

LOAN MANAGEMENT SYSTEM

Project report

submitted by

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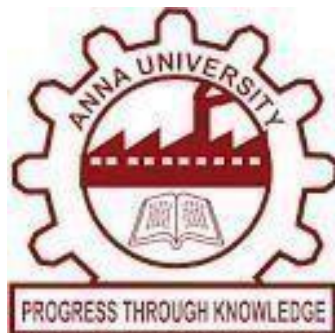
In partial fulfilment for

the Degree of

BACHELOR OF TECHNOLOGY

in

INFORMATION TECHNOLOGY



DEPARTMENT OF INFORMATION TECHNOLOGY

MADRAS INSTITUTE OF TECHNOLOGY

ANNA UNIVERSITY

CHENNAI-600044

LOAN MANAGEMENT SYSTEM

INTRODUCTION:

The Loan Management System (LMS) presented in this abstract is a comprehensive solution designed to streamline and optimize the entire lifecycle of loans. It encompasses a user-friendly interface for seamless loan application, robust approval processes, efficient disbursement workflows, and intelligent repayment tracking mechanisms. The LMS acts as a centralized hub, providing real-time insights into loan statuses, payment histories, and risk assessments. With advanced features such as automated notifications, document management, and risk analysis tools, the system ensures accuracy, transparency, and compliance throughout the lending process.

OBJECTIVES:

1. To provide good interaction & communication facilities between customers & administrator.
2. To provide interest rate and loan details at a mouse click.
3. Using with this system admin can find customer easily and it's a paperless system, so workload is reduced.
4. Customer can apply for a loan and after approved it they can track their details from online.

DATABASE SCHEMA:

borrowers(id, firstname, middlename, lastname, contact_no, address, email, tax_id, date_created);

loan_list(id, ref_no, loan_type_id, borrower_id, purpose, amount, plan_id, status, date_released, date_created);

loan_plan(id, months, interest_percentage, penalty_rate);

loan_schedule(id, loan_id, date_due);

loan_types(id, type_name, description);

payments(id, loan_id, payee, amount, penalty_amount, overdue, date_created);

users(id, doctor_id, name, address, contact, username, password, type);

IO DATA:

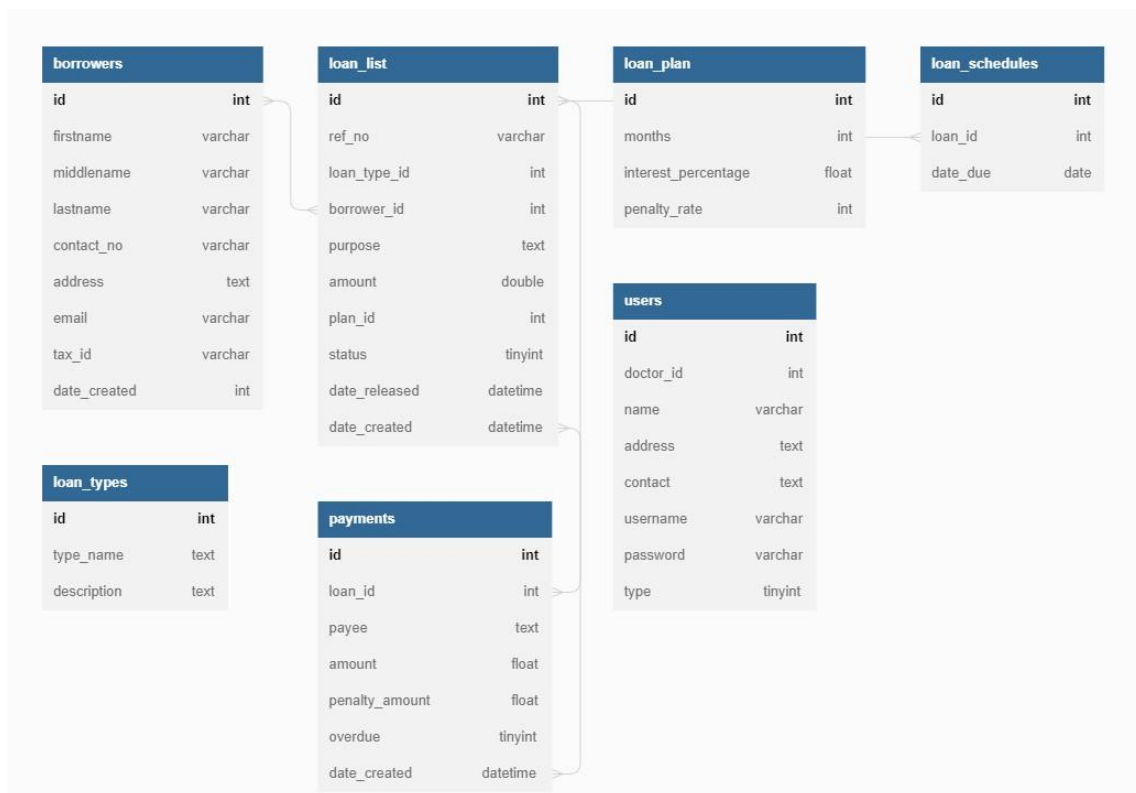
INPUT DATA:

Customer details (name, address, mobile number, email, etc) and details regarding the loan they want to take (loan type, loan amount, monthly income, etc) is received as the input.

OUTPUT DATA:

Generated report on Loan Amount payment after verification of customer details from the admin side will be provided to that respective customer.

