

K-DMS Bank Document Management System (DMS)

Chapter One

Introduction

What is DMS?

Often identified as DMS (Document Management System), a Document Management System incorporates the use of a computer system and software to store, manage and track electronic documents and electronic images of paper-based information captured through the use of a document scanner (Intelligent Information Management Glossary).

In order to maintain an effective record management system for paper documents, there are usually a few components involved. After you've outlined your business information management goals, establishing a document retention schedule is the next critical step. This helps you to both organize records based on their purpose within your organization, as well as ensure your useless or no longer needed records are being removed or destroyed in a timely fashion—in turn helping to manage your overall record inventory (Records Nations, 2016).

Banks and Document Management

A **Bank** is a financial institution licensed to receive deposits and make loans. **Banks** may also provide financial services such as wealth management, currency exchange, and safe deposit boxes. In most countries, **banks** are regulated by the national government or central **bank**.

The history of banking began when empires needed a way to pay for foreign goods and services with something that could be exchanged easily. Coins of varying sizes and metals eventually replaced fragile, impermanent paper bills.

Banking has been around in one form or another throughout recorded history, as issuers of currency and as stores of wealth. Even before currency emerged, starting with the first minted coins, and then adding what were known as banknotes, paper currency, banks still were around to manage the accumulation of assets.

In ancient times, temples typically performed this function, and in addition to storing money for others, and providing security to depositors, there is evidence to suggest that these temples also lent out money, although their function was primarily to store assets. We now had the makings of the first retail banking system, from which banks as we know today evolved from.

Almost the entire framework in the banking sector requires documentations. In Kenya the CBK's regulations allows banks to maintain records for up to 10 years (icpak, 2015). The World Bank's *Records Management Roadmap* system is a multi-part toolkit, designed to help governments and public-sector organizations

implement strategic and coordinated improvements in records management (World Bank).

Also, take into consideration the security risks involved in keeping all your bank documents stored in a filing cabinet. Customers trust their banks with sensitive information stored in their accounts. Your customers' private, financial data is as valuable as the cash in your vault. In fact, their financial information is probably worth more than the cash. The right bank management software can take care of this problem. The (Quipu Credit Group) acknowledges that bank DMS creates real benefits in terms of increased efficiency, greater security and time efficiency.

Information exchange allows for a productive exchange between engineering and marketing about the release of a new product and gets information on prospective employment candidates to the human resources department. Improving communication between departments improves the efficiency of the overall operation of your organization (Small Business, 2019).

Problem Statement

On daily basis banks encounter numerous transactions which involves documentations. Such transactions at times requires interdepartmental engagements of which may entail a lot back and forth especially when sharing the information of which may results to lost time, resource wastage and clients inconveniences and the security and integrity of the sensitive documents being compromised.

Objectives

- To save lots of time in information/documents sharing
- To provide a more safer documentation framework
- To organize business files and records digitally

Scope

The project aims to generate a document management system that will be able to ;

- Interact by uploading documents to the database.
- Work that will allow easier or real time interdepartmental info sharing including in emails.
- Segment info departmental wise in databases.
- Establish various access protocols will oversee held info security.

Project Schedule

| Time | Activities | Deliverables |
|-----------|--|--------------------|
| Week 1 | Project research and Ideas generation | Concept |
| Week 2 -4 | Project Proposal | Chapter one -three |
| Week- 5-6 | Project Initiation (Entity relations (DBSM) Chapter | |
| Week 7-10 | -Back-End and Front end project dev -Progress report and consultation | Full Application |
| Week 11 | Project Documentation | Project Document |
| Week 12 | Presentation | |

Budget

| Items/activity | Costs |
|--|------------|
| Laptop: Specification (minimum 8Gb Ram or ssd upgrade, PU: 11th-generation Intel Core i5 – i7, PU: 11th-generation Intel Core i5 – i7) | 40,000 Kes |
| Software : Front End (Javascript , Vue Js) Back End (Mysql, Php) | 1000 Kes |
| Back Up (1 TB hard disk) | 5,000 Kes |
| Cloud hosting (Amazon) | 2000 Kes |
| Marketing and Presentations | 10,000 Kes |
| Total Substantive Cost | Kes 58,000 |

Chapter 2

Evaluative Report

This segment aims to provide more insight into strive that have been gained when comes to documentation systems and automations.

