

# Technical Design Document

Project name: **ABC Loan Service.**

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## **Introduction:**

ABC Loans is created to meet the needs of Customers of ABC Bank to apply a Loan online Instantly. The architecture implemented is Spring Boot services.

## **Functional Requirements:**

The functional requirements of the project are :

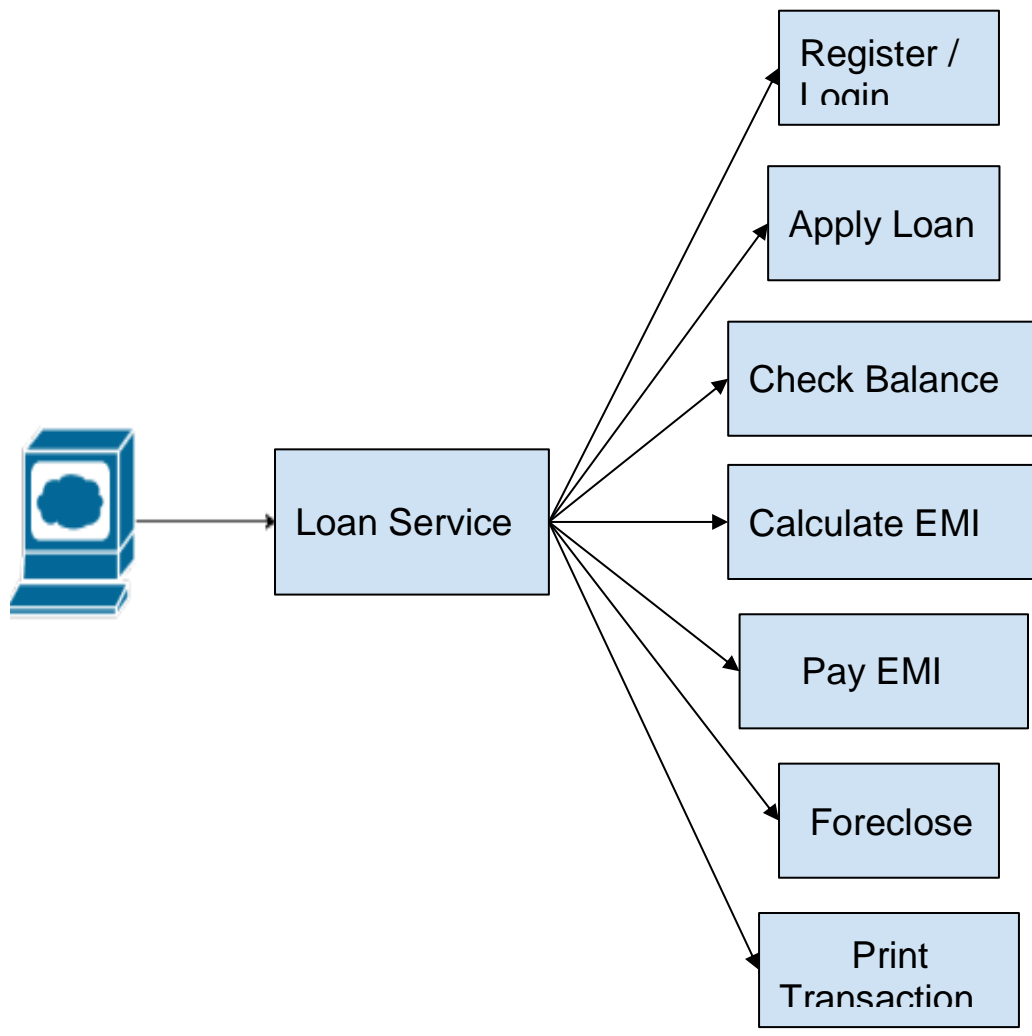
- Login/Register
- View Profile
- Edit Profile
- Apply Loan
- Show Balance
- Calculate EMI
- Pay EMI
- Foreclose
- Print Transactions