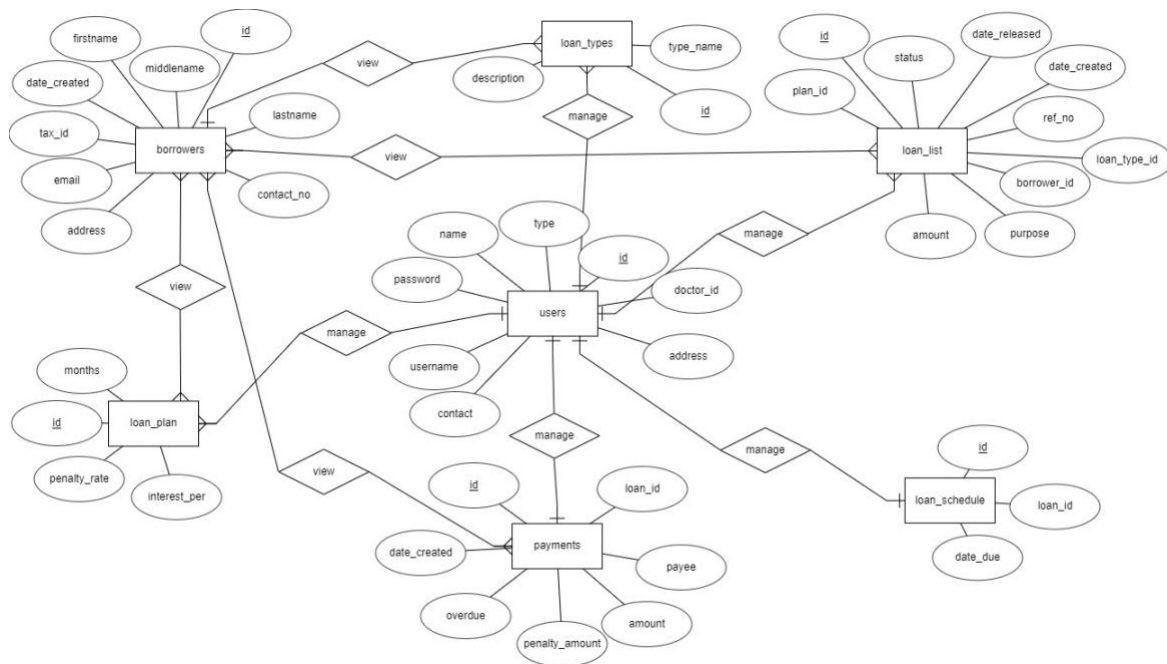
SCHEMA DIAGRAM:



PROGRAMMING LANGUAGES USED:

1. MY SQL
2. PHP-SERVER SCRIPTING
3. WEB-PAGE DESIGNING:
 1. HTML
 2. CSS
 3. JAVA SCRIPTING

ENTITY RELATIONSHIP DIAGRAM:

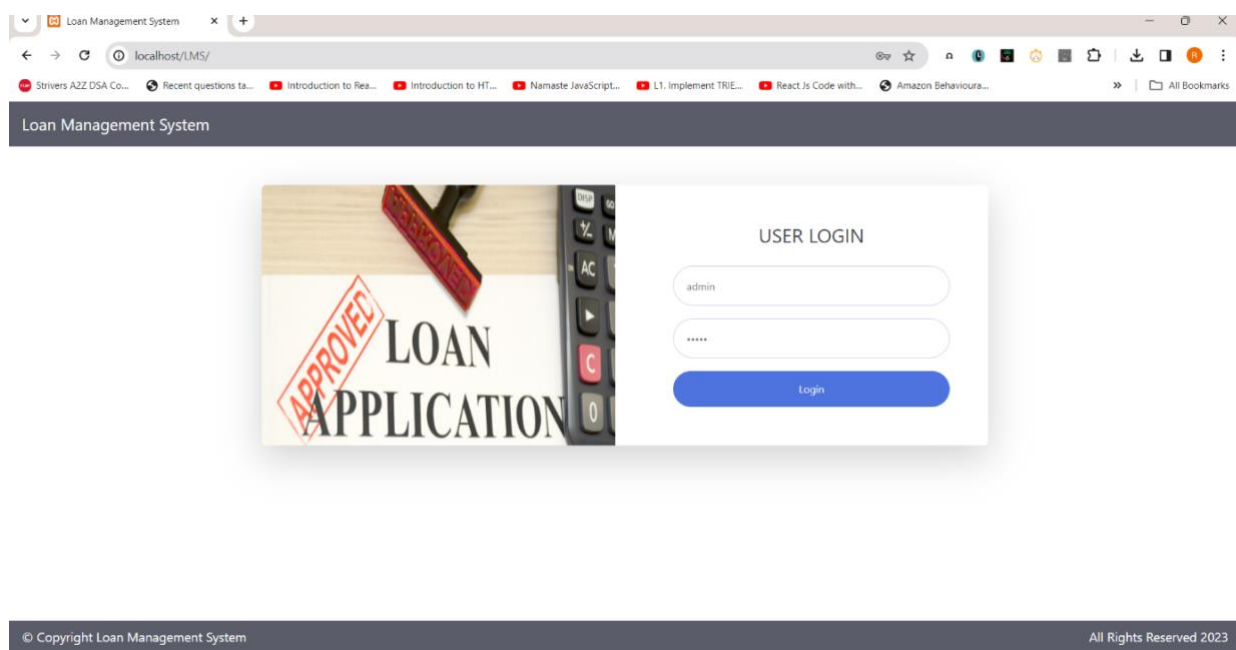


USER INTERFACE DESIGN:

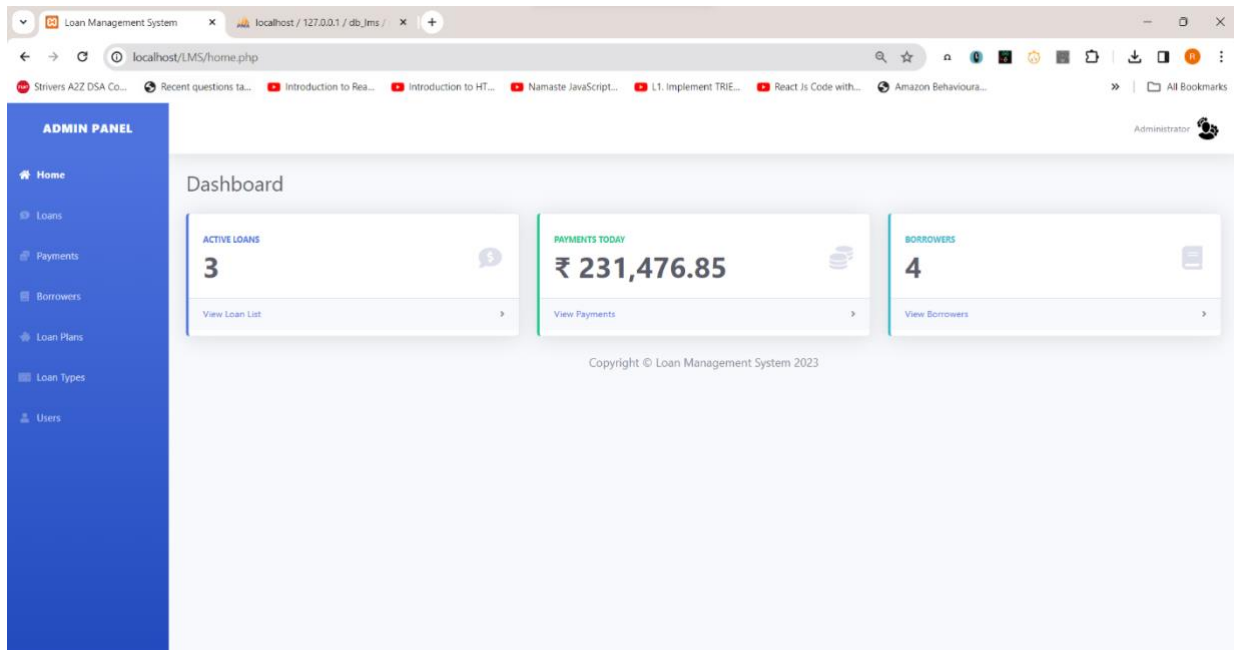
The UI for the database is designed using web development tools such as HTML5, CSS3 and bootstrap. Javascript is used for form validation and PHP – MySQL Connectivity is used to connect the database at the backend to the frontend.

FUNCTIONALITIES OUTPUT SCREENSHOTS:

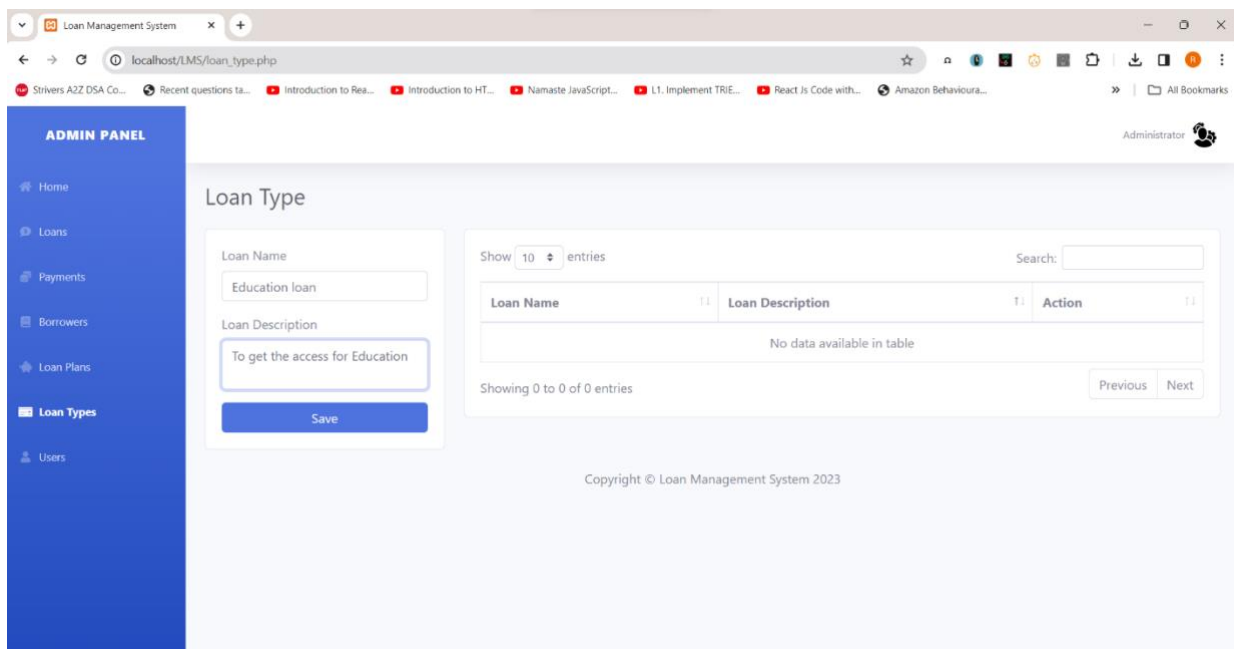
LOGIN PAGE:



HOME PAGE:

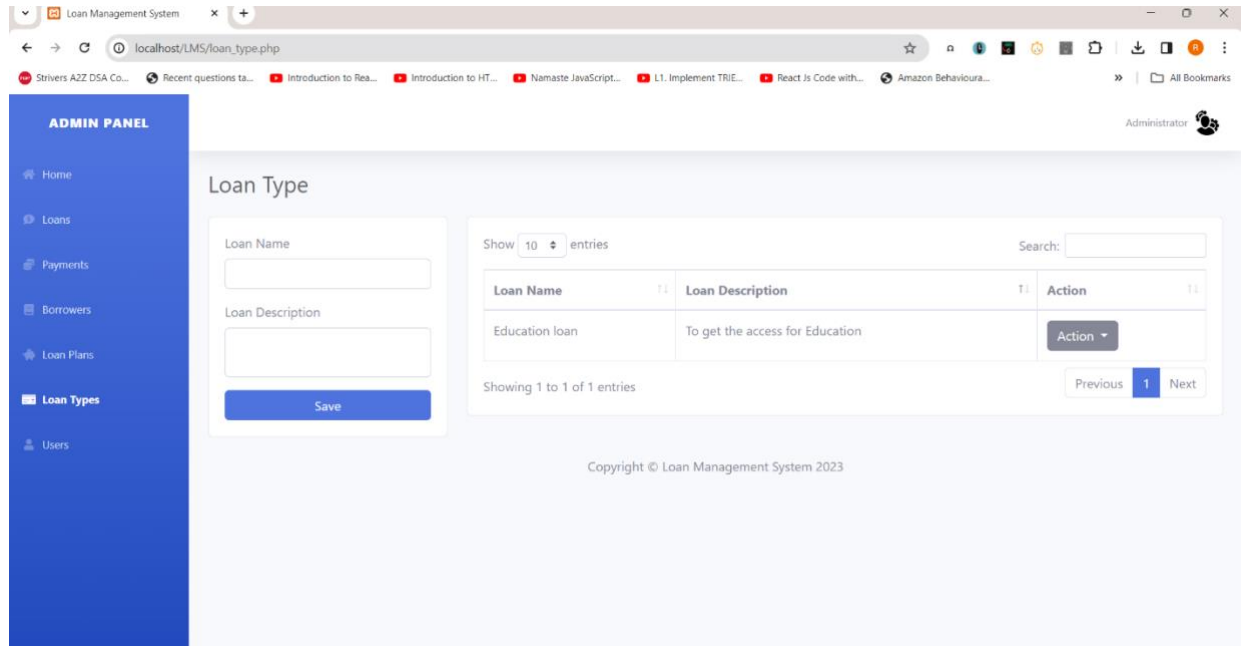


ADDING LOAN TYPES:



AFTER CLICKING SAVE:

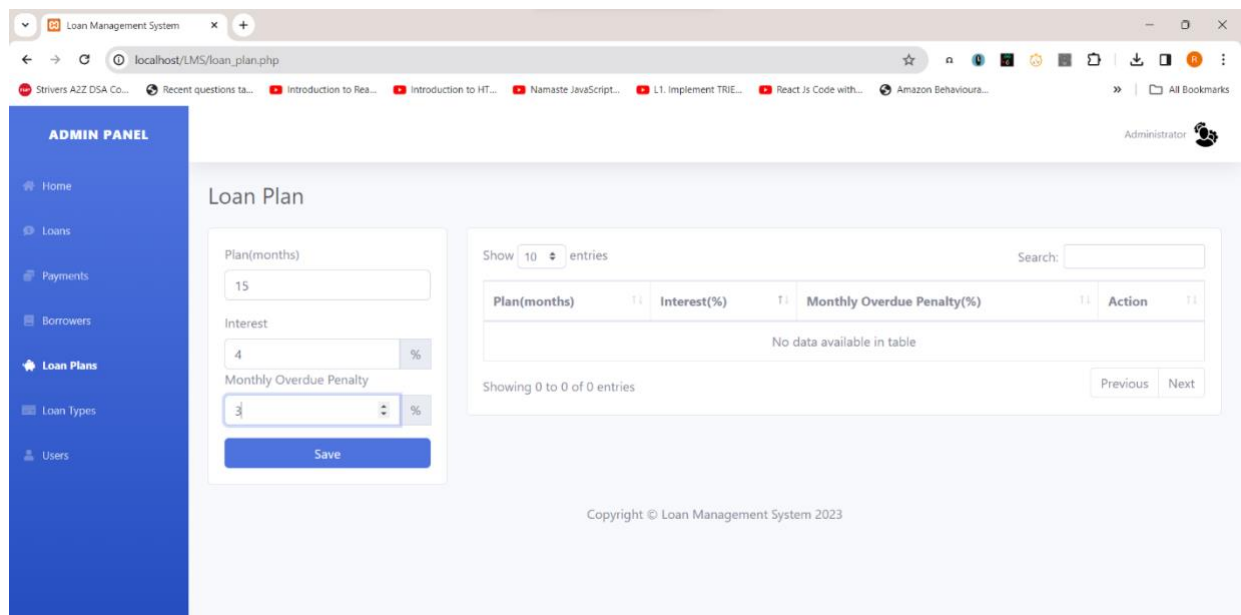
EDUCATIONAL LOAN TYPE IS SUCCESSFULLY ADDED.



The screenshot shows the 'Loan Type' page in the Loan Management System. The left sidebar contains the 'ADMIN PANEL' with links to Home, Loans, Payments, Borrowers, Loan Plans, **Loan Types**, and Users. The main content area has a 'Loan Type' section with input fields for 'Loan Name' and 'Loan Description', and a 'Save' button. To the right, there is a table with columns 'Loan Name', 'Loan Description', and 'Action'. The table shows one entry: 'Education loan' with the description 'To get the access for Education'. Below the table, it says 'Showing 1 to 1 of 1 entries'. The footer of the page reads 'Copyright © Loan Management System 2023'.

