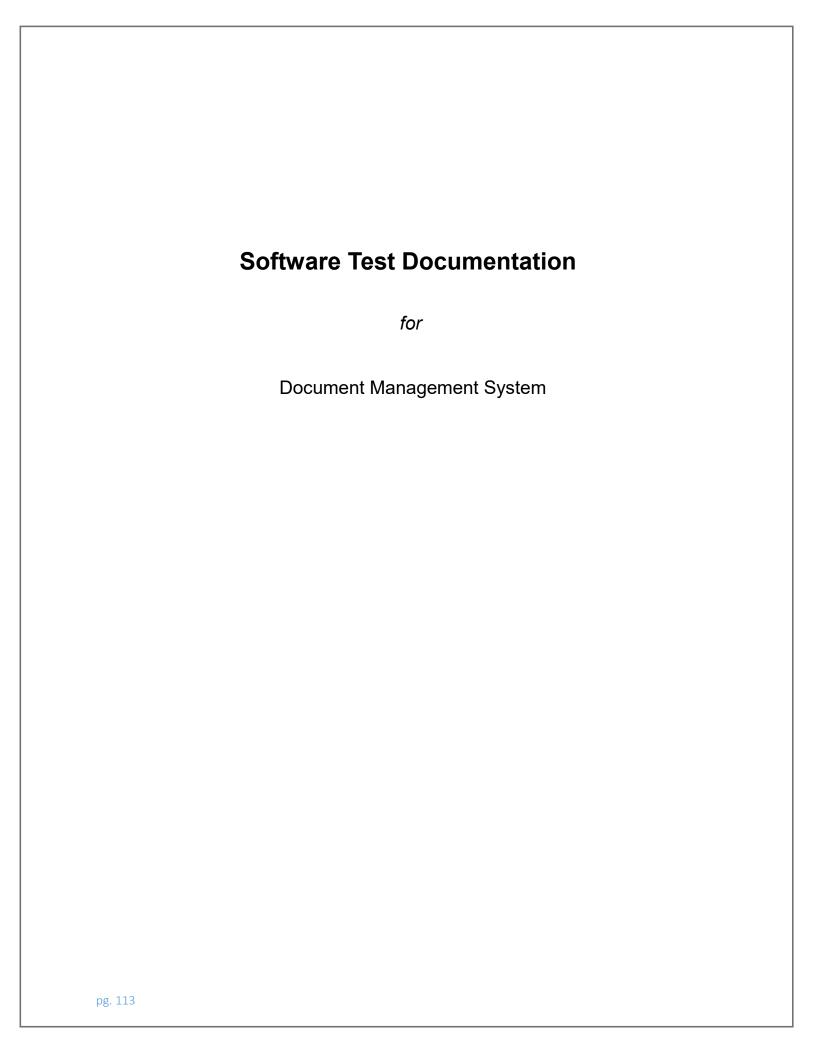


Fig. 9.4.30 Work Form

9.5. Entity-relationship diagram

9.5.1. Entity Relationship Diagram





Signature

MEMBERS	POSITION	SIGNATURE
Jheoganni Canda	Team leader, Programmer	
Ferrer Vincent C. Rosales	Programmer, Graphic Designer	
Honeylette V. Tingson	Graphic Designer, Tester	
Neldi Mar K. Cañizares	Documentation Officer, Tester	
Chatelyn Villareal	Graphic Designer	

Change History

Date	Primary Author	Description
August 14, 2014	Neldi Mar K. Cañizares	Initial version
October 10,	Neldi Mar K. Cañizares	Final Version
2014		

Preface

The contents of this document are based upon the concepts espoused in the document "IEEE Std. 829-1998 IEEE Standard for Software Test Documentation, IEEE Std. 1008-1997 IEEE Standard for Software Unit Testing and IEEE Std. 1012-1998 IEEE Standard for Software Verification and Validation."

The context of STD describes a process rather than a product. During system development, this document and its supplements provide the information needed to do adequate testing. It lists approaches and standards to ensure that a quality product that meets the needs of the user is produced. This document is augmented by supplementary documents that list schedules, assignments and results. A record of the final result of the testing should be kept externally. For the maintenance phase, this document provides the context for regression testing when any changes are made.

