

USER MANUAL



ZEPHYR LOAN MANAGEMENT SYSTEM

DEVELOPERS:

PRINCE ROBEN P. GLORIA

ALOE GEL G. FERNANDEZ

STEPHANIE CHRISTINE P. SUCO

CHESTER JAY BUGNA

Table of Contents

Introduction.....	3
What is Loan Management System?.....	3
What is Loan?.....	3
What is Interest?.....	3
What is Loan Service?.....	3
What Zephyr Loan Management Can Do?.....	3
Conceptual Framework.....	6
Data Flow Diagram.....	6
Use Case Model.....	7
Relational Database Management System.....	8
Software Main Features	9
Implementation	9
Admin Set-Up.....	9
Sign-Up.....	10
Log-In.....	10
Manage Section.....	11
Loaner Form.....	12
Loan Form.....	12
Payment Form.....	13
Collateral Form.....	13
Loan Types.....	14
Loan Plans.....	15
Generate Invoice.....	16
Future Plan/Update	18
Limitations of the Software	18

Introduction

What is Loan Management System?

Loan Management System is a desktop application which assist lenders in automating and streamlining entire loan life cycle including loan servicing, reporting, customer care, syndication and customer monitoring.

What is Loan?

The term loan refers to a type of credit vehicle in which a sum of money is lent to another party in exchange for future repayment of the value or principal amount. In many cases, the lender also adds interest or finance charges to the principal value, which the borrower must repay in addition to the principal balance.

What is Interest?

Interest is the fee a business pays a lender (creditor) to borrow money. Interest payments are usually based on the outstanding balance of a loan and paid monthly, though many different arrangements are possible. Interest is usually calculated as a percentage of the loan balance at an agreed-upon interest rate

What is Loan Service?

Loan services typically involve a borrower requesting a specific amount of money from the lender, and upon approval, the lender provides the funds with agreed-upon terms and conditions. These terms and conditions typically include the interest rate, repayment schedule, and any other relevant fees or charges associated with the loan.

What Zephyr Loan Management can do?

Home

This is where the users can Sign-Up or Log-In.

Loan Types

A useful section for looking at different Loan Types. The Admin can manage the Loan Types.

Loan Management System

File Admin Theme

Home Manage Types Plans

Admin Log Out

Loan Types

Loan Type
Personal Loans
Auto Loan
Student Loan
Mortgage Loan
Home Equity Loan
Credit Builder Loan
Debt Consolidation Loan
Payday Loan

Personal Loans

Description

Personal loans can typically be used for anything, unlike vehicle and mortgage loans, which have specific uses in mind. For example, some people utilize them for home renovation projects, weddings, or unexpected bills. Most personal loans are unsecured, which means they don't call for any kind of security. They could have a few months to several years of repayment time and fixed or variable interest rates.

Delete Modify Insert

Loan Plans

Managing Loan Plans has never been easier. In this section, you can look for Loan Plans that suits the Loaner's needs. The admin can manage the Loan Plans.