## **Service**

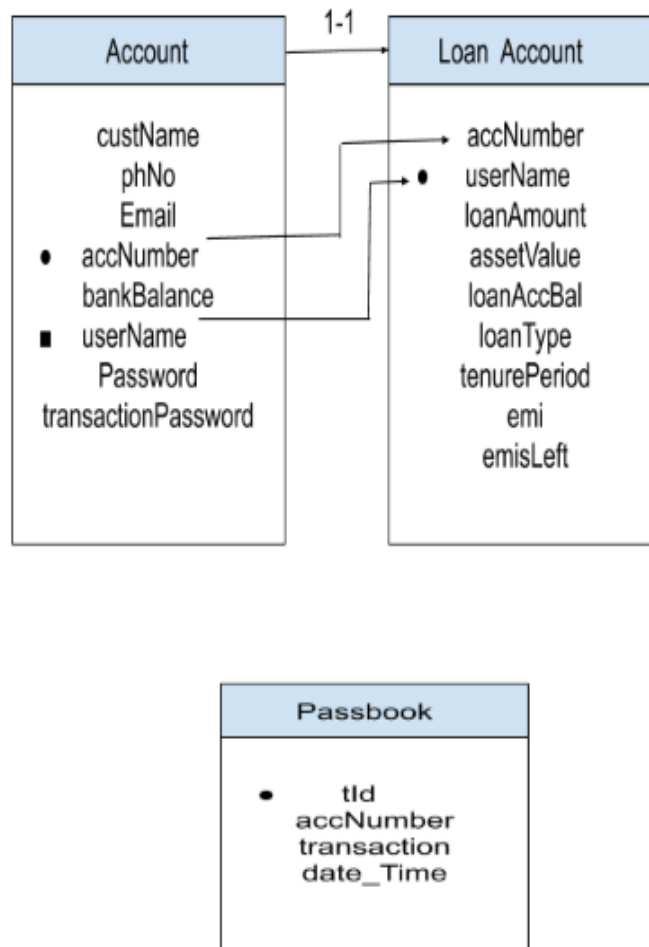
Loan Service in this project is :

- Register - Create an Account in ABC Bank.
- Apply Loan - To Apply a Loan with an ABC Bank Account.
- Show Balance - To Get balance details of a Customer.
- Calculate EMI - To Calculate EMI for the existing Loan Account (or)  
To calculate EMI for customized parameters.
- Pay EMI - To Pay EMI for the Existing Loan Account.
- Foreclose - To foreclose the pending Loan account.
- Payment Interface - To deposit,pay emi,foreclose loan with transaction  
password verification.
- Print Transactions - To Print all the Transactions made by the customer.