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Scope

This system test document presented is done in accordance with IEEE Std. 829 – 1998. This document is used as to test the system on its different functions.

There will be a testing plan in order to have a systematic testing for the system and in order to follow specific steps in testing the functionality. Test design will be specified identify the features to be tested by this design. Test case will also be specified identify the test design specification. There will be a test procedure to specify the steps for executing a set of test cases or more generally, the steps used to analyze software item in order to evaluate a set of features. A test transmittal report will be provided to identify test items being transmitted for testing. Most of all a test log is very important in order to provide a chronological record of relevant details about the execution tests. And a test log identifier to specify unique identifier assigned to the test log. And the test incident report to document the events that occur during the testing process that requires investigation. A summary report is provided to summarize the results of the designated testing activities and to provide evaluations based on these results.

These are the different test process that will be followed in order to evaluate the system. This portion will also tell us about the execution of the program with dynamic aspects of software testing. This show us the purpose, outline, the content of what's inside of the project and some documentation. It focuses on the dynamic part of the system by doing some testing in every module.

Document Version: 1.0

Published Date: 30 January 2014

References

• IEEE-SA Standards Board. (1998). *IEEE Recommended Practice for Software Testing Description*. Software Engineering Standards Committee of the IEEE Computer Society.

• Best Practices in Software Test Planning and Design. Retrieved August 14,2014, from http://testinginstitute.com/display.php

Document Version: 1.0

Published Date: 30 January 2014

Definitions

Contains key terms as used in this document:

3.1 design level:

The design decomposition of the software item (e.g., system, subsystem, program, or module).

3.2 pass/fail criteria:

Decision rules used to determine whether a software item or a software feature passes or fails a test.

3.3 software feature:

A distinguishing characteristic of a software item (e.g., performance, portability, or functionality).

3.4 software item:

Source code, object code, job control code, control data, or a collection of these items.

3.5 test:

- (A) A set of one or more test cases, or
- **(B)** A set of one or more test procedures, or
- (C) A set of one or more test cases and procedures.

3.6 test case specification:

A document specifying inputs, predicted results, and a set of execution conditions for a test item.

3.7 test design specification:

A document specifying the details of the test approach for a software feature or combination of software features and identifying the associated tests.

3.8 test incident report:

A document reporting on any event that occurs during the testing process which requires investigation.

3.9 testing:

The process of analyzing a software item to detect the differences between existing and required conditions (that is, bugs) and to evaluate the features of the software item.

3.10 test item:

A software item which is an object of testing.

3.11 test item transmittal report:

A document identifying test items. It contains current status and location information.

3.12 test log:

A chronological record of relevant details about the execution of tests.

3.13 test plan:

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A document describing the scope, approach, resources, and schedule of intended testing activities. It identifies test items, the features to be tested, the testing tasks, who will do each task, and any risks requiring contingency planning.

3.14 test procedure specification:

A document specifying a sequence of actions for the execution of a test.

3.15 test summary report:

A document summarizing testing activities and results. It also contains an evaluation of the corresponding test items.

4 Test Plan

4.1 Purpose

This Test Plan will prescribe the scope, approach, resources, and schedule of the testing activities. In addition, to identify the items being tested, the features to be tested, the testing tasks to be performed, the personnel responsible for each task, and the risks associated with this test plan. The primary focus of this plan is to ensure that the functionalities provide the expected output.

The purpose of this document is to describe the standards and procedures to follow during the software testing phases of the Document Management System. This document supports the section on Testing and Validation in the Integration and Methods Quality Manual.

The test plan is to provide the necessary information's needed for the verification and validation of the features and functionalities of the system. All test procedures will be done thoroughly and with enough credibility.

4.2 Outline

4.2.1 Test Plan Identifier

Functional Testing Plan for Document Management System.

4.2.2 Introduction

This test plan covers a full systems test of the Document Management System. This includes administrator and user procedures. In addition to comprehensively testing multi program functionality, external interfaces, security, recovery, and performance will also be evaluated. It will test software items for the Administrators and users.

All items that make up the Document Management System will be tested during the system test. The versions to be tested will be held and kept by the team leader. The leader will also control changes to the versions under test and notify the test group when new version are available.

