ENAT BANK

Software Requirements Specification

Version 1.0

November 4, 2022

Case Management System

Prepared by:

System Development Division Team

Table of Contents

Software Requirements Specification

1.   Introduction

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, definitions, acronyms, abbreviations, references and overview of the SRS. The aim of this document is to gather and analyze and give an in-depth insight of the complete **Case Management System** by defining the problem statement in detail.

1.1   Purpose

The purpose of the document is to collect and analyze all assorted ideas that have come up to define the system, its requirements with respect to consumers. Also, we shall predict and sort out how we hope this product will be used in order to gain a better understanding of the project, outline concepts that may be developed later, and document ideas that are being considered, but may be discarded as the product develops.

In short, the purpose of this SRS document is to provide a detailed overview of our software product, its parameters and goals. This document describes the project's target audience and its user interface, hardware and software requirements. It defines how our client, team and audience see the product and its functionality. Nonetheless, it helps any designer and developer to assist in software delivery lifecycle (SDLC) processes.

1.2   Scope

Primarily, the scope pertains to the Case-Management product features for making the process of dealing with cases that the Bank and Its customers face live; instead of keeping records and following up a case manually. It focuses on the company, the stakeholders and applications, which allow for online sales, distribution and marketing of electronics.

This SRS is also aimed at specifying requirements of software to be developed but it can also be applied to assist in the selection of in-house and commercial software products. The standard can be used to create software requirements specifications directly or can be used as a model for defining an organization or project specific standard. It does not identify any specific method, nomenclature or tool for preparing an SRS.

1.1   References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements*

   Specifications. IEEE Computer Society, 1998.

1.2   Overview

The remaining sections of this document provide a general description, including characteristics of the users of this project, the product's hardware, and the functional and data requirements of the product. General description of the project is discussed in section 2 of this document. Section 3 gives the functional requirements, data requirements and constraints and assumptions made while designing the E-Store. It also gives the user viewpoint of the product. Section 3 also gives the specific requirements of

the product. Section 3 also discusses the external interface requirements and gives detailed description of functional requirements. Section 4 is for supporting information.

2. Overall Description

This document contains the problem statement that the current system is facing which is hampering the Case Management work and Auditing a bit difficult. It further contains a list of the stakeholders and users of the proposed solution. It also illustrates the needs and wants of the stakeholders that were identified in the brainstorming exercise as part of the requirements workshop. It further lists and briefly describes the major features and a brief description of each of the proposed systems.

The following SRS contains the detailed product perspective from different stakeholders. It provides the detailed product functions of E-Store with user characteristics permitted constraints, assumptions and dependencies and requirements subsets.

2.1 System Environment
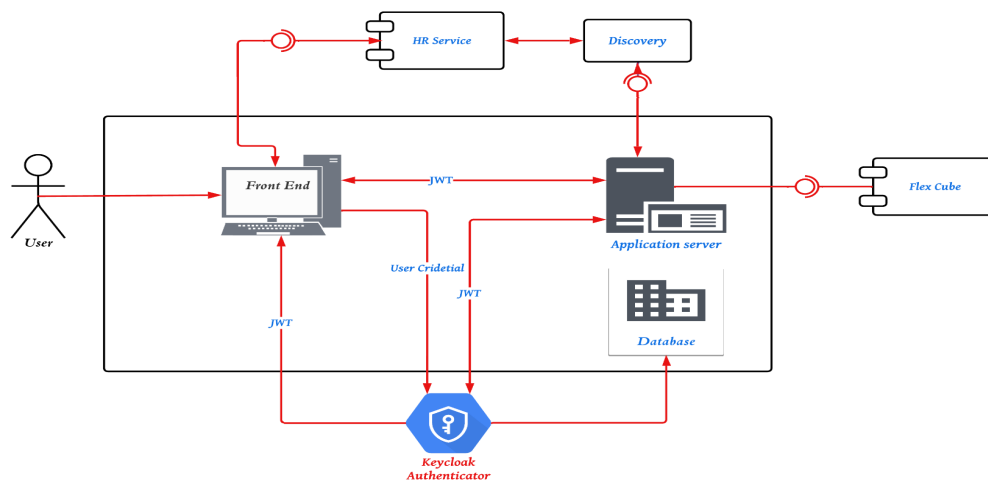
3. Specific Requirements

The specific requirements are –

3.1 Functionality

Introduction –

This subsection contains the requirements for the e-store. These requirements are organized by the features discussed in the vision document. Features from vision documents are then refined into use case diagrams and to sequence diagrams to best capture the functional requirements of the system. All these functional requirements can be traced using a traceability matrix.