Loan Management System

File Admin Theme

Home Manage Types Plans

Admin 123 Log Out

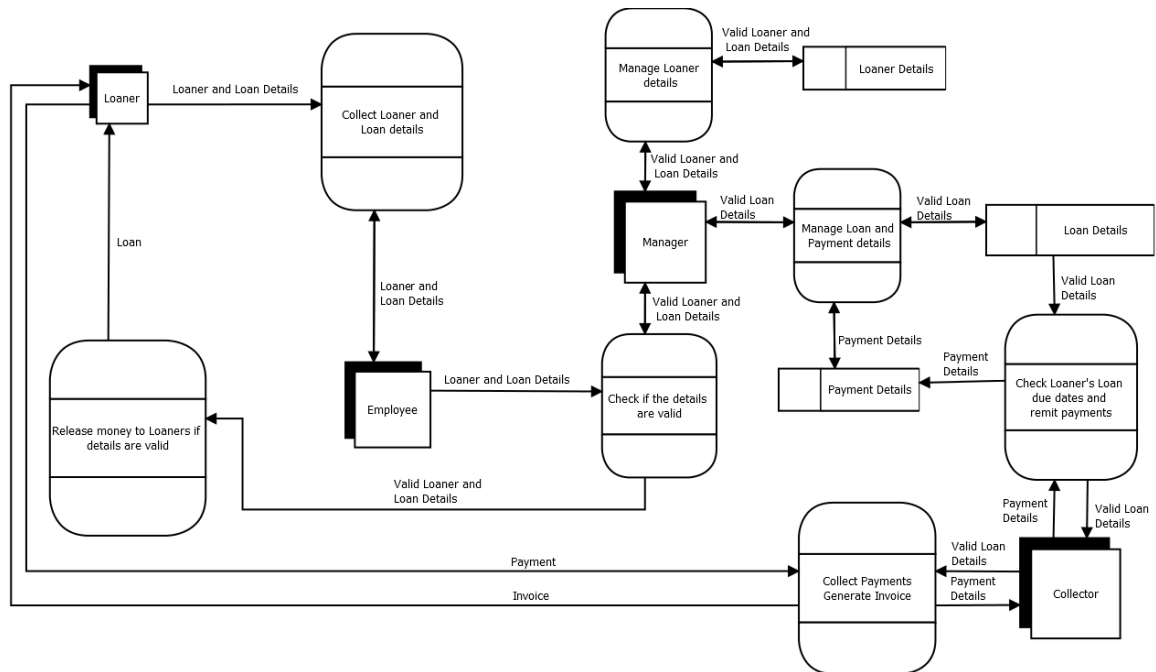
Loan Plans

Plan ID	Loan Type	Payment Mode	Term	Interest Rate	Penalty Rate
2764	Personal Loans	Monthly	999	0.09	0.18
6166	Auto Loan	Monthly	365	0.2	0.5

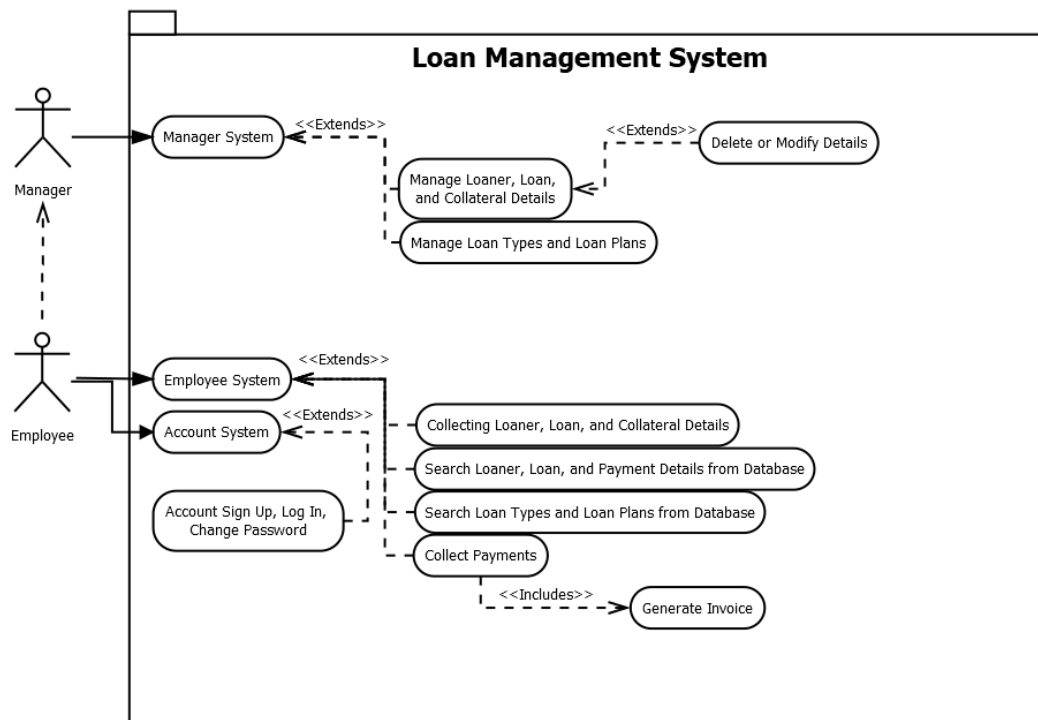
Conceptual Framework

Zephyr Loan Management System DFD (Data Flow Diagram)