This test plan is a planning document that shows the following:

- How the testing will be done
- Who will do it/persons responsible for the tasks
- · What items will be tested
- How long it will take for the testing to be done

4.2.3 Test Items

All items that make up the "Document Management System" features of will be tested during the testing.

The following documents will provide the basis for defining correct operation:

Software Requirements Specification (SRS)

Document Version: 1.0

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Software Design Description (SDD)

The items to be tested are as follows:

- Administrator procedures
- User procedures
- Program modules
- Program functions
- Program procedures
- Program interfaces

4.2.4 Features to be tested

The following list describes the features that will be tested:

- Data entry
- Login
- Database recordings
- Interface functions
- Interface procedures
- Data processing
- Registration

•

4.2.5 Features not to be tested

Not Applicable.

4.2.6 Approach

The testing for this project will consist of functional testing at the same time unit testing which test items will undergo. Each item shall be tested directly from execution and the testers will analyze the result or resulting action to check whether it functions correctly or not. Every test items such the buttons will be tested individually and thereon its functionality will be verified for any errors.

It is hoped that every member will be keen during the testing and will have at least one full time independent test person who is most likely the team leader who will also be the one to approve and verify everything.

In order to ensure privacy, all test data extracted from the company will have privacy-sensitive fields changed

4.2.6.1 Interface testing

The system will have a user – friendly GUI for the user to navigate the system easily. In order to test the interface, the test personnel will try to enter the system and click the buttons for further testing. There are required fields that need to be filled and will not proceed if left aside.

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4.2.6.2 Performance testing

The performance will be compared against the Software Design Description (SDD) by the measurement of the run times of several occurrences if the test version is able to meet the design description.

4.2.6.3 Regression

It is assumed that several iterations of the system test will be done in order to test program modifications made during the system test period. A regression test will be performed for each modifications of the system to detect unexpected impact resulting from program modifications.

4.2.6.4 Constraints

The proposed system shall be finished on last week of September which is a week before the Final Presentation. This project will use resources in the form of time and effort that will be spent for developing the project deliverables.

4.2.7 Item pass / fail criteria

The system must satisfy all the necessary requirements set by the client. Test items will be passed if the following requirements are met:

Test Item	Requirements
Software Design Modules	All links must be properly working.
Dynamic Part	All functions should work and run according to the features set by the developer and all contents of the dynamic part of the system should generate dynamic outputs.

[Table 4.2.7.1] Item pass / fail criteria

4.2.8 Suspension criteria and resumption requirements

4.2.8.1 Suspension Criteria

If any defects are found which seriously impact the test progress, the Quality Assurance officer may choose to suspend testing. Criteria that will justify test suspension are:

- Source code contains one or more critical defects, which seriously prevents or limits testing progress.
- Assigned test resources are not available when needed by the test team.

If testing is suspended, resumption will only occur when the problem(s) that caused the

suspension has been resolved. When a critical defect is the cause of the suspension, the "FIX" must be verified by the test department before testing is resumed.

4.2.8.2 Resumption requirements

After a new version of the system is conducted to the test group after the delay of testing has occurred, the regression test as described in 3.4.4 will be run.

4.2.9 Test deliverables

The following documents will be generated by the system test group and will be delivered to the project team after test completion.

Test documentation:

System Test Incident Reports Log

System Test Logs

System Test Incident Reports

System Test Procedure Specifications

System Test Summary Report

System Test Plan

System Test Design Specifications

System Test Case Specifications

Test data:

- Copies of all data entry and inquiry screens and the reply screens are to be attached to the related test case document.
- Copies of the input and output test files should be delivered to the project team.

4.2.10 Testing tasks

- Operation Testing
- Error recording
- Analysis on encountered errors
- Debugging
- Re Test

4.2.11 Environmental Needs

4.2.11.1 Hardware

Any computer will do if it is supported by the required specifications. The system will be running in a web browser.

4.2.11.2 *Software*

This system will be implemented through applications like Komodo

4.2.11.3 Security

This program is for private use. Only those who are able to register can login their account, it can be the administrator or a user.