3.1.1   Create Type Of Mortgage.

3.1.1.1 The system shall allow the user to navigate to the type of mortgages page.
3.1.1.2 The system shall allow the user to see the list of previously created mortgage types.
3.1.1.3 The system shall allow the user to navigate to add a new mortgage type page.
3.1.1.4 The system shall enable users to fill out all required information and persist new mortgage types.
3.1.1.5 The system shall notify the user about any conflict while creating the mortgage types.
3.1.1.6 The system shall allow users to change | modify | correct the entered information.
3.1.1.7 The system shall allow user to confirm the completion of current configuration | mortgage creation.

3.1.2   View Details of Mortgage.

3.1.2.1 The system shall display detailed information of the selected mortgage type.
3.1.2.2 The system shall provide browsing options to see mortgage details.

3.1.3   Update Mortgage Type

3.1.3.1 The system shall allow the user to update an existing mortgage that is created by them.

3.1.4   Search Mortgage Type

3.1.4.1 The system shall enable users to enter the search text on the screen.
3.1.4.2 The system shall enable users to select multiple options on the screen to search.
3.1.4.3 The system shall display all the matching products based on the search.
3.1.4.4 The system shall notify the user when no matching product is found on the search.

3.1.5   Create a Mail Schedule type.

3.1.5.1 The system shall allow the user to navigate to the Mail Schedule Types page.
3.1.5.2 The system shall allow the user to see the list of previously created Mail Schedule types.
3.1.5.3 The system shall allow the user to navigate to add a new Mail Schedule page.
3.1.5.4 The system shall enable users to fill out all required information and persist new Mail Schedule types.
3.1.5.5 The system shall notify the user about any conflict while creating the Mail Schedule types.
3.1.5.6 The system shall allow user to confirm the completion of current configuration | Mail Schedule creation.

3.1.6   View Details of Mail Schedule Types

3.1.6.1 The system shall display detailed information of the selected Mail Schedule type.
3.1.6.2 The system shall provide browsing options to see Mail Schedule details.

3.1.7   Update Mail Schedule Type

3.1.7.1 The system shall allow the user to update an existing Mail Schedule Type that is created by them.

3.1.8 Create Expense Type

3.1.8.1 The system shall allow the user to navigate to the Expense Types page.
3.1.8.2 The system shall allow the user to see the list of previously created Expense Types.
3.1.8.3 The system shall allow the user to navigate to add a new Expense Types page.
3.1.8.4 The system shall enable users to fill out all required information and persist new Expense types.
3.1.8.5 The system shall notify the user about any conflict while creating the Expense types.
3.1.8.6 The system shall allow user to confirm the completion of current configuration | Expense Type creation.

3.1.9 View Details of Expense Type

3.1.9.1 The system shall display a detailed invoice for the current order once it is confirmed.
3.1.9.2 The system shall provide browsing options to see Expense Type details.

3.1.10 Update Expense Type

3.1.10.1 The system shall allow the user to update an existing Mail Schedule Type that is created by them.

3.1.11 Create Auction type

3.1.11.1 The system shall allow the user to navigate to the auction types page.
3.1.11.2 The system shall allow the user to see the list of previously created auction types.
3.1.11.3 The system shall allow the user to navigate to add a new auction type page.
3.1.11.4 The system shall enable users to fill out all required information and persist new auction types.
3.1.11.5 The system shall notify the user about any conflict while creating the auction types.
3.1.11.6 The system shall allow users to change | modify | correct the entered information.
3.1.11.7 The system shall allow user to confirm the completion of current configuration | auction type creation.