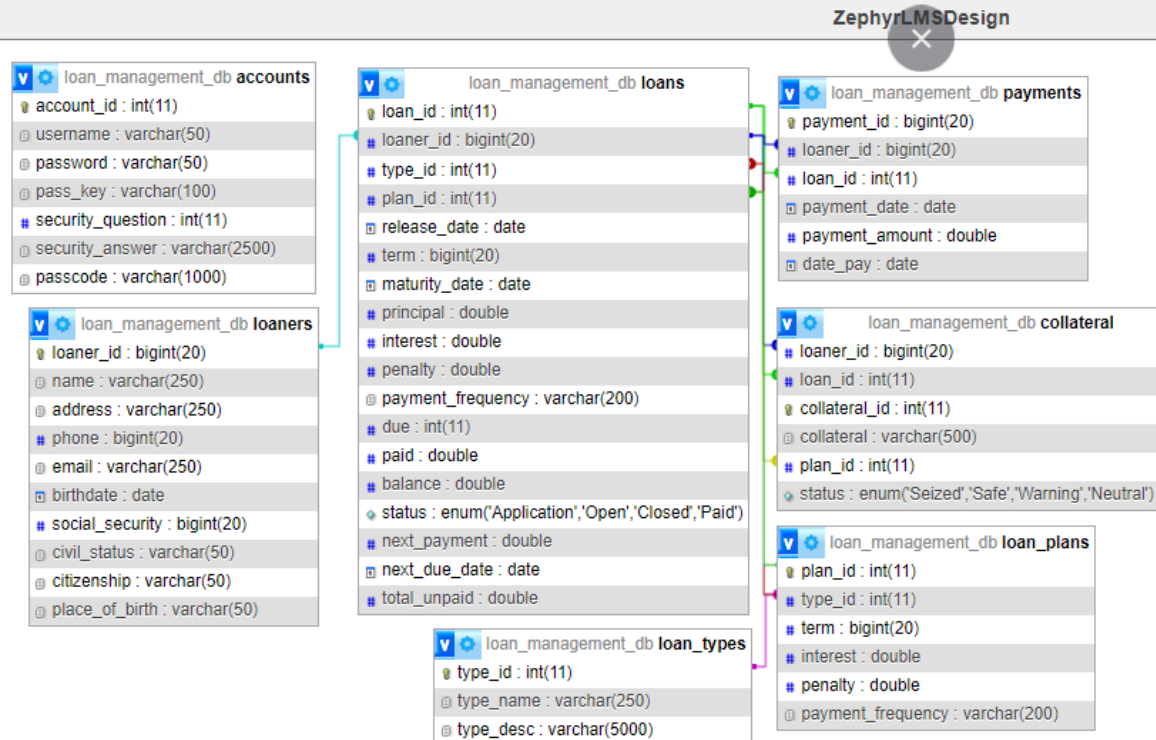
Level 1



Zephyr Loan Management System UCM (Use Case Model)



Zephyr Loan Management System RDBMS (Relational Database Management System)



The **RDBMS** is a type of database management system that stores data in a table structure which connects related data elements. The diagram above shows the structure of the database in the system and it has four table's namely **collateral**, **loans**, **loaners**, and **payments**. The lines between the tables symbolize the relationship between tables.

Table 'loans' and 'loaners' is a parent field which contains extended information of the table this is called **parent field with one-to-many relationship**. Table 'loans' contains all the information while table 'loaners' contains the information of the loaners.