Loan Name	Loan Description	Action
Education loan	To get the access for Education	Action

ADDING LOAN PLANS:



The screenshot shows the 'Loan Plan' page in the Loan Management System. The left sidebar contains the 'ADMIN PANEL' with links to Home, Loans, Payments, Borrowers, **Loan Plans**, Loan Types, and Users. The main content area has a 'Loan Plan' section with input fields for 'Plan(months)', 'Interest', and 'Monthly Overdue Penalty', and a 'Save' button. To the right, there is a table with columns 'Plan(months)', 'Interest(%)', 'Monthly Overdue Penalty(%)', and 'Action'. The table is empty, showing 'No data available in table'. Below the table, it says 'Showing 0 to 0 of 0 entries'. The footer of the page reads 'Copyright © Loan Management System 2023'.

Plan(months)	Interest(%)	Monthly Overdue Penalty(%)	Action
No data available in table			

AFTER CLICKING SAVE:

NEW LOAN PLAN IS SUCCESSFULLY ADDED.

The screenshot shows the 'Loan Plan' section of the Admin Panel. On the left is a sidebar with navigation links: Home, Loans, Payments, Borrowers, **Loan Plans**, Loan Types, and Users. The main content area has a form on the left with fields for 'Plan(months)', 'Interest' (with a percentage sign), and 'Monthly Overdue Penalty' (with a percentage sign). A 'Save' button is at the bottom of the form. To the right of the form is a table with the following data:

Plan(months)	Interest(%)	Monthly Overdue Penalty(%)	Action
15	4	3	Action

Below the table, it says 'Showing 1 to 1 of 1 entries'. At the bottom right of the table are 'Previous', '1', and 'Next' buttons. The footer of the page says 'Copyright © Loan Management System 2023'.

ADDING NEW BORROWER:

The screenshot shows the 'Add Borrower' form in the Admin Panel. The sidebar is the same as in the previous screenshot. The main content area has a 'Borrower' section with a '+ Add Borrower' button. Below it is a table with the following data:

Firstname	Middlename
Mr	Jagadheesh

Below the table, it says 'Showing 1 to 1 of 1 entries'. To the right of the table is a form with the following fields: 'Firstname' (A D), 'Middlename' (Raj), 'Lastname' (kumar), 'Contact no' (8754 327 887), 'Address' (Chennimalal Perundurai), 'Email' (adrajkumar724@gmail.com), and 'Tax ID(must be valid)' (123456789). At the bottom right of the form are 'Cancel' and 'Save' buttons. The footer of the page says 'Copyright © Loan Management System 2023'.

ADDING BORROWER DETAILS:

ADMIN PANEL

- Home
- Loans
- Payments
- Borrowers**
- Loan Plans
- Loan Types
- Users

Borrower

[+ Add Borrower](#)

Show 10 entries

Firstname	Middlename
Mr	Jagadheesh

Showing 1 to 1 of 1 entries

Add Borrower

Firstname: A D

Middlename: Raj

Lastname: kumar

Contact no: 8754 327 887

Address: Chennimalal Perundurai

Email: adrajkumar724@gmail.com

Tax ID(must be valid): 123456789

[Cancel](#) [Save](#)

Borrower List (Background):

Email	Tax ID	Action
jagadheesh@gmail.com	111111111	Action

Previous 1 Next

LOAN PAGE:

ADMIN PANEL

- Home
- Loans**
- Payments
- Borrowers
- Loan Plans
- Loan Types
- Users

Loan List

[+ Create new Loan Application](#)

Show 10 entries

Search:

#	Borrower	Loan Detail	Payment Detail	Status	Action
1	Name: kumar, A D R. Contact: 1470 025 3693 Address: Chennimalal Perundurai	Reference no: 96141962 Loan Type: Education loan Loan Plan: 15 months[4%, 3%] interest, penalty Amount: ₹ 124,666.00 Total Payable Amount: ₹ 133,309.51 Monthly Payable Amount: ₹ 8,643.51 Overdue Payable Amount: ₹ 259.31 Date Released: Nov 29, 2023	Next Payment Date: January 29, 2024 Monthly Amount: ₹ 8,643.51 Penalty: ₹ 0 Payable Amount: ₹ 8,643.51	Released	View Payment Schedule
2	Name: M, Mr J.	Reference no: 82743764	Next Payment Date:	Released	View Payment Schedule

ADDING NEW LOAN APPLICATION WITH DETAILS:

The screenshot shows a web browser window with the URL `localhost/LMS/loan.php`. The page displays the 'Loan Application' modal form. The form contains the following fields:

- Borrower:** A dropdown menu with the value 'kumar, A D R'.
- Loan type:** A dropdown menu with the value 'Education loan'.
- Loan Plan:** A dropdown menu with the value '15 months[4%, 3%]'.
- Loan Amount:** A text input field with the value '124666'.
- Purpose:** A text area with the value 'To build my career'.
- Calculate Amount:** A blue button.
- Cancel:** A grey button.
- Apply:** A blue button.

The background shows the 'Loan List' table with columns for '#', 'Borrower', 'Status', and 'Action'. The table is currently empty, showing 'Showing 0 to 0 of 0 entries'.

CALCULATING THE AMOUNT:

The screenshot shows the same 'Loan Application' modal form as above, but with the 'Calculate Amount' button clicked. The form now displays the calculated amounts at the bottom:

- Total Payable Amount:** ₹ 133,309.51
- Monthly Payable Amount:** ₹ 8,643.51
- Penalty Amount:** ₹ 259.31

The 'Cancel' and 'Apply' buttons are still present at the bottom right of the modal.