3.1.12 View Auction type Details

3.1.12.1 The system shall display detailed information of the selected auction type.
3.1.12.2 The system shall provide browsing options to see auction details.

3.1.13 Update Auction Type

3.1.13.1 The system shall allow the user to update an existing Auction type that is created by them.

3.1.14 Delete Auction Type

3.1.14.1 The system shall display and allow the user to delete an existing auction type.

3.1.15 Create Foreclosure

3.1.15.1 The system shall allow the user to navigate to the foreclosures page.
3.1.15.2 The system shall allow the user to see the list of previously created foreclosures..
3.1.15.3 The system shall allow the user to navigate to add a new foreclosure page.
3.1.15.4 The system shall enable users to fill out all required information and persist new foreclosure..
3.1.15.5 The system shall notify the user about any conflict while creating the foreclosure..
3.1.15.6 The system shall allow users to change | modify | correct the entered information.
3.1.15.7 The system shall allow users to confirm the completion of current foreclosure creation.

3.1.16 Update Foreclosure

3.1.16.1 The system shall allow the user to update an existing Mail Schedule Type that is created by them.

3.1.17 View Foreclosure Details

3.1.17.1 The system shall display detailed information of the selected auction type.
3.1.17.2 The system shall provide browsing option
3.1.17.3s to see auction details.

3.1.18 **Approve Foreclosure**

3.1.18.1 The system shall enable users [credit users] view list of initiated foreclosure.
3.1.18.2 The system shall navigate users to the details page when users click the desired foreclosure's detail button.
3.1.18.3 The system shall enable users to approve when they press the approve button.
3.1.18.4 The System shall notify users about any conflict during the approval of the foreclosure.
3.1.18.5 The System shall enable users to confirm the completion of the current intervenes creation.

3.1.19 **Decline Foreclosure**

3.1.19.1 The system shall enable users [credit users] view list of initiated litigations.
3.1.19.2 The system shall navigate users to the details page when users click the desired litigations' detail button.
3.1.19.3 The system shall enable users to decline when they press the decline button.
3.1.19.4 The System shall notify users about any conflict during the declination of the litigation.
3.1.19.5 The System shall enable users to confirm the completion of the current intervenes creation.

3.1.20 **Assign Attorney Foreclosure**

3.1.20.1 The system shall enable users [credit users] view list of initiated foreclosure.
3.1.20.2 The system shall navigate users to the details page when users click the desired foreclosures' detail button.
3.1.20.3 The system shall enable users to Assign an Attorney when they select an attorney and press the Assign Attorney button.
3.1.20.4 The System shall notify users about any conflict during the assigning of an attorney.
3.1.20.5 The System shall enable users to confirm the completion of the assignment creation.

3.1.21 **Comment On ForeClosure**

3.1.21.1 The system shall allow users to navigate to the foreclosure details page..
3.1.21.2 The system shall enable users to comment and reply to a comment on that particular foreclosure.
3.1.21.3 The system shall notify about any conflict while commenting on foreclosure.
3.1.21.4 The system shall allow users to confirm the completion of current commenting.

3.1.22 Add Auction To ForeClosure

3.1.22.1 The system shall enable users to select an auction type when creating foreclosure.
3.1.22.2 The system shall notify about any conflict while Adding auction.
3.1.22.3 The system shall allow users to confirm the completion of current auction creation.

3.1.23 Add Expense To ForeClosure

3.1.23.1 The system shall display details of the selected auction.
3.1.23.2 The system shall enable users to select and add expenses to the foreclosure.
3.1.23.3 The system shall display the notify about any conflict while adding expense.
3.1.23.4 The system shall allow users to confirm the completion of the current expense creation.

3.1.24 Send Automated Mail

3.1.24.1 The system shall display automated mails according to the mortgage types.
3.1.24.2 The system shall enable users to receive mails before 5 days of the auctions' deadline.