**Overall Architecture Diagram:**

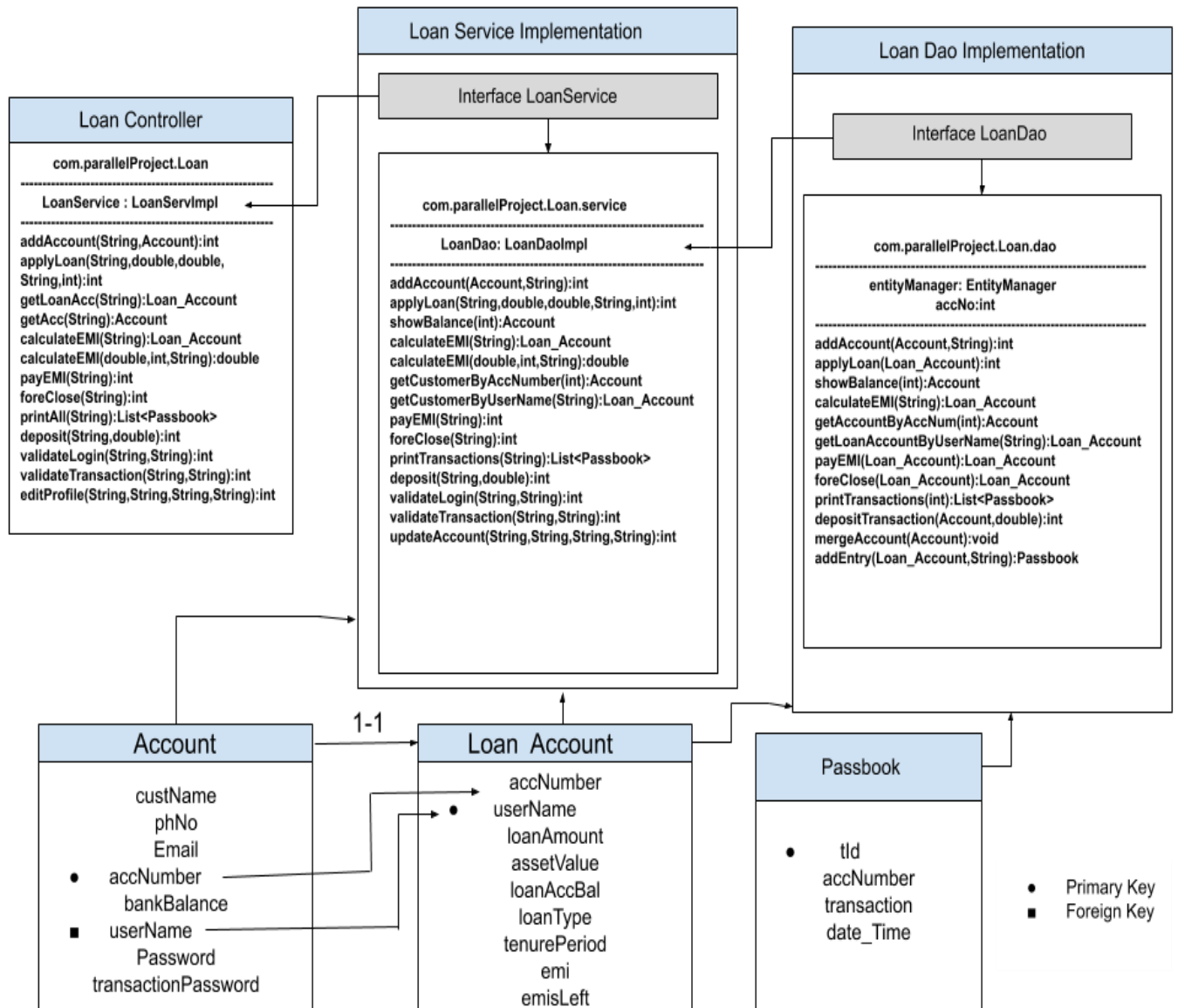


## Overall Entity Relationship Diagram:



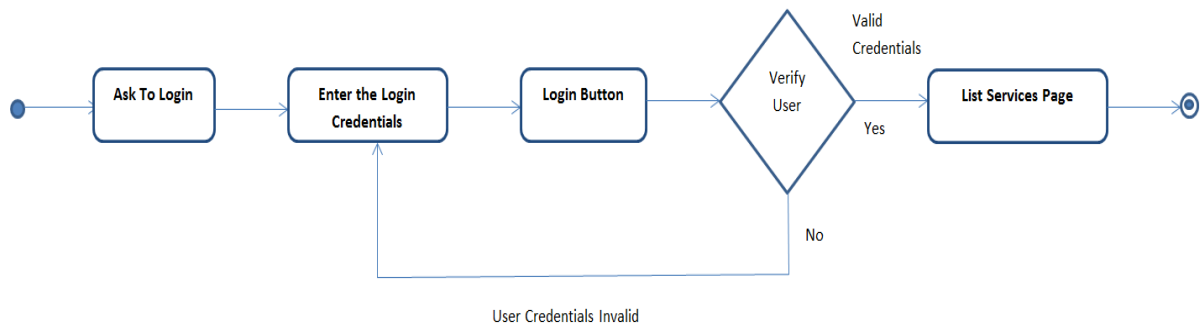
- Primary Key
- Foreign Key