ADDED LOAN IS WAITING FOR THE FOR APPROVAL:

The screenshot shows the 'Loan List' page in the 'ADMIN PANEL'. A green button '+ Create new Loan Application' is at the top. Below it, a table displays loan details for a single entry. The table has columns: #, Borrower, Loan Detail, Payment Detail, Status, and Action. The loan is for 'kumar, A D R.' with a reference number '96141962'. The status is 'For Approval'. The action column has a dropdown menu.

#	Borrower	Loan Detail	Payment Detail	Status	Action
1	Name: kumar, A D R. Contact: 1470 025 3693 Address: Chennimalai Perundurai	Reference no: 96141962 Loan Type: Education loan Loan Plan: 15 months(4%, 3%) interest, penalty Amount: ₹ 124,666.00 Total Payable Amount: ₹ 133,309.51 Monthly Payable Amount: ₹ 8,643.51 Overdue Payable Amount: ₹ 259.31		For Approval	Action

Showing 1 to 1 of 1 entries

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APPROVING THE LOAN:

The screenshot shows the 'Create new Loan' form in the 'ADMIN PANEL'. The form includes fields for Borrower, Loan type, Loan Plan, Loan Amount, Purpose, and Status. A 'Calculate Amount' button is present. The status dropdown menu is open, showing options: 'For Approval', 'Approved', 'Released', and 'Denied'. The background shows the 'Loan List' table with the same loan entry.

Borrower: kumar, A D R. | Loan type: Education loan | Loan Plan: 15 months(4%, 3%) | Loan Amount: 124666 | Months[Interest%, Penalty%]

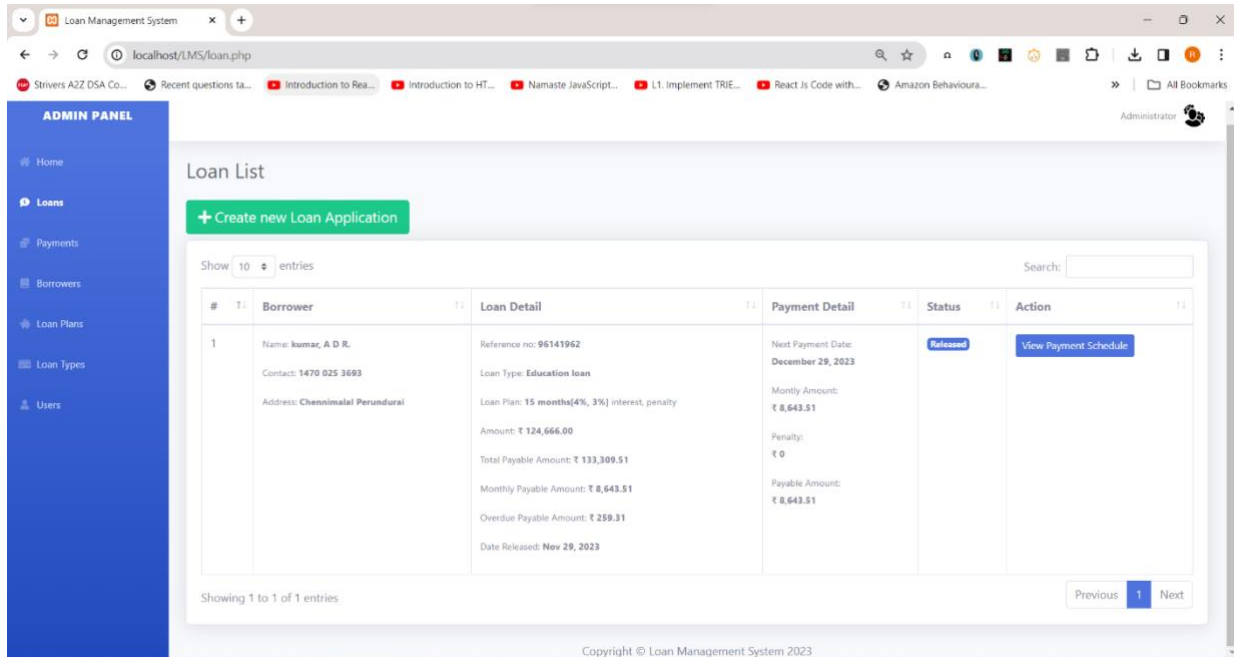
Purpose: To build my career | Calculate Amount

Total Payable Amount: ₹ 133,309.51 | Monthly Payable Amount: ₹ 8,643.51 | Penalty Amount: ₹ 259.31

Status: For Approval (selected) | Approved | Released | Denied

Cancel | Update

FINALLY, LOAN IS RELEASED:



ADMIN PANEL

- Home
- Loans
- Payments
- Borrowers
- Loan Plans
- Loan Types
- Users

Loan List

[+ Create new Loan Application](#)

Show 10 entries Search:

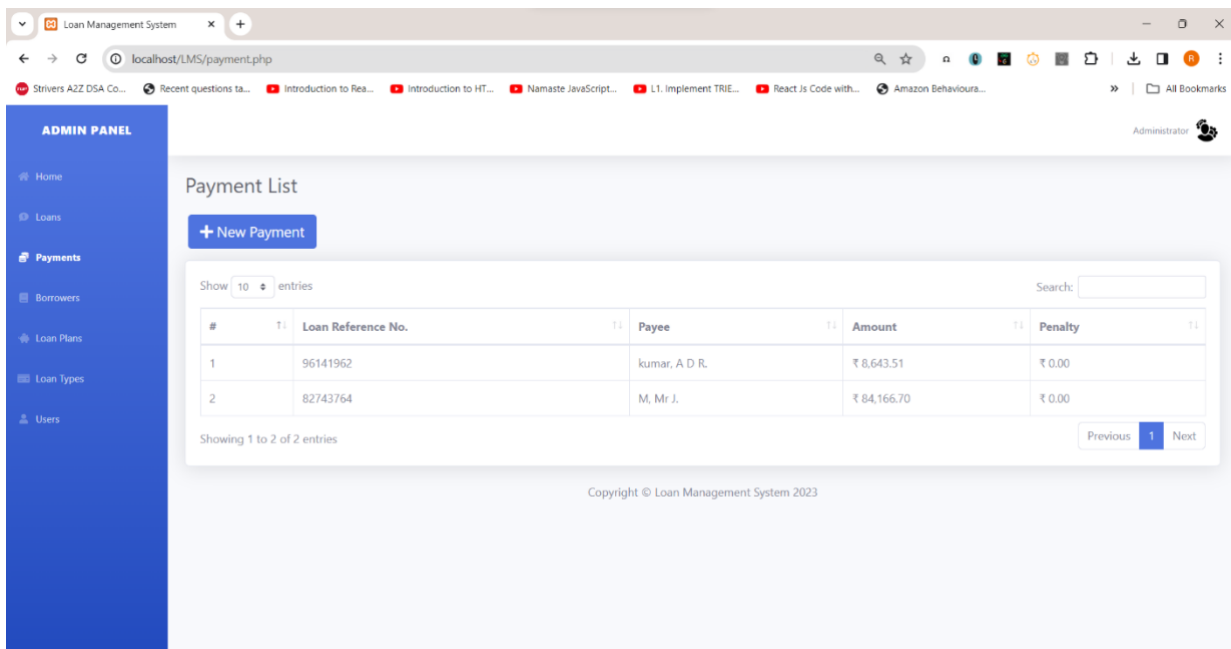
#	Borrower	Loan Detail	Payment Detail	Status	Action
1	Name: kumar, A D R. Contact: 1470 025 3693 Address: Chennimalai Perundurai	Reference no: 96141962 Loan Type: Education loan Loan Plan: 15 months(4%, 3%) interest, penalty Amount: ₹ 124,666.00 Total Payable Amount: ₹ 133,309.51 Monthly Payable Amount: ₹ 8,643.51 Overdue Payable Amount: ₹ 259.31 Date Released: Nov 29, 2023	Next Payment Date: December 29, 2023 Monthly Amount: ₹ 8,643.51 Penalty: ₹ 0 Payable Amount: ₹ 8,643.51	Released	View Payment Schedule

Showing 1 to 1 of 1 entries

Previous 1 Next

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PAYMENT PAGE:



ADMIN PANEL

- Home
- Loans
- Payments
- Borrowers
- Loan Plans
- Loan Types
- Users

Payment List

[+ New Payment](#)

Show 10 entries Search:

#	Loan Reference No.	Payee	Amount	Penalty
1	96141962	kumar, A D R.	₹ 8,643.51	₹ 0.00
2	82743764	M, Mr J.	₹ 84,166.70	₹ 0.00

Showing 1 to 2 of 2 entries

Previous 1 Next

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ADDING NEW PAYMENT:

Payment Form

Reference no: 22834968

Payee: I, Tony S.

Monthly Amount: ₹ 138,666.67

Penalty: ₹ 0.00

Payable Amount: ₹ 138,666.67

Amount: 138666.67

Cancel Save

Payment List

+ New Payment

Show 10 entries

#	Loan Reference No.	Amount	Penalty
1	96141962	₹ 8,643.51	₹ 0.00
2	82743764	₹ 84,166.70	₹ 0.00
3	22834968	₹ 138,667.00	₹ 0.00

Showing 1 to 3 of 3 entries

Previous 1 Next

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AFTER CLICKING SAVE:

PAYMENT IS SUCCESSFULLY ADDED.

Payment List

+ New Payment

Show 10 entries

#	Loan Reference No.	Payee	Amount	Penalty
1	96141962	kumar, A D R.	₹ 8,643.51	₹ 0.00
2	82743764	M, Mr J.	₹ 84,166.70	₹ 0.00

Showing 1 to 2 of 2 entries

Previous 1 Next

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USER PAGE:

ADMIN PANEL

- Home
- Loans
- Payments
- Borrowers
- Loan Plans
- Loan Types
- Users

Users

[+ Add User](#)

Show 10 entries

Search:

Username	Password	Name	Action
admin	*****	Administrator	Action
new_admin	***	Rohit M	Action

Showing 1 to 2 of 2 entries

Previous 1 Next

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ADDING NEW USER:

ADMIN PANEL

- Home
- Loans
- Payments
- Borrowers
- Loan Plans
- Loan Types
- Users

Users

[+ Add User](#)

Show 10 entries

Search:

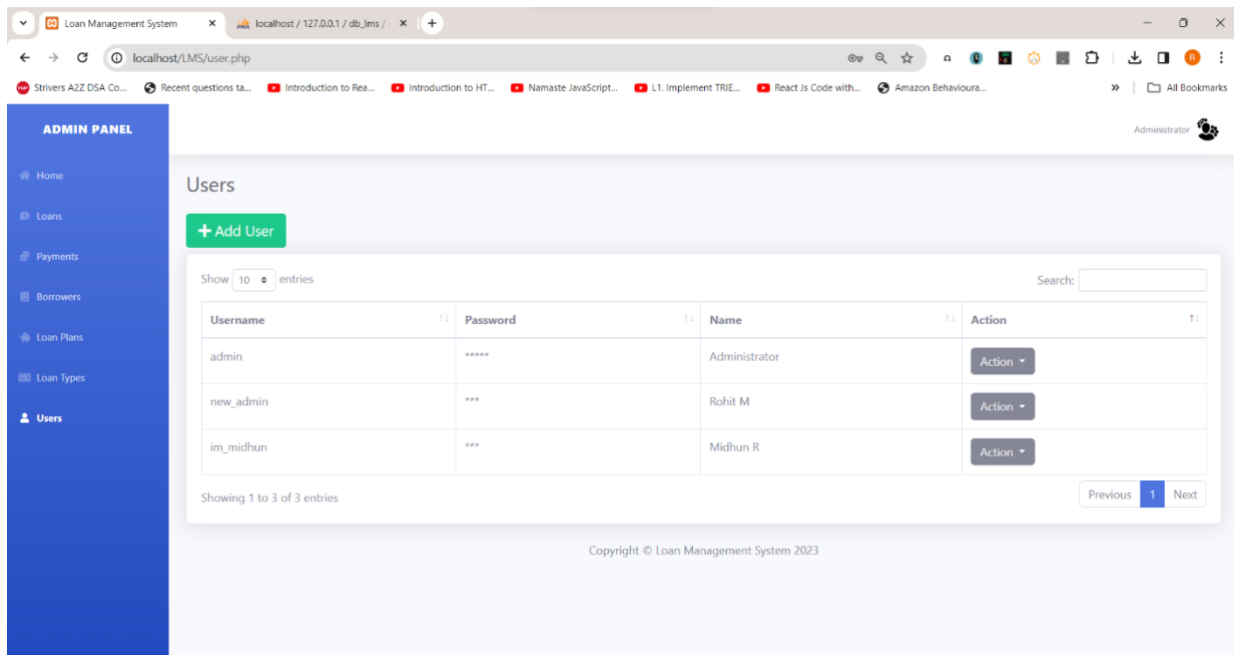
Username	Password	Name	Action
admin	*****	Administrator	Action
new_admin	***	Rohit M	Action
im_midhun	***	Midhun R	Action

Showing 1 to 3 of 3 entries

Previous 1 Next

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NEW USER IS ADDED:



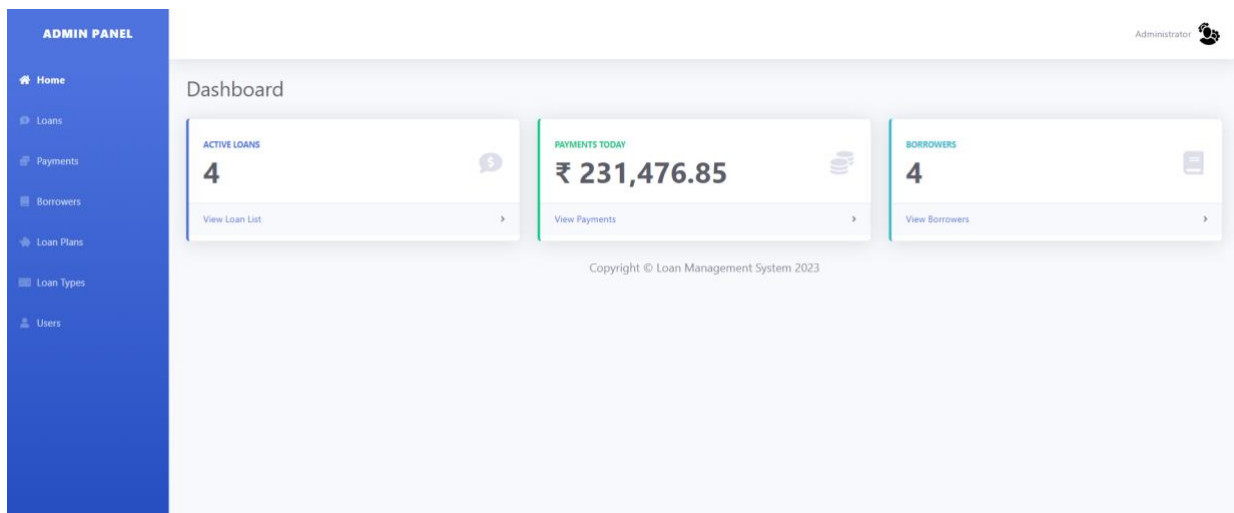
The screenshot shows the 'Users' page in the LMS Admin Panel. The left sidebar contains the 'ADMIN PANEL' menu with options: Home, Loans, Payments, Borrowers, Loan Plans, Loan Types, and Users. The main content area shows a '+ Add User' button and a table of users. The table has columns for Username, Password, Name, and Action. The 'new_admin' user has been added with the name 'Rohit M'.

Username	Password	Name	Action
admin	*****	Administrator	Action
new_admin	***	Rohit M	Action
im_midhun	***	Midhun R	Action

Showing 1 to 3 of 3 entries

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RETURNING TO THE HOME PAGE:



The screenshot shows the 'Dashboard' page in the LMS Admin Panel. The left sidebar contains the 'ADMIN PANEL' menu with options: Home, Loans, Payments, Borrowers, Loan Plans, Loan Types, and Users. The main content area displays three key metrics: Active Loans (4), Payments Today (₹ 231,476.85), and Borrowers (4). Each metric has a 'View' link below it.

ACTIVE LOANS	PAYMENTS TODAY	BORROWERS
4	₹ 231,476.85	4

View Loan List View Payments View Borrowers

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CONCLUSION:

Thus, we have created the loan management system to manage the every stage of loan life cycle.

The Loan Management System (LMS) is a comprehensive, user-friendly solution designed to optimize the entire lifecycle of loans, from application to repayment. With its robust features and functionalities, the LMS provides significant benefits to both customers and administrators.

The well-structured database schema supports the system's functionality, providing a solid foundation for managing borrowers, loan plans, loan schedules, payments, and user information. By leveraging this schema, the LMS ensures data integrity and facilitates quick retrieval of information, thereby enhancing operational efficiency.

The LMS enhances interaction and communication between customers and administrators, provides real-time insights, and promotes a paperless environment, making it a valuable asset for any lending institution.