3.1.25 Create Litigation

3.1.25.1 The system shall allow users to be navigated to the Litigations page.
3.1.25.2 The system shall enable users to click on the Create New Litigation button and navigate to a new page..
3.1.25.3 The system shall enable users to fill out all required fields.
3.1.25.4 The system shall notify users about any conflict while creating litigation.
3.1.25.5 The system shall allow users to confirm the completion of current Litigation creation.

3.1.26 View Details of Litigation

3.1.26.1 The system shall allow users to select the desired Litigation and view the details.
3.1.26.2 The system shall provide browsing options to see Litigation details.

3.1.27 Update Litigation

3.1.27.1 The system shall allow users to select the desired litigation and update | make modifications and save the litigation.

3.1.28 Approve Litigation

3.1.28.1 The system shall enable users [credit users] view list of initiated litigations.
3.1.28.2 The system shall navigate users to the details page when users click the desired litigations' detail button.
3.1.28.3 The system shall enable users to approve when they press the approve button.
3.1.28.4 The System shall notify users about any conflict during the approval of the litigation.
3.1.28.5 The System shall enable users to confirm the completion of the current intervenes creation.

3.1.29 Decline Litigation

3.1.29.1 The system shall enable users [credit users] view list of initiated litigations.
3.1.29.2 The system shall navigate users to the details page when users click the desired litigations' detail button.
3.1.29.3 The system shall enable users to decline when they press the decline button.
3.1.29.4 The System shall notify users about any conflict during the declination of the litigation.

3.1.29.5 The System shall enable users to confirm the completion of the current intervenes creation.

3.1.30 Assign Attorney Litigation

3.1.30.1 The system shall enable users [credit users] view list of initiated litigations.
3.1.30.2 The system shall navigate users to the details page when users click the desired litigations' detail button.
3.1.30.3 The system shall enable users to Assign an Attorney when they select an attorney and press the Assign Attorney button.
3.1.30.4 The System shall notify users about any conflict during the assigning of an attorney.
3.1.30.5 The System shall enable users to confirm the completion of the assignment creation.

3.1.31 Add Report To Litigation

3.1.31.1 The system shall allow users to add reports to the litigation on each adjournment.
3.1.31.2 The system shall notify users about any conflict while adding a report.

3.1.32 Add Intervene To Litigation

3.1.32.1 The system shall enable users to select the desired litigation.
3.1.32.2 The system shall enable users to add intervenes to the selected litigation.
3.1.32.3 The system shall notify users about any conflict while adding an intervenes.
3.1.32.4 The system shall enable users to confirm the completion of the current intervenes creation.

3.1.33 Add Expenses To Litigation

3.1.33.1 The system shall enable users to select the desired litigation.
3.1.33.2 The system shall enable users to add expenses to the selected litigation.
3.1.33.3 The system shall notify users about any conflict while adding an expense.
3.1.33.4 The system shall enable users to confirm the completion of the current expense creation.

3.1.34 Add Advocates To Litigation

3.1.34.1 The system shall enable users to select the desired litigation.
3.1.34.2 The system shall enable users to add advocates to the selected litigation.
3.1.34.3 The system shall notify users about any conflict while adding an advocate.
3.1.34.4 The system shall enable users to confirm the completion of the current advocate's creation.

3.1.35 Comment On Litigation

3.1.35.1 The system shall enable users to select the desired litigation.
3.1.35.2 The system shall enable users to comment on the selected litigation.
3.1.35.3 The system shall notify users about any conflict while adding any comments.
3.1.35.4 The system shall enable users to confirm the completion of the current comments creation.

3.1.36 Create Case Type

3.1.36.1 The system shall allow users to be navigated to the case types page.
3.1.36.2 The system shall enable users to click on the Create New Case Type button and navigate to a new

page..

3.1.36.3 The system shall enable users to fill out all required fields.
3.1.36.4 The system shall notify users about any conflict while creating case types.
3.1.36.5 The system shall allow users to confirm the completion of current case type creation.

3.1.37 View Case Type Details

3.1.37.1 The system shall allow users to select the desired Case Type and view the details.
3.1.37.2 The system shall provide browsing options to see Case Type details.