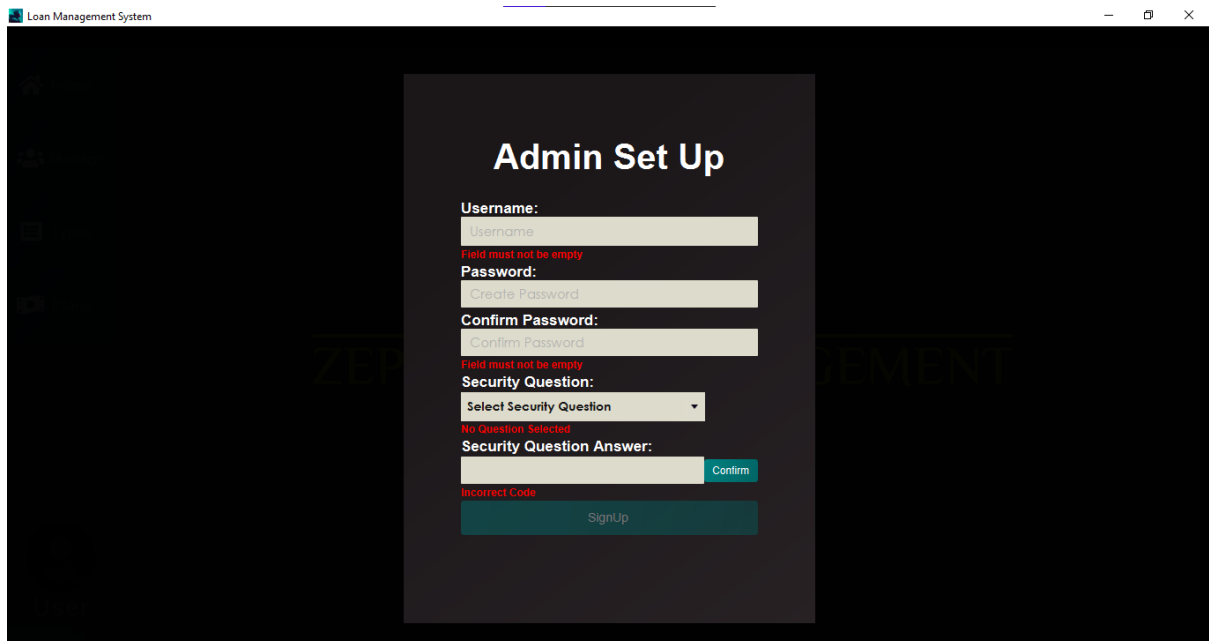
Parent field with one-to-one relationship is a field that contains only one relationship. This type of field is to hold data section that single cascading relationship contains the number of uses of the table.

Software Main Features

- ♣ Data Storing and Management
- ♣ Generating Invoice

Implementation

Admin Set-Up



The screenshot shows a web application window titled "Loan Management System". The main content area is dark grey with a central white box titled "Admin Set Up". Inside this box, there are several input fields and buttons. The "Username:" field has a placeholder "Username" and a red error message "Field must not be empty". The "Password:" field has a placeholder "Create Password". The "Confirm Password:" field has a placeholder "Confirm Password" and a red error message "Field must not be empty". The "Security Question:" field is a dropdown menu with "Select Security Question" and a red error message "No Question Selected". The "Security Question Answer:" field has a placeholder for the answer and a "Confirm" button. Below these fields is a "SignUp" button. A red error message "Incorrect Code" is visible below the "Confirm" button. The background of the application window shows a sidebar with icons and a large watermark text "ZEPHYRUS LENDING".

The first time you open the software, it will ask you to set-up an Admin account. In the username field, you can choose any username you want, but we recommend you choose appropriate username. Password field requires you to make a new password for your new account, you also need to re-type your password on confirm password field. Security question functions as recovery verification method in case when you forgot your password. You need to pick one security question you prefer, and give your answer on the field below, then press confirm before hitting sign-up button.

Sign-Up

The screenshot shows a web browser window titled "Loan Management System". The main content is a "Sign Up" form. The form has a dark background with white text. It includes three input fields: "Username:" with a placeholder "Username", "Password:" with a placeholder "Create Password", and "Confirm Password:" with a placeholder "Confirm Password". A red error message "Field must not be empty" is displayed below the Username field. Below the input fields is a green "SignUp" button. At the bottom, there is a link "Already have an account? Login".

Here, you can sign-up a new non-admin account which your employees can use. If an account is already made, you can press the log-in link below the sign-up button.

Log-In

The screenshot shows a web browser window titled "Loan Management System". The main content is a "Log In" form. The form has a dark background with white text. It includes two input fields: "Username:" with a placeholder "Username" and "Password:" with a placeholder "Password". A red error message "Empty field" is displayed below the Username field. Below the input fields is a green "Login" button. At the bottom, there is a link "Don't have an account? SignUp".

On this form, you can log-in using non-admin or admin account. If no non-admin account has been made yet, you can sign-up by pressing the sign-up link below the log-in button.

Manage Section

The screenshot shows the 'Manage' section of the Loan Management System. The left sidebar contains navigation links: Home, Manage, Types, and Plans. The main content area is divided into three sections. The top section displays a table of loaners and a table of loans. The middle section shows the details for a specific loaner, Rythmind, including their ID, address, birthdate, birthplace, email, contact number, social security number, citizenship, and civil status. The bottom section shows the details for a specific loan, including its ID, plan ID, release date, maturity date, term, principal, interest rate, penalty rate, due date, paid amount, balance, next due date, duly amount, and total penalty.

