

FUNCTIONAL DOCUMENT (FSD)

SPECIFICATION

1. Document Control

Item	Description
Document Title	Functional Specification Document (FSD)
Project Name	PT. XYZ Mobile App Pinjaman Online
Version	1.0
Document Status	Draft for Design Review
Prepared By	System Analyst Team
Reviewed By	IT Project Manager
Approved By	Product Owner
Date	17/12/2025
Confidentiality	Internal & Client Confidential

2. Purpose of Document

Dokumen Functional Specification Document (FSD) ini menjabarkan kebutuhan fungsional sistem secara detail berdasarkan BRD yang telah disetujui. Dokumen ini menjadi acuan utama bagi tim pengembang, QA, dan stakeholder teknis dalam membangun aplikasi pinjaman online PT. XYZ.

3. System Overview

Aplikasi PT. XYZ Online Lending Mobile App adalah platform pinjaman digital berbasis mobile yang memungkinkan user melakukan registrasi, login, pengajuan pinjaman, pemantauan

hutang, serta menerima notifikasi status pinjaman. Sistem menggunakan mekanisme **credit score evaluation** untuk menentukan approval atau rejection pinjaman.

4. User Roles

Role	Description
Guest User	Pengguna yang belum registrasi
Registered User	Pengguna terdaftar yang telah login
System	Sistem backend yang memproses logic bisnis
Admin (Internal)	Monitoring dan audit (read-only pada fase ini)

5. Functional Scope

Fungsi utama sistem meliputi:

- User Registration & Verification
 - User Authentication
 - Loan Application
 - Credit Score Evaluation
 - Loan Approval / Rejection
 - Loan Monitoring
 - Notification Management
-

6. Functional Requirements

FR-01 User Registration

Description

Sistem memungkinkan user melakukan registrasi akun secara digital.

Input Step 1

- Email
- Nomor Telepon
- Nama Lengkap

Input Step 2

- Foto KTP
- Nomor KTP
- Foto Selfie Pegang KTP

Process

1. User mengisi form registrasi step 1 dan step 2
2. Sistem melakukan validasi data
3. Sistem menyimpan data user
4. Sistem mengirim email berisi Password & Register Berhasil
5. Status user menjadi Registered & Verification Pending

Output

- Akun user berhasil dibuat
-

FR-02 User Authentication

Description

Sistem menyediakan mekanisme login yang aman.

Input

- Email / Nomor Telepon dan Password
- Biometric

Process

1. User memasukkan kredensial
2. Sistem memvalidasi kredensial
3. Sistem memberikan akses ke aplikasi

Output

- User berhasil login
-

FR-03 Loan Application

Description

User dapat mengajukan pinjaman melalui aplikasi.

Input

- Nominal pinjaman
- Option Tenor (3,6, 9, 12 bulan)
- Tujuan pinjaman

Business Rules

- Maksimal pinjaman Rp 12.000.000
- Maksimal tenor 12 bulan
- User tidak memiliki pinjaman aktif

Process

1. User memilih nominal dan tenor
2. Sistem memvalidasi limit dan user verified
3. Sistem meneruskan ke credit score evaluation

Output

- Status pengajuan: Pending
 - Kirim data user dan pinjaman ke service Credit Score
-

FR-04 Credit Score Evaluation

Description

Sistem melakukan evaluasi risiko kredit user.

Input

- Data user
- Data histori pinjaman

Process

1. Sistem menghitung credit score
2. Sistem membandingkan dengan threshold
3. Sistem menentukan hasil

Output

- Credit score value
- Decision: Approved / Rejected
- Kirim ke service Loan

FR-05 Loan Approval / Rejection

Description

Sistem menentukan hasil pengajuan pinjaman.

Process

- Jika score \geq threshold \rightarrow Approved
- Jika score $<$ threshold \rightarrow Rejected

Output

- Status pinjaman
-

FR-06 Loan Monitoring

Description

User dapat melihat status pinjaman aktif.