4.2.11.4 Publications

The following documents are required to support systems testing:

- Software Requirements Specifications (SRS)
- Software Design Description (SDD)

4.2.12 Responsibilities

[Table 4.2.12.1] Responsibilities

Role	Responsibilities	
Team Leader	Software project planning and monitoringMilestone and schedule planning	
(Jheoganni Canda)	 Set and communicate the group meeting agendas Keep reminders of the group 	
System Developer	,	
(Jheoganni Canda,Ferrer Vincent C. Rosales)	 Write codes and optimize it if required Resolve the errors that occur in the software 	
Documentation Officer	In-charge in the document reportsKeeps accurate records	
(Neldi Mar K. Cañizares)	 Ensures that the project management method meets conventional standards Requirements specifier 	
Graphics Designer		
(Jheoganni Canda, Ferrer Vincent C. Rosales, Chatelyn Villareal)	5 5 1	
Quality Assurance/Tester		
(Honeylette V. Tingson/ Neldi Mar K. Cañizares)	Test the softwareDetermine the errors	
Systems Analyst	Analyzes the flow of the entire system	
(Jheoganni Canda)	Designing the Structure of the Database Canda)	

Each member has its individual responsibilities because each one has its own topic, each members

do research, planning, developing and animating. Each member focuses its respective topics.

4.2.13 Staffing and Training needs

All members already have the necessary skills to conduct the software testing. Therefore there will be no training provided for the team.

4.2.14 Schedule

Software testing will be conducted the last week of August and will end at the last week of September.

4.2.15 Risk and Contingencies

Delayed software testing of the other test items might require the team to extend the software testing time frame. If the testing schedule is significantly impacted by system failure, the project manager has agreed to assign a full-time person to the test group to do debugging. If hardware problems impact system availability during the day, then the test group will schedule their activities during the evening.

4.2.16 Approvals

[Table 4.2.16.1] Approvals

Date	Team	Signature
	Jheoganni Canda	
	Ferrer Vincent C. Rosales	
	Honeylette V. Tingson	
	Neldi Mar K. Cañizares	
	Chatelyn Villareal	

5 Test Design Specification

5.1 Purpose

To identify the test items being implement for testing. It includes the person who is responsible in testing each item. This report will help to determine the effectiveness and robustness of the system by testing each specified item features. It specifies refinements of the test approach and to identify the features to be tested by this design and its associated tests.

5.2 Outline

5.2.1 Test Case Specification Identifier

The Functional Testing Plan for Document Management System.

5.2.2 Features to be tested

The Features that to be tested

- Data entry
- Login
- Database recordings
- Interface functions
- Interface procedures
- Data processing
- Registration

5.2.3 Approach Refinements

The test personnel will use the IEEE Standard as a guideline in making the test design and test case specifications. The approach in this Software Test Document is to make the testing phase for Document Management System for Software Design be neatly organized.

Interface Testing

During interface testing, different inputs will be entered, including erroneous ones.

Security Testing

The log in panel will be tested if it follows the specified function stated in the Software Requirements Specifications document. This is to check that the system is critically filtered.

Constraints

There will be a scheduled final test of the system on October 2014. There might be constraints that would occur. However, full effort shall be given in order to fully meet the target output.

5.2.4 Test Identification

The system must satisfy the set requirements of the clients. The following will be the basis for the item testing:

- Resulting action based on its purpose
- User input
- Generated output
- Compliance from its functionality

5.2.5 Features Pass/Fail Criteria

The system must satisfy all the necessary requirements set by the client. Test items will be passed if the following requirements are met:

[Table 5.2.5.1] Item pass / fail criteria

Test Item	Requirements
Software Design Modules	All links must be properly working.
Dynamic Part	All functions should work and run according to the features set by the developer and all contents of the dynamic part of the system should generate dynamic outputs.

Test Case Specification

6.1 Purpose

The purpose of this document is to indicate the item to be tested, such as a particular module or product feature. It includes a reference to the corresponding test design document and describes any dependence on execution of other test cases. Like any standard document, a test case specification is labeled with a unique identifier.

6.2 Outline

Test Case Specification Identifier 6.2.1

The Functional Testing Plan for Document Management System for Software Design.

6.2.2 Test Items

All items that make up the "Document Management System" features of will be tested during the testing.