Loaner ID	Name
3058244	Five Hargreeves
3331357	Rythmind
3876501	Klaus Hargreeves
8745533	stewie11

Loan ID	Loan Type
3165356	Personal Loans

Status: OPEN **Monthly**

Loan ID: 3165356 Plan ID: 2764

Release: Jun 15, 2023 Maturity: Mar 15, 2026 Term: 999

Principal: \$1,000 Interest Rate: 0.09% Penalty Rate: 0.18%

Due: Day 15 of every month

Paid: \$33.03

Balance: \$1,058.97

Next Due: Aug 15, 2023 Duly Amount: 33.03 Total Penalty: 0

[New Loan](#)

Rythmind

ID: 3331357 Contact#: 1235125

Address: France Social Security#: 2135

Birthdate: 07/29/2015 Citizenship: French

Birth Place: France Civil Status: Single

Email: asfag@gmail.com

[Add Loaner](#)

After logging in, you can access Manage section. Here you will be able to see and look for the Loaner, Loan, Payment, and Collateral details.

The screenshot shows the 'Manage' section of the Loan Management System for an admin user. The left sidebar contains navigation links: Home, Manage, Types, and Plans. The main content area is divided into three sections. The top section displays a table of loaners and a table of loans. The middle section shows the details for a specific loaner, Gerard Way, including their ID, address, birthdate, birthplace, email, contact number, social security number, citizenship, and civil status. The bottom section shows the details for a specific loan, including its ID, plan ID, release date, maturity date, term, principal, interest rate, penalty rate, due date, paid amount, balance, next due date, duly amount, and total penalty.

Loaner ID	Name
3058244	Five Hargreeves
3331357	Rythmind
3876501	Klaus Hargreeves
8745533	stewie11
2746072	Gerard Way

Loan ID	Loan Type
1541002	Personal Loans

Status: OPEN **Monthly**

Loan ID: 1541002 Plan ID: 2764

Release: Jun 15, 2023 Maturity: Mar 15, 2026 Term: 999

Principal: \$1,000 Interest Rate: 0.09% Penalty Rate: 0.18%

Due: Day 15 of every month

Paid: \$33.03

Balance: \$1,058.97

Next Due: Aug 15, 2023 Duly Amount: 33.03 Total Penalty: 0

[Remove Loan](#) [Modify Loan](#) [New Loan](#)

Gerard Way

ID: 2746072 Contact#: 9234134113

Address: Summit, New Jersey, United States Social Security#: 4586874526

Birthdate: 01/07/1992 Citizenship: American

Birth Place: Summit, New Jersey, United States Civil Status: Married

Email: mcrgerardway@gmail.com

[Remove Loaner](#) [Modify Loaner](#) [Add Loaner](#)

The admin will be able to see more buttons as they have access on modifying, removing, and inserting new details.

Loaner Form

Loaner Form

Name: Contact No.: Email: Birthday:

Address: Civil Status: Citizenship: Loaner ID:

Social Security: Place of Birth:

You are required to fill-up the form when you want to add a new Loaner.

Loan Form

Loan Form

Loan ID: Release Date: Maturity Date: Interest:

Status: Term: Due: Penalty:

Payment Mode: Principal:

Loan Plan:

Search Loan Type: Selected Plan ID: Selected Plan Type:

Plan ID	Loan Type	Payment Mode	Term	Interest	Penalty
2764	Personal Loans	Monthly	999	0.09	0.18
7762	Auto Loan	Yearly	423634	0.0023	0.005

If a new loan is wanted to be made, you will be greeted with this Loan Form modal which you will be needing to fill up with the appropriate details. Here, you can change the date for release, set the status of the loan, and choose the Loan Plan. The other fields will be automatically filled with accurate details by the time you choose a Loan Plan in the Loan Plan table you can see below in the picture.