Data Displayed

- Total hutang
 - Sisa hutang
 - Tenor
 - Tagihan per bulan
 - Tanggal jatuh tempo
-

FR-07 Notification Management

Description

Sistem mengirim notifikasi status pinjaman.

Channels

- Email
- SMS

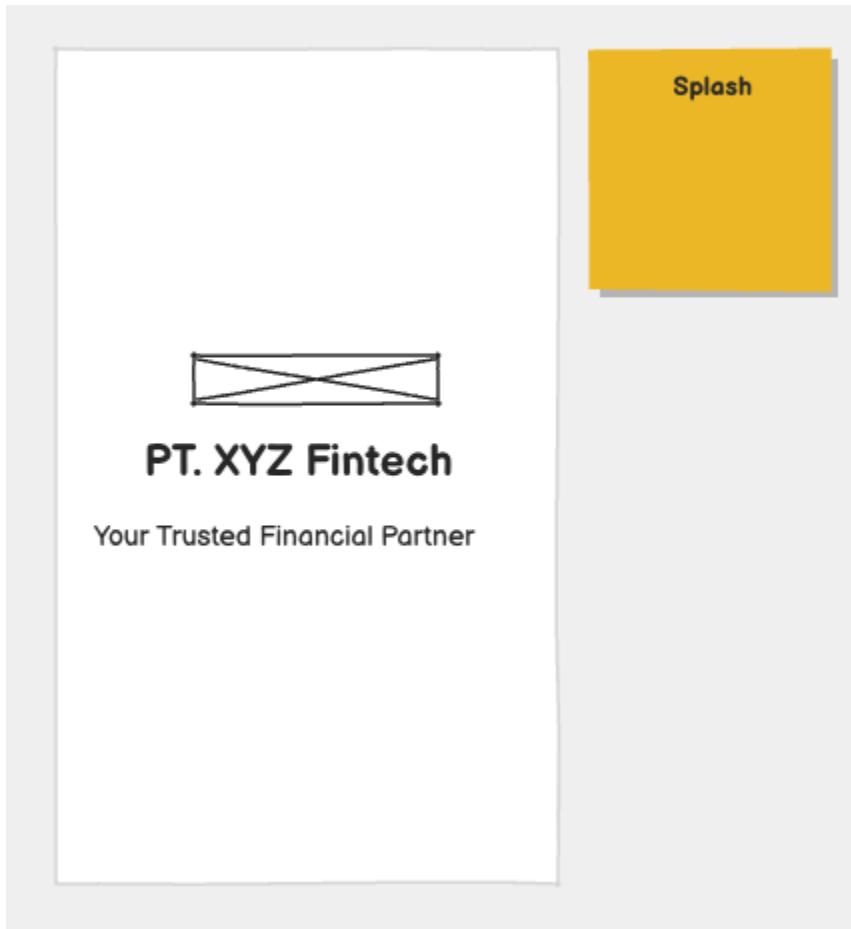
Trigger Events

- Loan Approved

- Loan Rejected
-

7. Screen Flow Overview

1. Splash Screen



2. Registration Screen

Step 1

Register

Lengkapi Data Diri Anda

Full Name

Enter your Full Name

Email

Enter your email

Phone Number

Enter your phone number

Next

OR

Login

Register Step 1

Step 2



Register

Register Step 2
KYC Verification

Lengkapi Data Diri Anda

Untuk keamanan dan verifikasi, mohon lengkapi data berikut.

Unggah Foto KTP Anda

Pilih file KTP



Pastikan foto KTP jelas dan tidak buram.

Nomor KTP

Input Nomor KTP



Pastikan nomor KTP sama dengan foto KTP

Unggah Foto Selfie Anda

Pilih file Selfie



Ambil foto selfie dengan memegang KTP Anda.