3.1.38 Update Case Type

3.1.38.1 The system shall allow users to select the desired Case Type and update | make modifications and save the Case Type.

3.1.39 Delete Case Type

3.1.39.1 The system shall allow users to select the desired Case Type and view the details.
3.1.39.2 The system shall allow users to delete the selected case type.
3.1.39.3 The system shall notify users about any conflict while deleting a case type.
3.1.39.4 The system shall enable users to confirm the completion of the case type deletion.

3.1.40 Update Judicial Report

3.1.40.1 The system shall allow users to select the desired Litigation and render all reports related to that litigation.
3.1.40.2 The system shall allow users modify the desired report and save the changes.
3.1.40.3 The system shall notify users about any conflicts while updating the report.
3.1.40.4 The system shall notify users about the completion of updating the report.

3.1.41 Print Judicial Report

3.1.41.1 The system shall allow users to be navigated to select the desired litigation.
3.1.41.2 The system shall allow users to navigate through reports and print each report.

3.1.42 Comment on Judicial Report

3.1.42.1 The system shall enable users to select the desired litigation.
3.1.42.2 The system shall enable users to comment on the selected litigation.
3.1.42.3 The system shall notify users about any conflict while adding any comments.
3.1.42.4 The system shall enable users to confirm the completion of the current comments creation.

3.1.43 Create Appeal

3.1.43.1 The system shall display available payment methods for payment.
3.1.43.2 The system shall allow users to select the payment method for order.

3.1.44 View Appeal Details

3.1.44.1 The system shall display the orders that are eligible to change.
3.1.44.2 The system shall allow users to select the order to be changed.
3.1.44.3 The system shall allow user to cancel the order

3.1.44.4 The system shall allow users to change shipping, payment methods.
3.1.44.5 The system shall notify the user about any changes made to the order.

3.1.45 Update Appeal

3.1.45.1 The system shall display the reviews and ratings of each product, when it is selected.
3.1.45.2 The system shall enable the user to enter their reviews and ratings.

3.2 Usability

3.2.1 Graphical User Interface

The system shall provide a uniform look and feel between all the web pages. The system shall provide an easy to grasp flow. The system shall provide use of icons and toolbars.

3.2.2 Accessibility

The specific requirements are –

3.3 Reliability

The system shall provide the expected services once it is deployed. Besides, the system shall respond in real time. Since the system will be developed using high reliability components, incorporating diversity, i.e. using components from different trustworthy vendors with good reputation the reliability of the system will be no question. And Above all the team will be upgrading and keeping the system up to date as it goes live for users.

3.4 Availability

The system will be up and running at the required time. The system will be able to give a good service, clients can access the system and collect the results of their work from the system as an output. The system should not have more than 8 hours of scheduled downtime per quarter.

3.4.1 Back-end Internal Computers

The system shall provide storage of all data that are recorded throughout the active days of the system starting from the first day it goes operations. The system shall provide a cache for fast access.

3.5 Performance

The product shall be based on the web and has to be run from a web server. The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run. The performance shall depend upon hardware components of the client/customer.

3.6 Security

3.6.1 Data Transfer

The system shall use APIs that will be built using spring boot framework which is going to be secured with oauth2 and key cloak. The system shall automatically log out all customers after a period of inactivity. The system shall not leave any cookies on the customer's computer containing the user's password. The system shall not leave any cookies on the customer's computer containing any of the user's confidential information.

3.6.2 Data Storage

The customer's web browser shall never display a customer's password. It shall always be echoed with special characters representing typed characters. The system's back-end servers shall never display a customer's password. The customer's password may be reset but never shown. The system's back-end servers shall only be accessible to authenticated administrators.

3.7 Design Constraints

3.7.1 Standard Development Tools

The system shall be built using a standard web page development tool that conforms to the most accepted standards out there.

3.7.2 Web Based Product

There are no memory requirements. The computers must be equipped with web browsers such as Internet explorer, Firefox, Google Chrome and the like. The product must be stored in such a way that allows the client easy access to it. Response time for loading the product should take no longer than two minutes. A general knowledge of basic computer skills is required to use the product.