Payment Form

The screenshot shows the 'Loan Management System' interface. A 'Payment Form' modal is open, displaying the following fields:

- Loaner ID:** 2746072
- Loan ID:** 1541002
- Payment ID:** 8120461
- Date Paid:** Jun 15, 2023
- Due Date to Pay:** 7/15/2023 (with a calendar icon)
- Amount to Pay:** \$33.03
- Payment Amount:** 0
- Change:** \$0.00

Buttons: Save, Cancel

The background shows a 'Manage' section with a table of loaners. The selected loaner is Gerard Way, with details: ID: 2746072, Address: Summit, New Jersey, United States, Birthdate: 01/07/1992, Birth Place: Summit, New Jersey, United States, Email: mcgerardway@gmail.com, Contact#: 9234134113, Social Security#: 4586874526, Citizenship: American, Civil Status: Married.

If a loaner pays for their loan, you can add the payment amount they paid inside the Payment Form. It will also automatically fill the necessary details and calculate the change.

Collateral Form

The screenshot shows the 'Loan Management System' interface. A 'Collateral Form' modal is open, displaying the following fields:

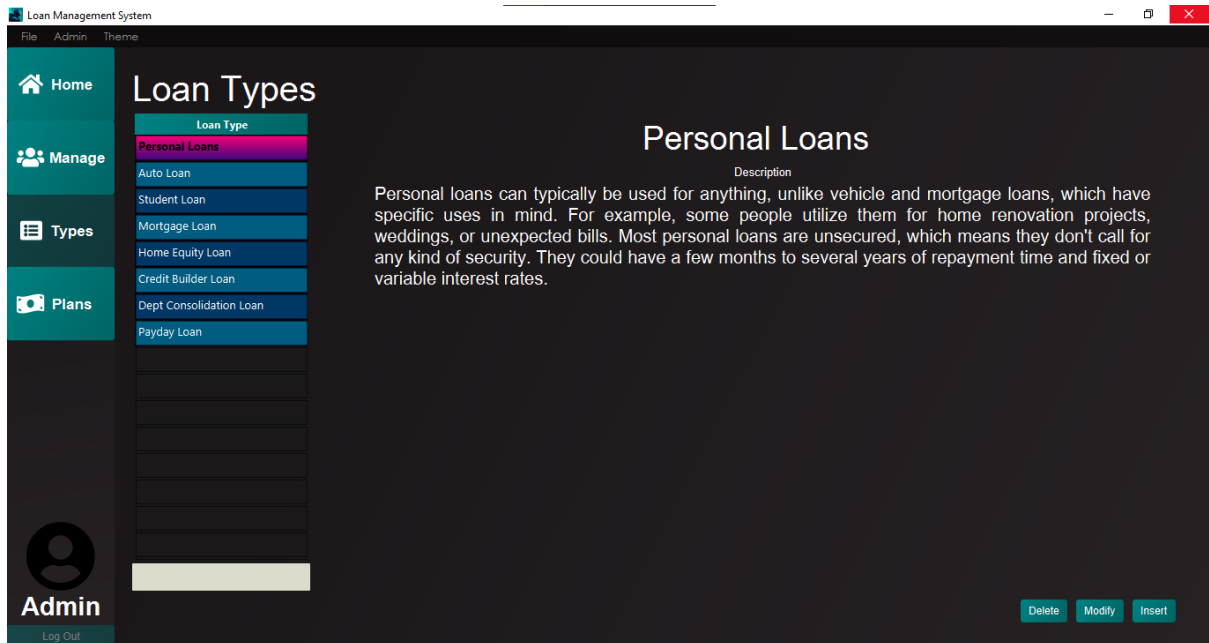
- Collateral:** 1551
- Status:** Neutral (dropdown menu)
- Collateral:** Car (text input field)

Buttons: Save, Cancel

The background shows the same 'Manage' section with the loaner Gerard Way selected.