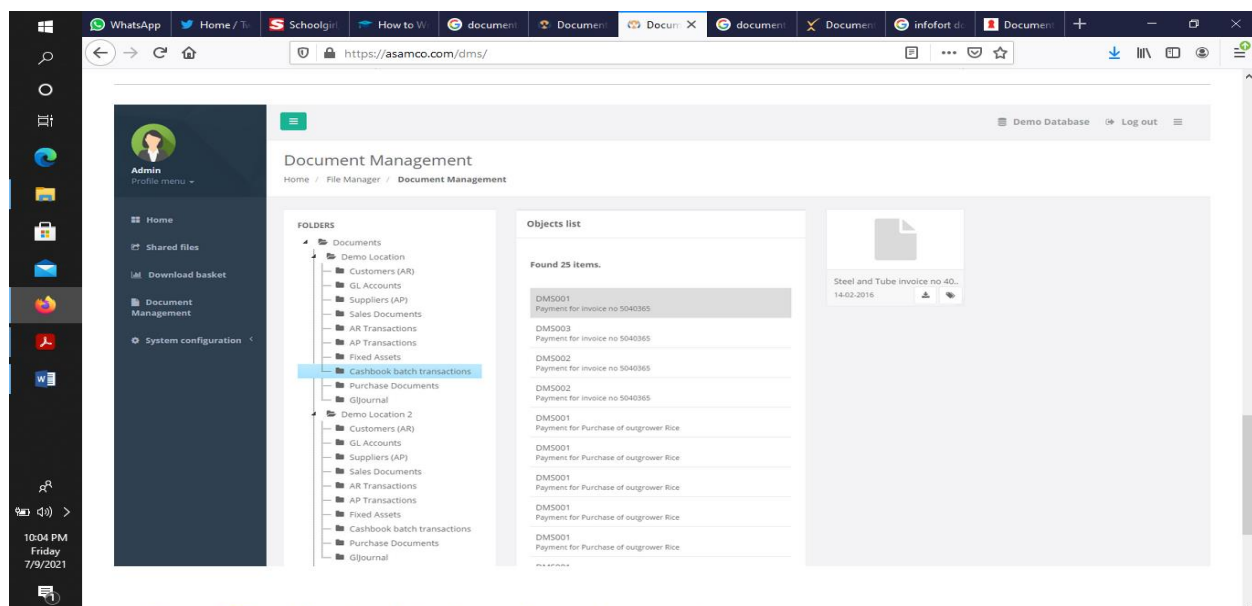
What is K-Dms?

K-DMS will be a system aimed at providing solutions to some of short falls in corporate document management frameworks. The K-DMs has been inspired with shift in digitalization in information exchange and record keeping. The recent decades have seen the rise of systems like Asamco , Infocort and more that allows corporates to easily manage business documents in one central place.

Overview into existing project

Asamco

The Document Management System ('DMS') allows you to easily manage your business documents in one central place within SAGE Evolution. It can be used in a web-environment or as an add-on module for SAGE Evolution. By using the DMS Evolution module, you will be able to upload documents and files directly into DMS from Sage Evolution.



Asamco User Interface

How does it work?

DMS provides you with valuable features on document management and serves as an easy solution for storing and linking documents from within SAGE Evolution, while also providing access to these documents through a web interface.

The integration of the Document Management System in SAGE Evolution allows users to attach documents to master data and transactional records within SAGE Evolution, while also allowing them to:

Control, create and authenticate documents

Ensure security and safety of documents by preventing unauthorized access: *As the DMS server can be deployed on your own (Evolution) server, all your documents will be safely stored with your own IT security*

Track, display and compare document versions

Infofort

The infofort provides both cloud and remote based document management framework. All Documents and Files in storage are kept anonymous through InfoFort's advanced barcoding system, random allocation, and separation of knowledge. **Security** is also scalable and you perform part of the authentication process when InfoFort retrieves your Documents and Files.

ENSUR Document Management System

ENSUR is a document control and specification management software application that automates the management of documents and their workflows.