3.8 Purchased Components

Not Applicable

3.9 Interfaces

There are many types of interfaces as such supported by the Case Management software system namely; User Interface, Software Interface and Hardware Interface. The protocol used shall be HTTP. There shall be a logical address of the system in IPv4 format.

3.9.1 User Interfaces

The user interface for the software shall be compatible with any browser such as Internet Explorer, Mozilla or Google Chrome by which the user can access the system. The user interface shall be implemented using Angular framework and NG-Zorro component framework.

3.9.2 Hardware Interfaces

Since the application must run over the internet, all the hardware required to connect to the internet will be hardware interface for the system. As for e.g. Modem, WAN – LAN, Ethernet Cross-Cable.

3.9.3 Software Interfaces

3.9.3.1 The Case Management system shall communicate with the key cloak using angular-auth-oidc-client in order to authenticate the user.
3.9.3.2 The Case Management system shall communicate with HR Service to get branches and employees.

3.9.3.3 The case Management System shall communicate with the flex to get customer data.

3.9.4 Communications Interfaces

The Case Management system shall use the HTTP protocol for communication over the internet and for the intranet communication will be through TCP/IP protocol suite.

3.10   Licensing Requirements

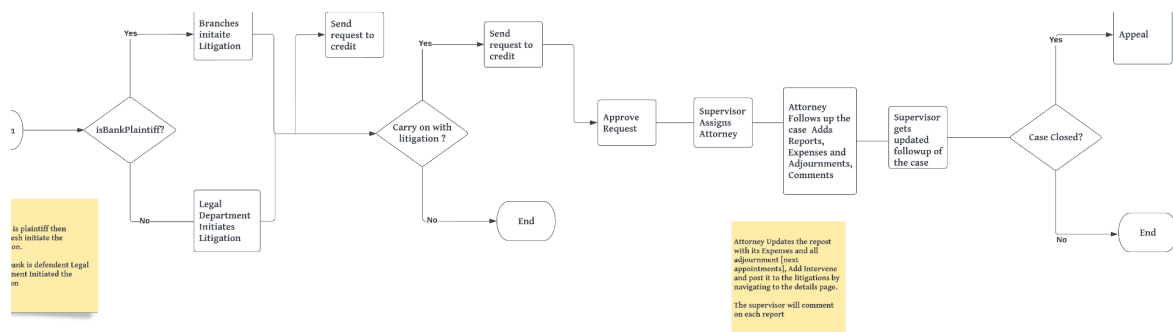Not Applicable

3.11   Applicable Standards

It shall be as per the industry standard.

4. Object Model
4.1 Class Diagram

5.   Workflow Diagram

5.1   Litigation

Yes → Branches initaite Litigation → Send request to credit

isBankPlaintiff?

Yes → Send request to credit

No → Legal Department Initiates Litigation

Carry on with litigation ?

No → End

Approve Request → Supervisor Assigns Attorney → Attorney Follows up the case Adds Reports, Expenses and Adjournments, Comments → Supervisor gets updated followup of the case → Case Closed?

Yes → Appeal

No → End

is plaintiff then esh initiate the on.

ank is defendant Legal nent Initiated the n

Attorney Updates the repot with its Expenses and all adjournment [next appointments], Add Intervene and post it to the litigations by navigating to the details page.

The supervisor will comment on each report

5.2   Foreclose

Notice of Default → Has Borrower Paid Within the time frame ?

Yes → End

No → Notifce of trustie

Send mail

Yes → Send Mail based on the mail type selected

No → End

Auction

Second Auction

Postponed

Sold to third party

Foreclosure owned

End [Trustees Peed]

Notice of default is the stage at which the Bank requests if the borrower has paid.

Notice of Trustie If the borrower hasnt paid then the bank will file for an auction.

Auctions will be added to the foreclosure when it is filed. And the news paper will be uploaded along side other detials of the auction, and notification type

Posponed The bank will do another auction if the first auction couldn't complete the foreclosure.

Trustees Peed Depending on the process of the auction when the foreclosure is settled, the bank could have either selled or owned the property.