- Login Form
- Login Button
- Data Entry Menu
- Data Entry Form
- Work Form
- Registration
- Document Bank

6.2.3 Input Specifications

Must be using desktop to open this system.

6.2.4 Output Specifications

Specify all of the outputs and features required of the test items. Provide the exact value (with tolerances where appropriate) for each required output or feature.

- I. Login Form
 - A. Username/Password
 - 1. Username

Enter username to login.

2. Password

Enter password for security purposes.

3. Login Button

Click login button to enter the system.

- II. Inside The System
 - A. Home Link

Click to go to home page.

B. Data Entry

Click to show drop down menu.

C. About

Click to show a description about the system.

D. Contact

Click to show the contact details of the company.

III. Data Entry Form

Input description, work order number, cost code, description of defects.

A. Send Button

Click to save the inputted document.

B. Cancel Button

Click to exit.

IV. Work Form

Displays the document/file inputted.

6.2.5 Environmental Needs

Software testing will be done using the following resources:

Hardware:

• Personal Computer or laptop with any Operating System

Software:

- Web Browser
- Notepad++ & Komodo

6.2.6 Specific Procedure Requirements

All users must be computer literate or must have a little knowledge in how to operate a computer in order for the user to use the system.

7 Test Procedure Specification

7.1 Purpose

To specify the steps for executing a set of test cases or, more generally, the steps used to analyse a software item in order to evaluate a set of features.

From the module level to the application level, this article defines the different types of testing. Depending upon the purpose for testing and the software requirements/specs, a combination of testing methodologies is applied. One of the most overlooked areas of testing is regression testing and fault tolerant testing.

7.2 Outline

7.2.1 Test procedure specification identifier

Functional Testing Plan for Document Management System for Software Design.

7.2.2 Purpose

This procedure has the main purpose is to achieve the execution of the test case and to minimize all the errors that can occurred when the test is conducted.

7.2.3 Special Requirements

Full attention of the developer and also the tester's knowledge ideas on how to deal on the testing process is most required.

7.2.4 Procedure Steps

- All members should be prepared for the test and anticipate possible errors
- Gather all the requirements and provide appropriate data need for the test.
- Document the test results in any way suitable for recording

A. Log

Test results will be immediately recorded.

• Errors will be tested during the tests therefore a pen and paper will do.

B. Set Up

Hardware and software performance will be added to ensure that such external factors will not influence the test results.

• Turn on the laptop or PC.

C. Start

Start the testing with the external functionalities and then its internal functionalities.

Open the Application from Desktop.

D. Proceed

During the execution of test procedure, a priority must be met which is to finish the interrupted testing.

Run tests according to test cases and modules.

E. Measure

Precautionary measures are applied during the execution of the procedure such as time table management to have enough time and to be well-organized.

 Measurements during the testing process will be based on human observations and each will be logged. Measurements with regards to time will be done manually using timers. Anything that goes wrong will be logged as well.

F. Wrap Up

Close program.

G. Restart

Any revisions made to the interface or some of the codes, considering the time can be covered by debugging codes and making retouches from the user interface, must construct ideas out of the members to help generate a new output.

• If you are restarting, restart the application and run source code again.

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8 Test summary report

8.1 Purpose

The purpose of this report is to identify the individual test items that are being transmitted for testing. Beside the status of the test, the item transmittal report also includes the physical location of the test and the responsible tester of each item.

To summarize the results of the designated testing activities and to provide evaluations based on these results.

8.2 Outline

8.2.1 Test summary report identifier

Functional Testing Plan for Document Management System for Software Design.

8.2.2 Summary

A test has been conducted and initially uncovered the errors which immediately resolved by the developers.

8.2.3 Summary of results

The conduct of the test is a success and some of the minor errors had been uncovered which immediately resolved.

8.2.4 Evaluation

This section provides an overall evaluation of the testing process including problems and limitations.

The tested items for the features of the project are functioning well and served its purpose. Thus, it made the test a successful one.

8.2.5 Summary of activities

As a summary of the activities, those were performed for the testing and for achieving the goal of the test execution.

8.2.6 Approvals

The people that are involved in approving this document is/are:

Mrs. Leah V. Barbaso - Software Project Adviser

9 Annexes