ENSUR user interface

Key elements

| | |
|------------------|---|
| Audit Trails | Completely reportable document history |
| Document Control | Complete version control of documents, including multi-user collaboration and review/approval routing |
| Find | Advanced searching of content, form data and metadata |

| | |
|----------|--|
| Mail | SMTP integration with your existing email for automatic receipt of document workflow notifications |
| Overlays | Create dynamic headers and footers and watermarks with document metadata |
| Report | Extensive Reports functionality by Administrators and general users to report and export critical data from within ENSUR |

Short- comings of current systems

While most of this systems presents defining factors on shaping cloud based data sharing the below elements inconsistencies still prevails.

Loss or chaotic distribution of information

Bank records are often listed to be amongst the most sensitive and hence they require proper and systematic handling and while strict controls on who to share what? With who? And, When?

Inaccurate filing methods and activities

With lack of data segmentation it may be challenging to retrieve any data. Data on K-DMS will be segmented based on department s

Strengths of the K-DMS

Secure: Only authorized users will be allowed to transact on the system. For one to be a user they will need to be authorized by the system admin

Real time information Sharing: Users will be able to access and share documents in real-time either on mail or in restricted shared folder thus saving time

Threats on K-DMS

Stiff competition from other industrial players who are better equipped with state of the art resources

The success is dependent on the goodwill and integrity of the users

Chapter 3

Methodologies

Key deliverables for K-DMS will include but not limited to data sharing, data storage and data protection.

The system maintains two levels of users:

- I. Administrative level.
- II. User-level.
 - ✓ The software maintains user details.
 - ✓ Provides users details for logins

Overall Description.

Product Perspective

Key deliverables for K-DMS will include but not limited to data sharing, data storage and data protection.

Product Features.

The system features can be described as follows:

Share

The feature will prompt the user to share the document with colleagues either on email or in a shared departmental folder and interfaces

Delete

This will provide the user with opportunity to remove non-resourceful documents

Upload

Users will be able to use the element generate documents into the systems

Archive

On a click on the archive button the uploaded file will be posted to the database

Download

The feature will enable users to retrieve data from systems and store them remotely

Departments

Users will be listed departmental wise that is customer service, cash, relationship and operations

User login

Users will be able to log in the system for them to access the services.

Operating Environment.

Operating environment for the K-DMS system is as follows:

Operating system: windows.

Database: Msql

Design and implementation constraints.

- ✓ The system will be accessible online.
- ✓ The database is password protected.
- ✓ Should use less ram and less processing power.
- ✓ Each user should have an individual id and passwords.
- ✓ Only the admin can access the whole system.

Assumption Dependencies.

- ✓ The user of this system is already computer literate.
- ✓ Each user must have a valid username and password.
- ✓ Users must log in to the system to access any record.
- ✓ Only the authorized user can delete any record.

Hardware Interface:

- ✓ Operating system: windows
- ✓ Hard disk: Minimum 40gb.
- ✓ Ram: 526mb.
- ✓ Processor: Pentium(R) dual-core cpu.

Software

- ✓ Php
- ✓ vue framework
- ✓ Mysql

- ✓ Hosting Software
- ✓ Sublime text editing tool

Safety Requirement.

Humans are error-prone but the negative effects of common errors should be limited. In that users should realize that a given command will delete data, and be asked to confirm their intent and given the option to undo.

Security Requirement:

- ✓ user identification:
The user will be identified with their log in footprint
- ✓ Login:
Any user who uses the system shall have a login username and password.
- ✓ Modification:
Any modification (insert, delete, update) for the database shall only be synchronized by the admin.
- ✓ Administration Rights:
Administrators shall be allowed to view and modify all information in the system.
- ✓ Each user have limited access and mandate

Software Quality Attributes:

- ✓ Availability
The system shall be available at all times.
- ✓ Reusability
The software can be used again and again without distortion.
- ✓ Correctness:
A bug-free software that fulfills the client's needs.
- ✓ Accessibility:
Admin and other users can access the system but access level is controlled depending on the type of user.
- ✓ Maintainability:
Includes:

- Back-up- The system shall provide the capability to back up the data.