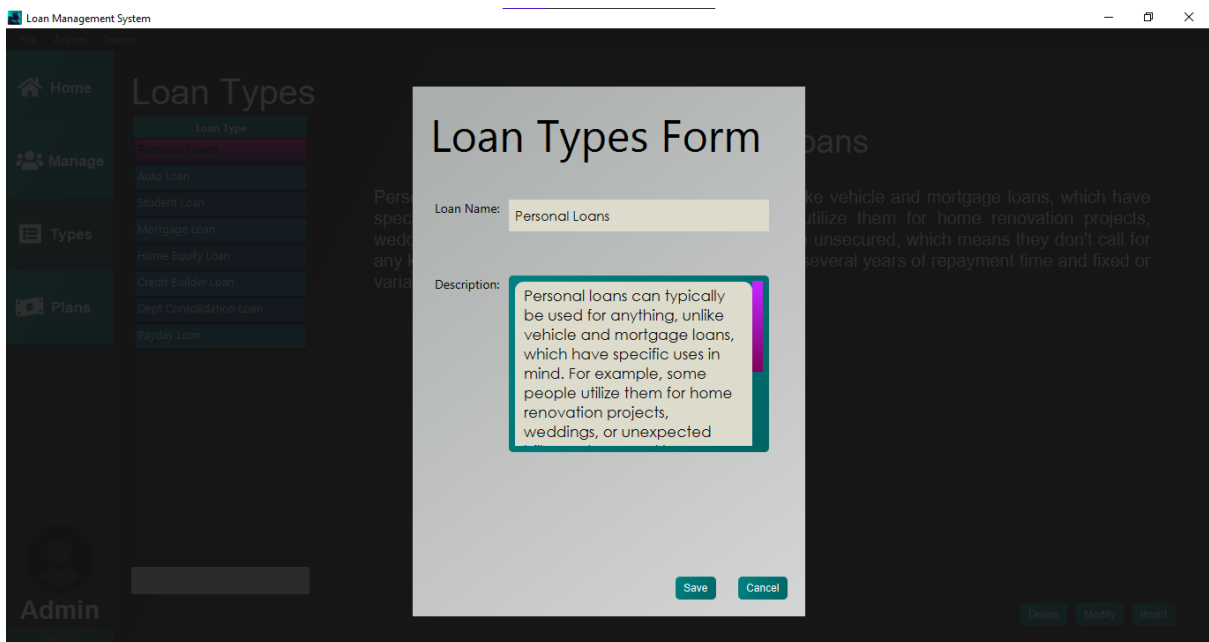
Here, you can add a collateral depending on the Loan Type the Loaner chooses. You can add the collateral details in the text area.

Loan Types



Only the admin can manage the details inside the Loan Types. But the non-admin users will still be able to look at the Loan Types descriptions.

Pressing the modify, or insert button will pop-up a Loan Types Form which you will



need to fill up with necessary and appropriate details.

[illegible]

Loan Management System

FileAdminProfile

Home

Manage

Types

Plans

Admin

Loan Plans

Plan ID

Loan Type

Payment Mode

Term(Days)

Interest in %

Penalty in %

6166

Auto Loan

Monthly

365

20.0%

50.0%

Save

Cancel

15

Generate Invoice

Info	Payments	Collaterals
------	----------	-------------

Payment ID	Loan ID	Due Date	Payment Date
8120461	1541002	Jul 15, 2023	Jun 15, 2023

Jul 15, 2023

Loan ID 1541002


Payment ID 8120461

Due Date Jun 15, 2023

Amount \$33.03

New PaymentGenerate Invoice

Back inside the Manage section, under Payments tab, you can see a Generate Invoice Button.

ocal Disk (C:) > Zephyr Loan Management System > data > 2746072 > 1541002 > invoices			
Name	Date modified	Type	Size
 2023-07-15.pdf	6/15/2023 9:19 PM	Chrome HTML Do...	2 KB

Pressing the Generate Invoice button will pop-up Windows Explorer with the location of your newly generated invoice on a form of pdf file.

Zephyr Loans

Personal Loan

Report generated by: Zephyr LMS, Thu Jun 15 21:19:01 SGT 2023

Gerard Way: 33.03030303030303

Payment ID	8120461
Loan ID	1541002
Due Date	Aug 15, 2023
Payment Date	Jun 15, 2023
Payment Due	\$33.03030303030303
Paid	\$33.03030303030303
Total Balance	\$1056.969696969697
Total Paid	\$33.03030303030303

Future Plan/Update

In the future updates, we are planning to add auto generated statistics, and auto generate forms on pdf file fore. We will also be planning on adding more security and accounts management. And of course, we will be fixing any bugs that might be discovered in the future. We are also open for suggestions from our clients.

Limitations of the Software

Our software exclusively caters to the initiation of lending enterprises, encompassing both small-scale lending companies and individual lenders. It is imperative that the software remains confined to a single computer device, as it operates through a localized database.