

# **Functional Requirements Document**

## **Loan Management System (Agile)**

**Version: 1.0**

**Release Model: 5 Sprints / 8 Builds**

**Document Date: 2026-02-18**

## Revision History

Version	Date	Author	Description
1.0	2026-02-18	Sanyogita Herwathe (QA Owner)	Initial Agile Enterprise Release Version

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## Approval & Sign-Off

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<b>Reviewed By:</b> Product Owner
<b>Approved By:</b> Engineering Manager
<b>Approval Status:</b> Approved for Release Governance

## **1. Introduction**

### **1.1 Purpose**

This document defines the functional requirements for the Loan Management System (LMS) delivered through an Agile 5-sprint model.

### **1.2 Scope**

This document covers user-facing functional behavior across authentication, user management, customer management, loan processing, and letter generation.

### **1.3 References**

- BRD\_LMS\_Agile\_v1.0
- Enterprise RTM\_8Builds.xlsx
- IDD\_LMS\_Agile\_v1.0

## **2. Authentication (Sprint 1)**

### **FR-01 Login Validation**

#### **Fields:**

- Branch (Mandatory)
- Username (Mandatory)
- Password (Mandatory)

#### **Validation:**

- Empty field → “Please fill out this field.”
- Invalid Branch → “Branch does not exist”
- Invalid credentials → “Invalid user name or password”

#### **Behavior:**

- Successful login → Dashboard
- Session created
- Logout destroys session
- Direct URL access blocked

## **3. Dashboard (Sprint 1)**

#### **Display:**

- Total Loans Requested
- Total Approved
- Total Rejected
- Navigation Bar

## 4. Users Module (Sprint 2)

### FR-02 Users List

#### Display grid:

- Username
- First Name
- Last Name
- Company
- Phone
- Email

#### Search:

- By username, first name, last name, phone, email

### FR-03 Add User

#### Mandatory:

- Username (unique)
- Password (min 8 chars)
- Role (Branch Admin, Loan Manager, Loan Officer)

#### Validation:

- Username required
- Password required
- Role required
- Username must be unique

## 5. Customers Module (Sprint 3)

### FR-04 Add Customer

#### Mandatory:

- Account # (7 digits numeric, unique)
- First Name
- Last Name

#### Validation:

- Account numeric only
- Account length = 7
- Email valid format
- Phone format (999)999-9999

## 6. Loans Module (Sprint 4)

### FR-05 Add Loan

#### Fields:

- Customer (mandatory)
- Monthly Income
- Monthly Debt
- Loan Term (2,3,5,10,15)
- Returned Customer checkbox

### FR-06 Loan Decision Logic

**Approval:** IF Income > Debt → Generate Approval Letter

**Rejection:** IF Income ≤ Debt → Generate Rejection Letter

**Returned customer:** Reduce rate by 0.5%

#### Calculated Fields:

- Monthly Payment
- Principal
- Customer Rate
- Central Bank Rate

## 7. Prequalification Letter (Sprint 5)

### FR-07 Letter Generation

- Open letter dialog
- Editable content
- Save
- Cancel
- Export to PDF

## 8. RBAC Rules (Cross-Sprint)

Role	Restriction
Branch Admin	Full Access
Loan Manager	Cannot add users
Loan Officer	Cannot add users, cannot view events

## **9. Non-Functional Requirements**

### **Security**

- Session timeout enforced
- Role-based route protection
- No unauthorized URL access

### **Performance**

- Dashboard load < 3 seconds
- Search results < 2 seconds

### **Usability**

- Clear validation messages
- Consistent navigation bar across pages

## **10. Traceability**

All functional requirements defined in this document are traceable to:

- 94 Manual Test Cases
- Enterprise RTM (8-Build Model)
- Test Execution Reports
- Release Candidate Build 8