## Class Diagram :

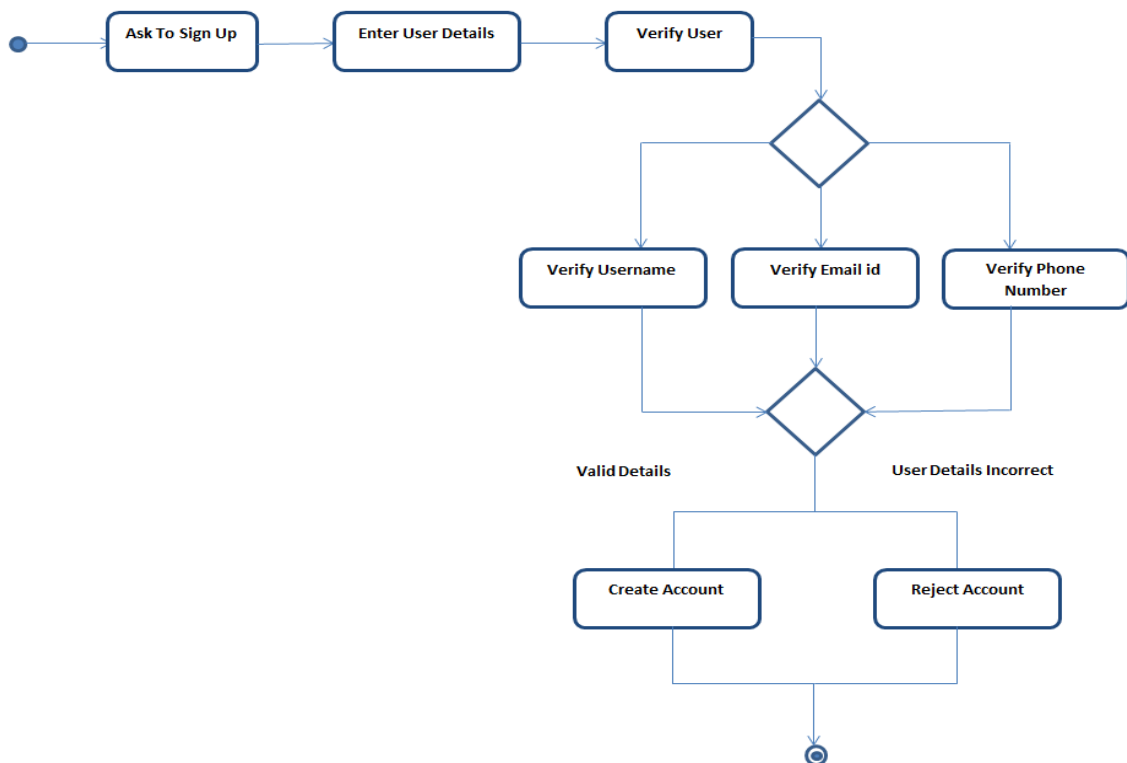


## Activity Diagrams:

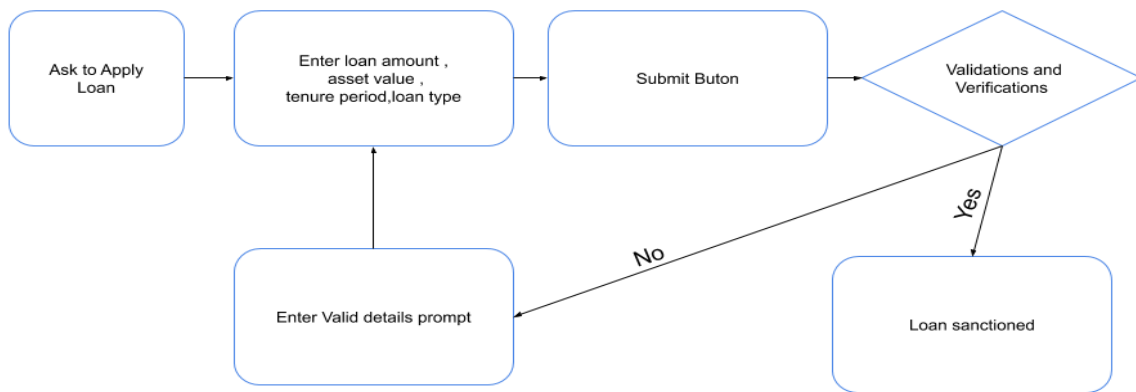
### Login:



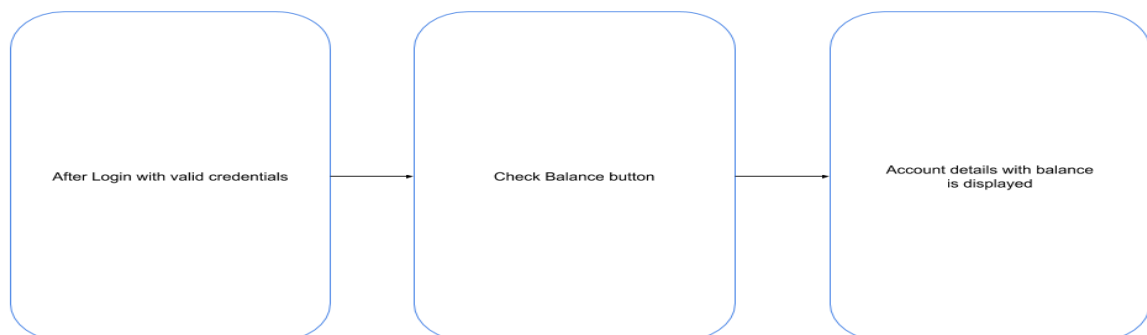
### Register/Sign Up:



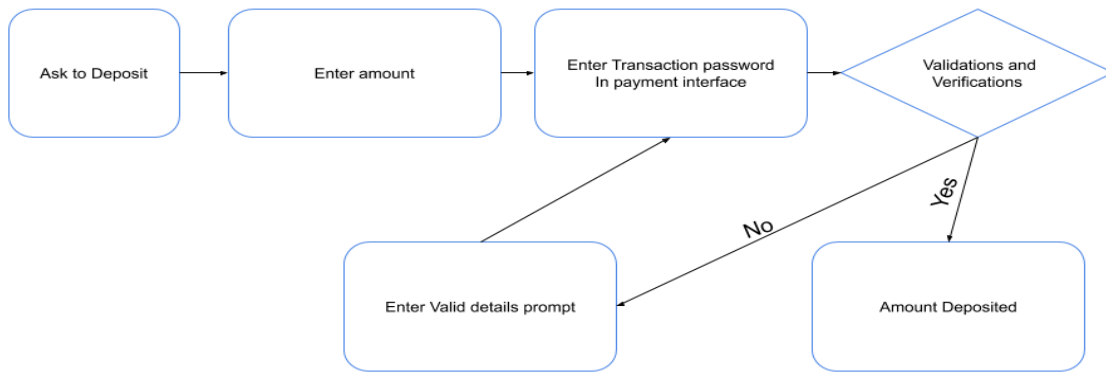
## Apply Loan:



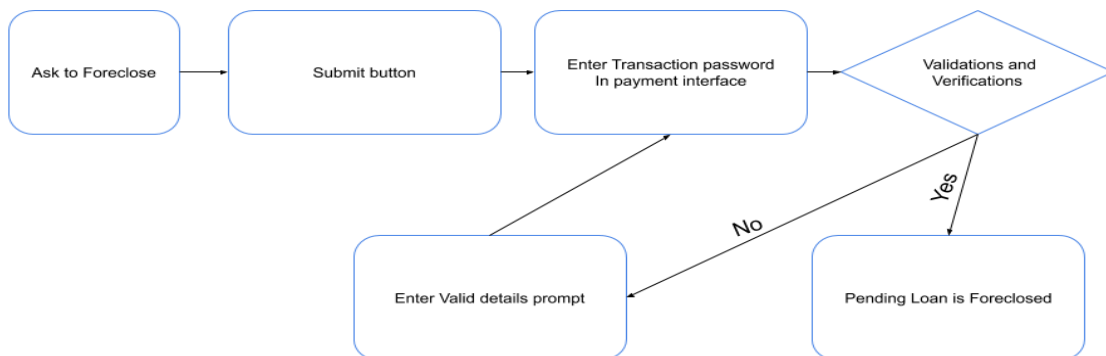
## Check Account Balance:



## Deposit:

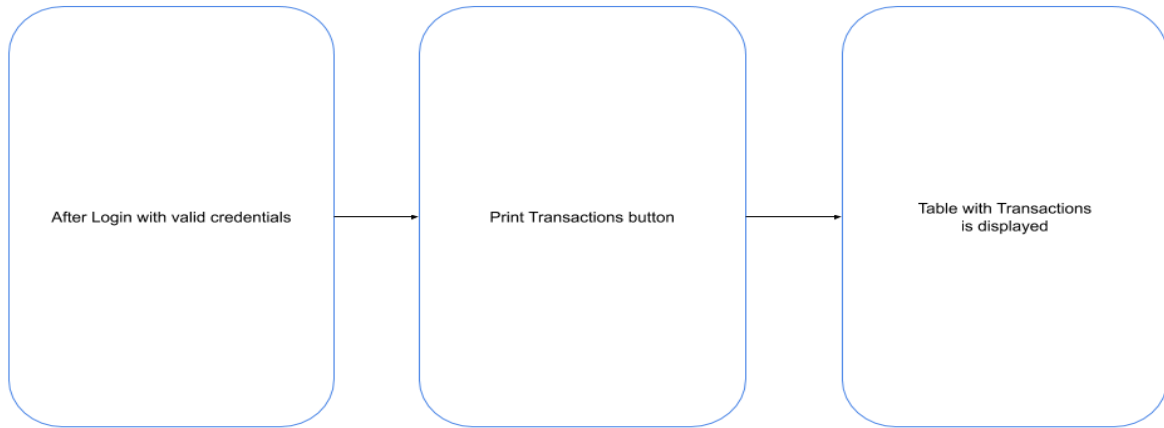


## Foreclose:

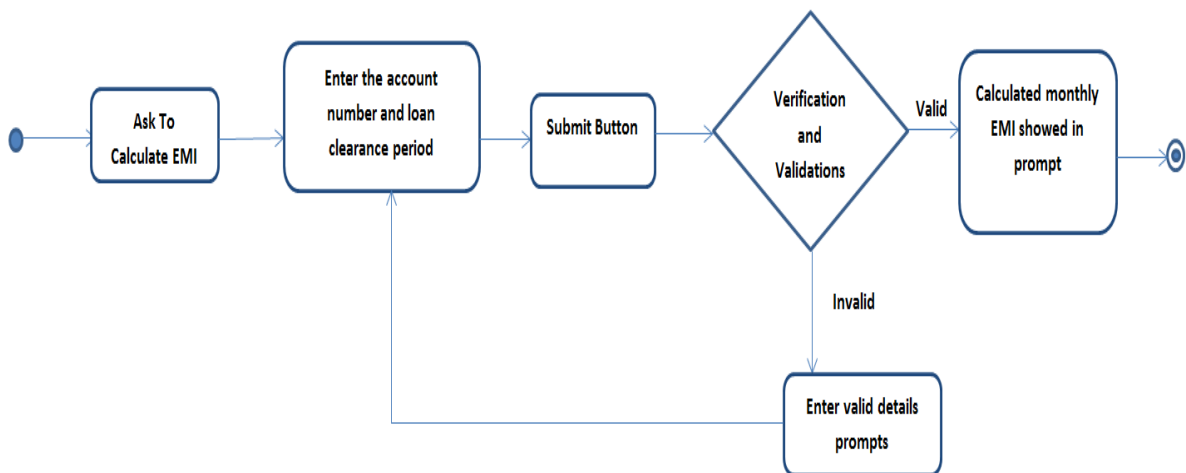




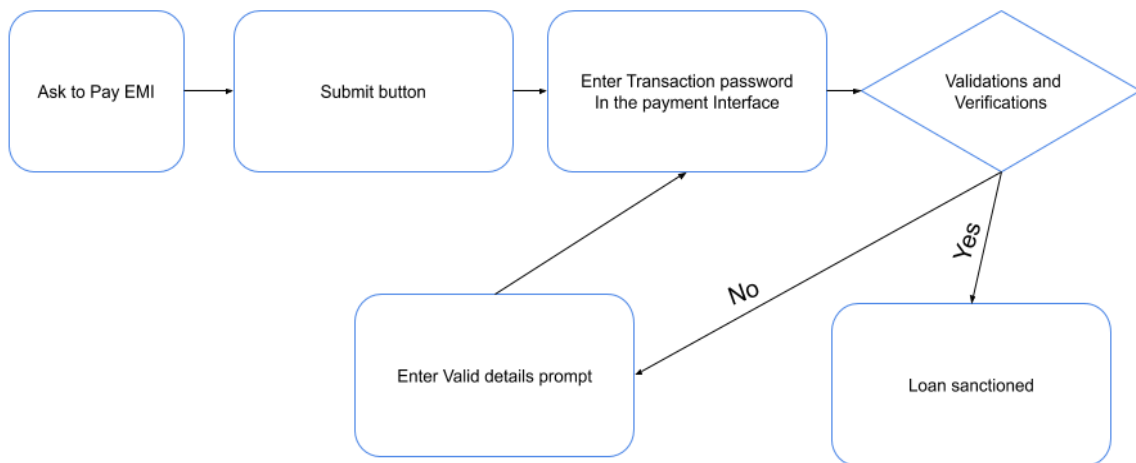
## Print Transactions:



## Calculate EMI:

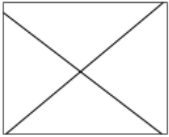


## **Pay EMI:**




# WIREFRAMES:


## Home Page:

 <b>ABC Loans</b>			
Home	Terms&Conditions	About Us	Contact Us
<div>Login</div> <div>Sign Up</div>			

**LOGIN:**

		<b>ABC Loans</b>	
<a href="#">Home</a>	<a href="#">Terms&amp;Conditions</a>	<a href="#">About Us</a>	<a href="#">Contact Us</a>
User Name * :	<input type="text"/>		
Password* :	<input type="password"/>		
<input type="button" value="Login"/>			

## **SIGN UP:**

		<b>ABC Loans</b>	
<a href="#">Home</a>	<a href="#">Terms&amp;Conditions</a>	<a href="#">About Us</a>	<a href="#">Contact Us</a>
<div><div>First Name * :</div><div><input type="text"/></div></div> <div><div>Last Name * :</div><div><input type="text"/></div></div> <div><div>Mobile Number * :</div><div><input type="text"/></div></div> <div><div>Mail ID * :</div><div><input type="text"/></div></div> <div><div>Initial Deposit * :</div><div><input type="text"/></div></div> <div><div>Enter password * :</div><div><input type="password"/></div></div> <div><div>Enter Transaction password * :</div><div><input type="password"/></div></div> <div><div>Sign Up</div></div>			

## Apply Loan:

ABC Loans	Home	Profile	Menu	LogOut
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Apply Loan

Loan Amount \* :

Asset Value\* :

Tenure Period\* :

Loan Type\* :

Apply Loan

Reset

## Loan Details :

ABC Loans	Home	Profile	Menu	LogOut
Loan Details				
<div>Loan Amount : <input type="text"/></div> <div>Asset Value : <input type="text"/></div> <div>Tenure Period : <input type="text"/></div> <div>Loan Type : <input type="text"/></div> <div>Cannot Apply Loan, Refer <a href="#">Terms &amp; Conditions</a> .</div>				

## Check Balance :

<b>ABC Loans</b>	Home	Profile	Menu	LogOut
Balance Details				
<div>Name * : <input type="text"/></div> <div>Mobile Number* : <input type="text"/></div> <div>Bank Balance* : <input type="text"/></div> <div>Loan Account Balance* : <input type="text"/></div> <div><div>View Passbook</div><div>Deposit Amount</div></div>				



## Deposit :

<b>ABC Loans</b>	Home	Profile	Menu	LogOut
Deposit				
<p>Amount * : <input type="text"/></p> <p>Deposit</p> <p>Cancel Back</p>				

## Calculate EMI :

<b>ABC Loans</b>	Home	Profile	Menu	LogOut
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EMI Calculator

Loan Amount\* :

Asset Value\* :

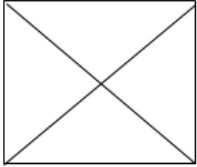
Tenure Period\* :

Loan Type\* :

Calculate EMI

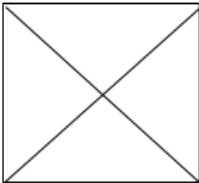
Reset

## Pay EMI :

<b>ABC Loans</b>	Home	Profile	Menu	LogOut
Pay EMI				
<div></div> <div>EMI Anount* : <input type="text"/></div> <div>EMIs Left* : <input type="text"/></div> <div>Pay EMI</div>				

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## Foreclose :

<b>ABC Loans</b>	Home	Profile	Menu	LogOut
Foreclose				
<div></div> <div>Loan Account Balance* : <input type="text"/></div> <div>Foreclose</div>				

### Print Transactions :

ABC Loans

HomeProfileMenuLogout

Print transactions

s.no	Transaction ID	Transactions	Date and Time

## Payment Interface :

<b>ABC Loans</b>	Home	Profile	Menu	LogOut
Payment Interface				
<p>Enter Transaction Password * : <input type="password"/></p> <p>Pay <input type="checkbox"/> amount</p> <p>Cancel</p>				