Kirim Verifikasi

3. Login Screen

Login

Email or Phone Number

Password

Login / Register

Or login with



OR

Create New Account

4. Home Dashboard

Dashboard

Hello, Budi!

[Apply for New Loan](#)

Your Active Loan

Loan ID: L-2023001

Amount: Rp 5,000,000

Due Date: 25/12/2023

Monthly Payment: Rp 450,000

Status: Active

[View Details](#)

Loan History

Loan ID: L-2022015

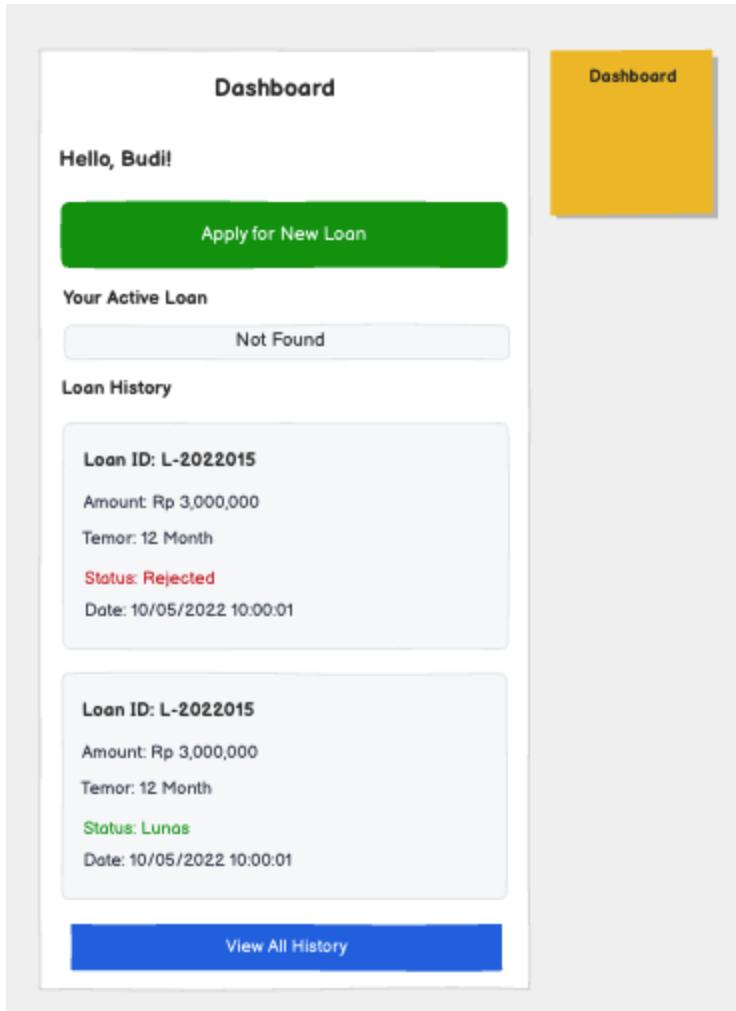
Amount: Rp 3,000,000

Tenor: 12 Month

Status: Lunas

Date: 10/05/2022 10:00:01

[View All History](#)



5. Loan Application Screen

[←](#)

Apply for a Loan

Loan Amount (IDR)