Conclusion

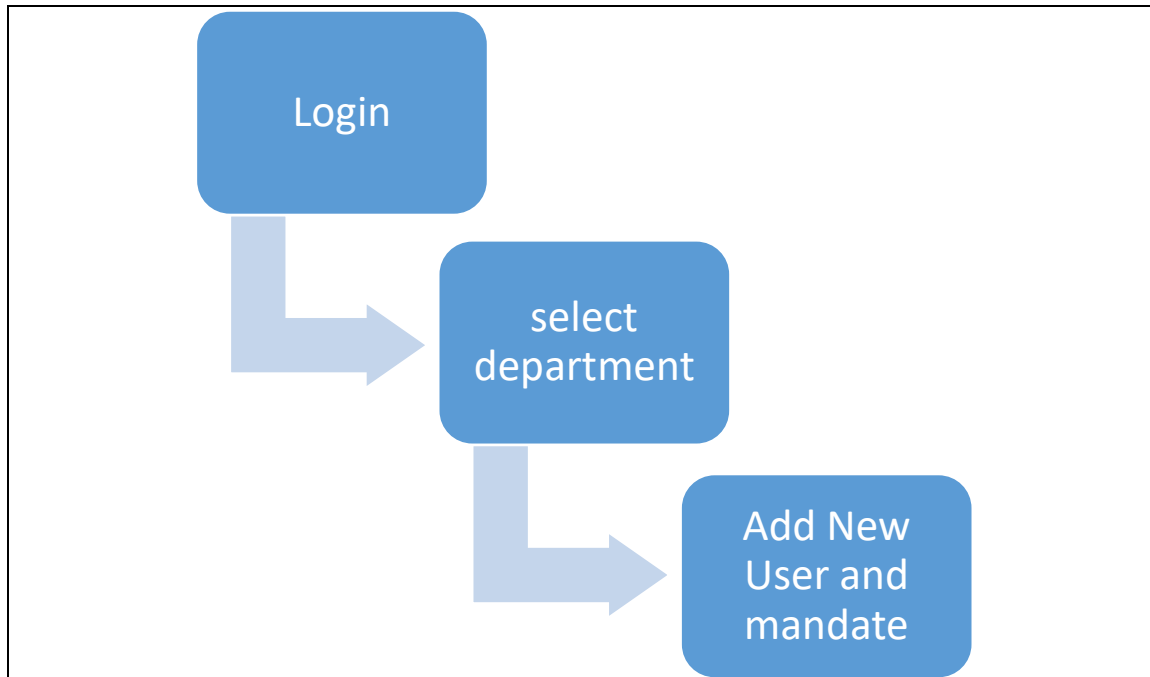
In this, all the functional and non-functional requirements are specified in order to get a clear cut idea to develop a project

MAJOR CONSTRAINTS.

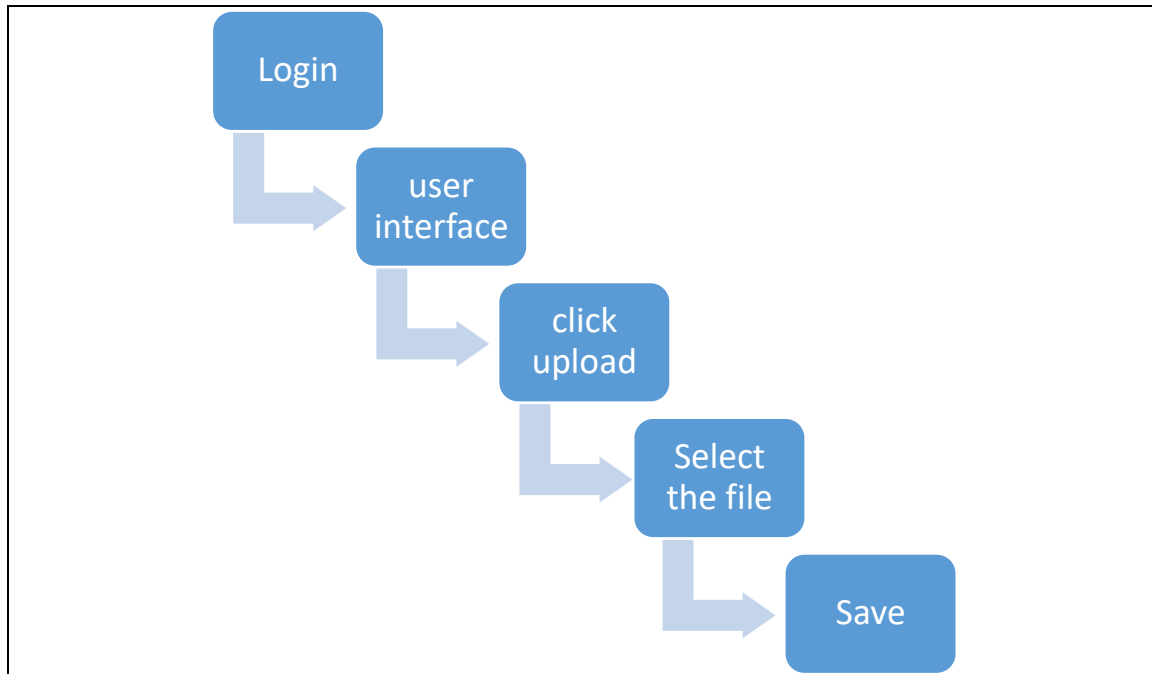
The system is only accessible online. Each user should have an individual id and password and accessible to the internet