Max. loan amount: IDR 12,000,000

Loan Tenor

3 Months 6 Months 9 Months **12 Months**

Estimated Repayment Details

Monthly Installment: IDR 1,100,000
Total Repayment: IDR 13,200,000

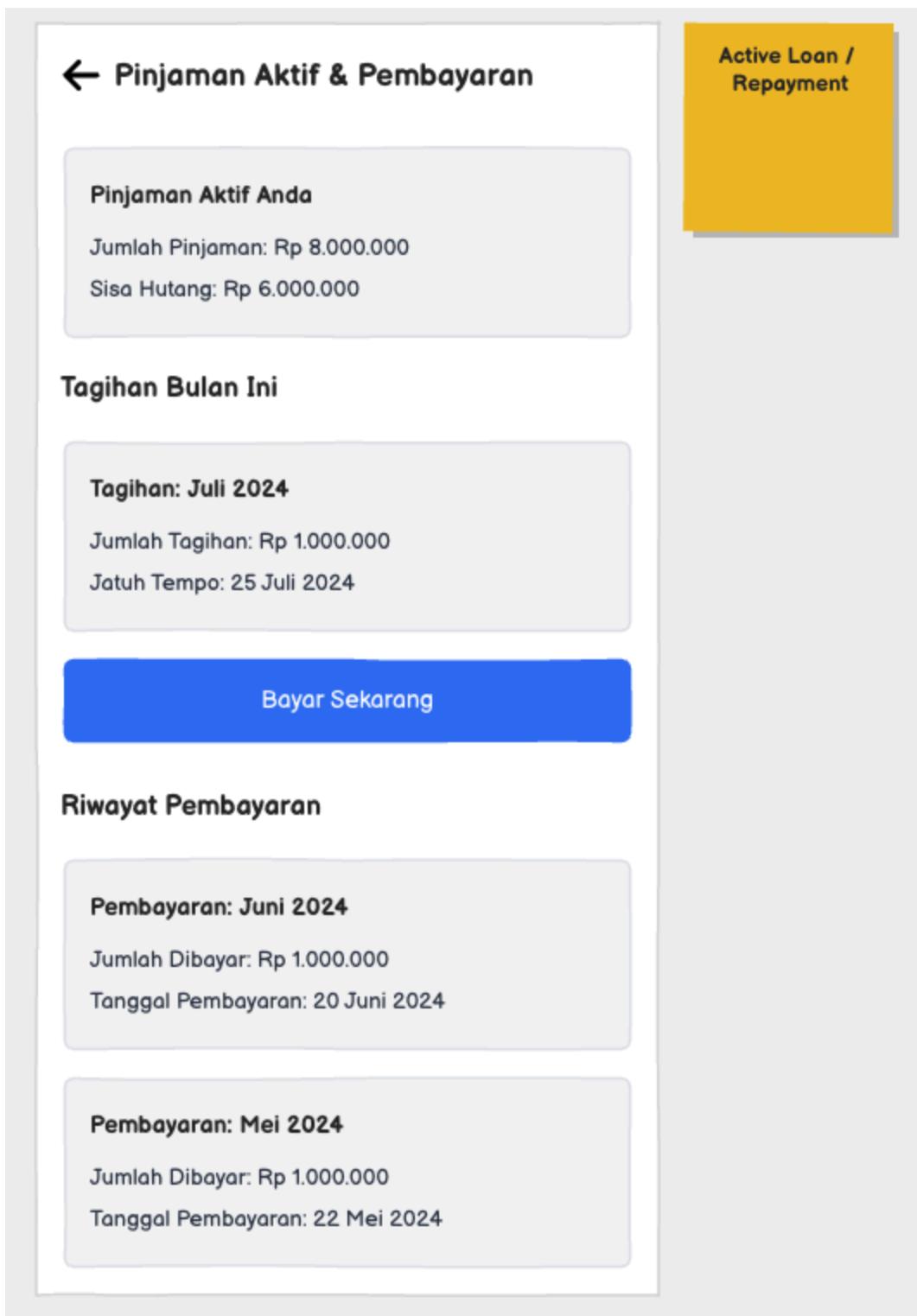
Purpose of Loan

e.g., Business capital, Education, Renovation

Submit Application

Apply Loan

6. History Loan



The image shows a mobile application interface for managing active loans and repayments. At the top left is a back arrow icon and the title "Pinjaman Aktif & Pembayaran". On the right side, there is a yellow button labeled "Active Loan / Repayment".