System Design

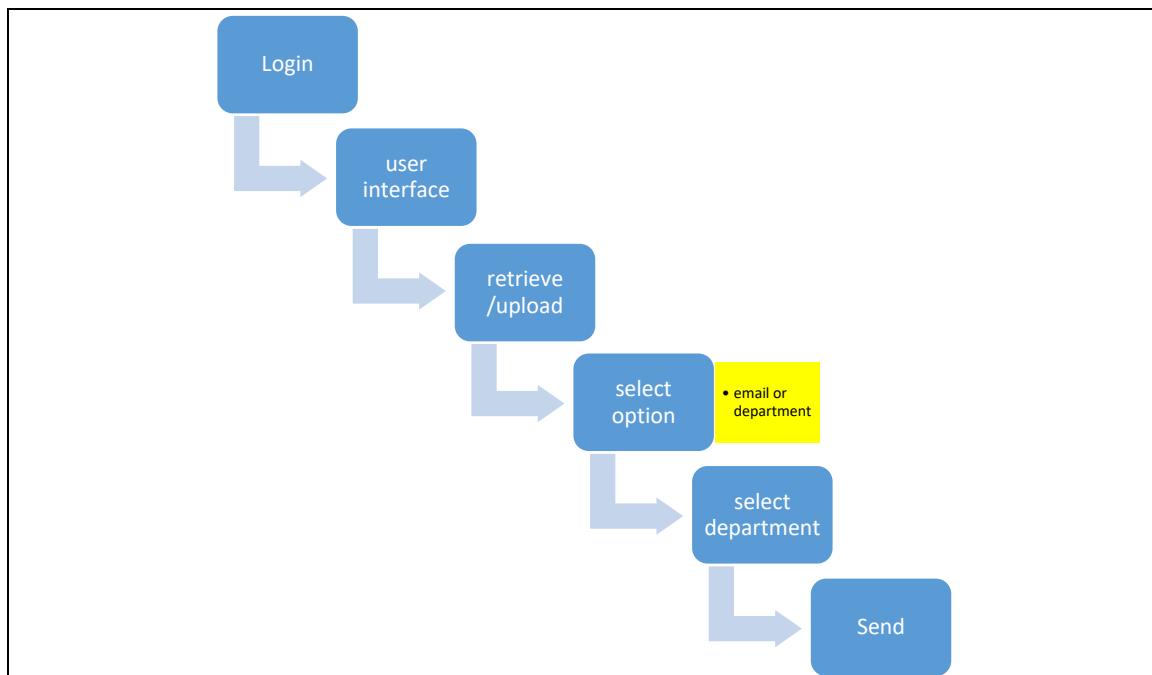
Case for Admin adding new user



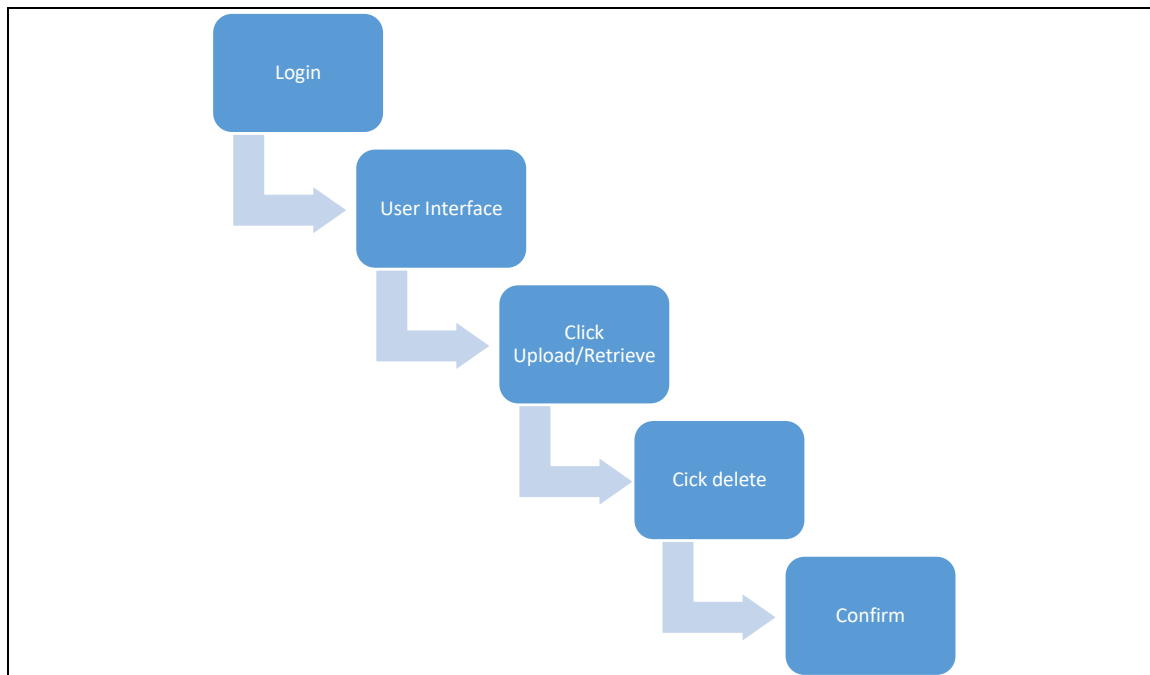
Case for user uploading a file



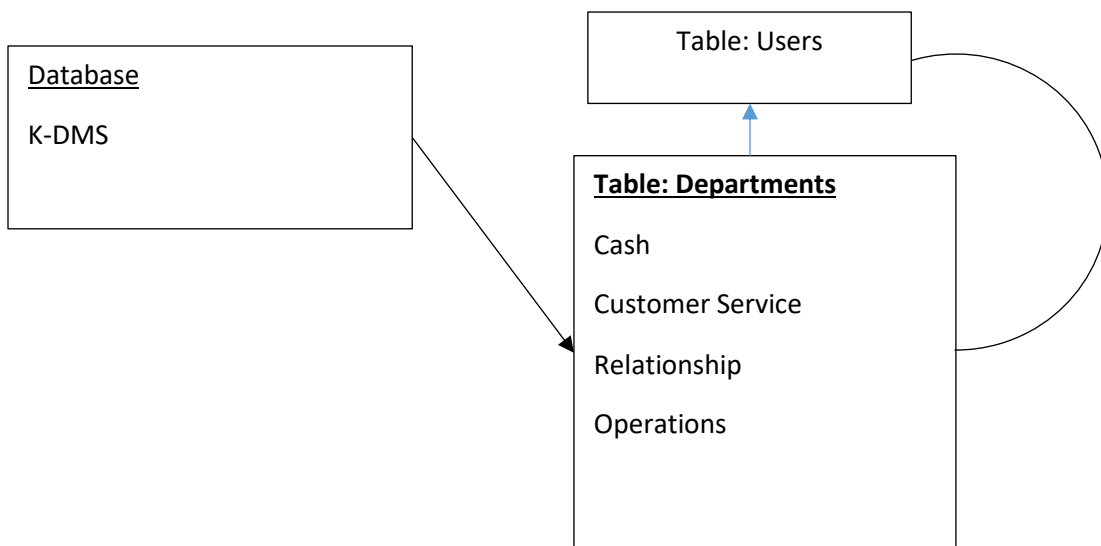
Case for sharing record



Case of document deletion



Data Base Design



Testing

The project will employ a prototyping methodology or the testing the design team's focus is to produce an early model of the new system, software, or application. This prototype won't

have full functionality or be thoroughly tested, but it will give external customers a sense of what's to come.

System Evaluation and Maintenance

Systems evaluation ranges at three levels which include at the application level, functional level or the technological level.

The application determines the systems' boundaries, the degree of abstraction and the suitable methods.

The system will be inclusive of the undermentioned. This help limit chances of non-issues detection during implementation. In this regard optimization will not be limited to both upward and downward approaches