Pinjaman Aktif Anda

Jumlah Pinjaman: Rp 8.000.000
Sisa Hutang: Rp 6.000.000

Tagihan Bulan Ini

Tagihan: Juli 2024

Jumlah Tagihan: Rp 1.000.000
Jatuh Tempo: 25 Juli 2024

Bayar Sekarang

Riwayat Pembayaran

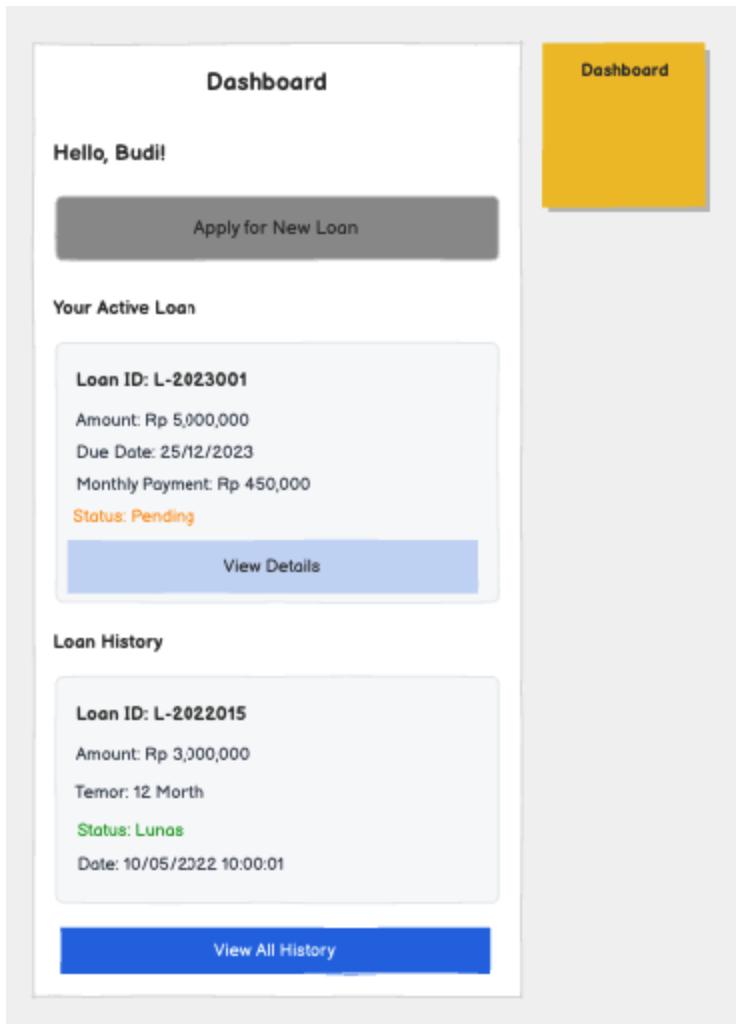
Pembayaran: Juni 2024

Jumlah Dibayar: Rp 1.000.000
Tanggal Pembayaran: 20 Juni 2024

Pembayaran: Mei 2024

Jumlah Dibayar: Rp 1.000.000
Tanggal Pembayaran: 22 Mei 2024

7. Loan Status Screen



8. Error Handling

- Invalid input → Error message
 - Credit score failure → Loan rejected
 - System error → Generic error message
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9. Non-Functional Overview (High Level)

6.1 Performance

- Response time <2 detik untuk transaksi dan query saldo

6.2 Security

- Enkripsi data, autentikasi, proteksi API

6.3 Availability

- Sistem tersedia 24/7, downtime minimal
- Notification realtime jika ada error di server

6.4 Compliance

- Mematuhi regulasi fintech, audit-ready
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10. Assumptions & Dependencies

- Credit score logic tersedia
 - Email & SMS gateway aktif
 - Infrastruktur cloud tersedia
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11. Approval & Sign-Off

Role	Name	Signature	Date
Product Owner			
IT Project Manager			
System Analyst			