



CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE, INDIA

5BCA Project



MISSION

CHRIST is a nurturing ground for an individual's holistic development to make effective contribution to the society in a dynamic environment

VISION

Excellence and Service

CORE

VALUES

Faith in God | Moral Uprightness
Love of Fellow Beings
Social Responsibility | Pursuit of Excellence

Under the guidance of

Dr KN Saravanan

Team Members:

K Abisheik 2241136

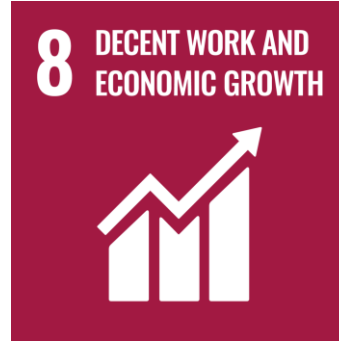
Pranav Srinivasan 2241149

Soravich Pinrat 2241158



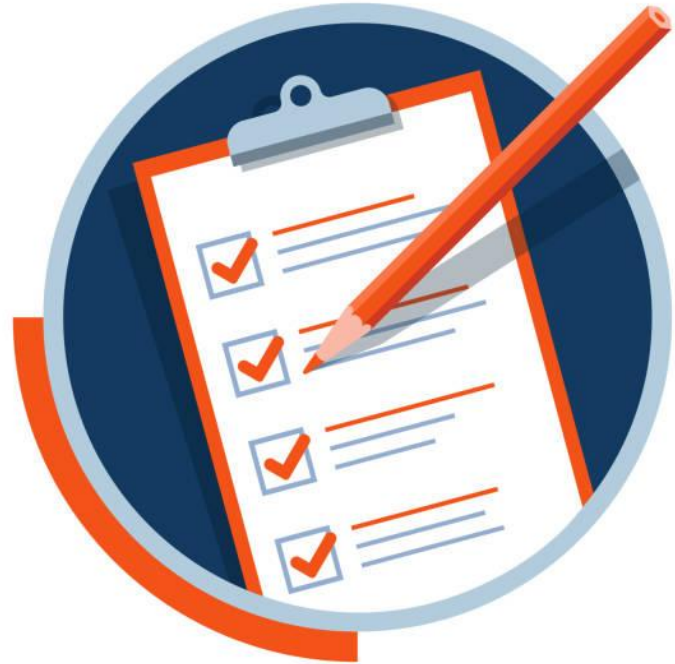
ABSTRACT

- MSMEs often need quick access to cash flow for their working capital needs.
- Traditional funding sources, such as banks, can be slow to process loans, prompting MSMEs to seek faster solutions from financiers.
- Our platform aims to simplify this process, allowing MSMEs to quickly find suitable financiers. At the same time, the platform helps financiers easily find appropriate borrowers.
- It is designed to facilitate faster funding for MSMEs and enable small-scale financiers to compete with larger market players.



AGENDA

1. Introduction
2. Existing Systems
 - 2.1 Limitations of Existing Systems
3. Proposed System
 - 3.1 Objective
 - 3.2 Application Areas
 - 3.3 Flow Diagram
4. Requirement Analysis
 - 4.1 Software Requirements
 - 4.2 System Requirements
 - 4.3 Modules/Functionalities
5. Database Design



INTRODUCTION

FinBridge is a digital platform that connects micro, small, and medium enterprises (MSMEs) with potential financiers. It streamlines the loan application process, enabling MSMEs to access funding quickly and efficiently while offering financiers a wider range of investment opportunities.

By enhancing financial inclusion and improving transparency, FinBridge supports the growth and success of small businesses.



EXISTING SYSTEMS



Traditional Banking Systems: Banks provide secure, regulated loans and comprehensive financial services, making them a reliable choice for MSMEs.



Peer-to-Peer (P2P) Lending Platforms: P2P platforms connect borrowers with individual lenders directly, offering flexible terms and an easy online application process.



Crowdfunding Platforms: These platforms allow businesses to raise funds from many people online, ideal for innovative projects without credit checks.



Faircent: An Indian P2P lending platform offering personal and business loans, with features like credit scoring and risk assessment.



Indifi: An Indian platform that connects small businesses with financial institutions for tailored loan products and fast disbursement.

LIMITATIONS OF EXISTING SYSTEMS

- Traditional Banking Systems: Long approval times and strict eligibility can delay funding, with higher costs for MSMEs due to high interest rates and fees.
- Peer-to-Peer (P2P) Lending Platforms: Increased risk of borrower default and less regulation make these platforms riskier for both borrowers and lenders.
- Microfinance Institutions (MFIs): Small loan sizes and higher interest rates may not meet the larger funding needs of some MSMEs.
- Crowdfunding Platforms: Success relies on crowd participation and can be time-consuming, potentially distracting from business operations.

- Government Schemes and Initiatives: Complex applications and bureaucratic processes can delay funding; many MSMEs may be unaware of available schemes.
- Funding Circle: Connects small businesses with investors for quick loans and competitive rates, but is geographically limited and focuses on established businesses.
- Faircent: An Indian P2P platform offering loans and credit assessment but with stringent eligibility criteria.
- Indifi: Connects small businesses with financial institutions for tailored loans and quick disbursement, but requires extensive documentation and is limited to certain business types.

PROPOSED SYSTEM

- 1. Streamlined Matching Process:** FinBridge provides a seamless platform where MSMEs can quickly find suitable financiers based on specific loan requirements, reducing the time and effort needed to secure funding.
- 2. Broader Access for MSMEs:** Unlike traditional banks, which have stringent criteria, FinBridge offers more inclusive access to financing options, catering to a wider range of MSMEs, including newer and smaller businesses.
- 3. Enhanced Transparency:** The platform fosters transparency by allowing MSMEs and financiers to view detailed profiles, loan terms, and credit ratings, leading to more informed decision-making and building trust.
- 4. Reduced Risk for Financiers:** FinBridge implements advanced risk assessment tools and credit scoring mechanisms to help financiers evaluate potential borrowers more accurately, mitigating the risk of default.

5. Simplified Process: Unlike complex government schemes and time-consuming crowdfunding campaigns, FinBridge offers a straightforward application and matching process, making it easier for both MSMEs and financiers to navigate.

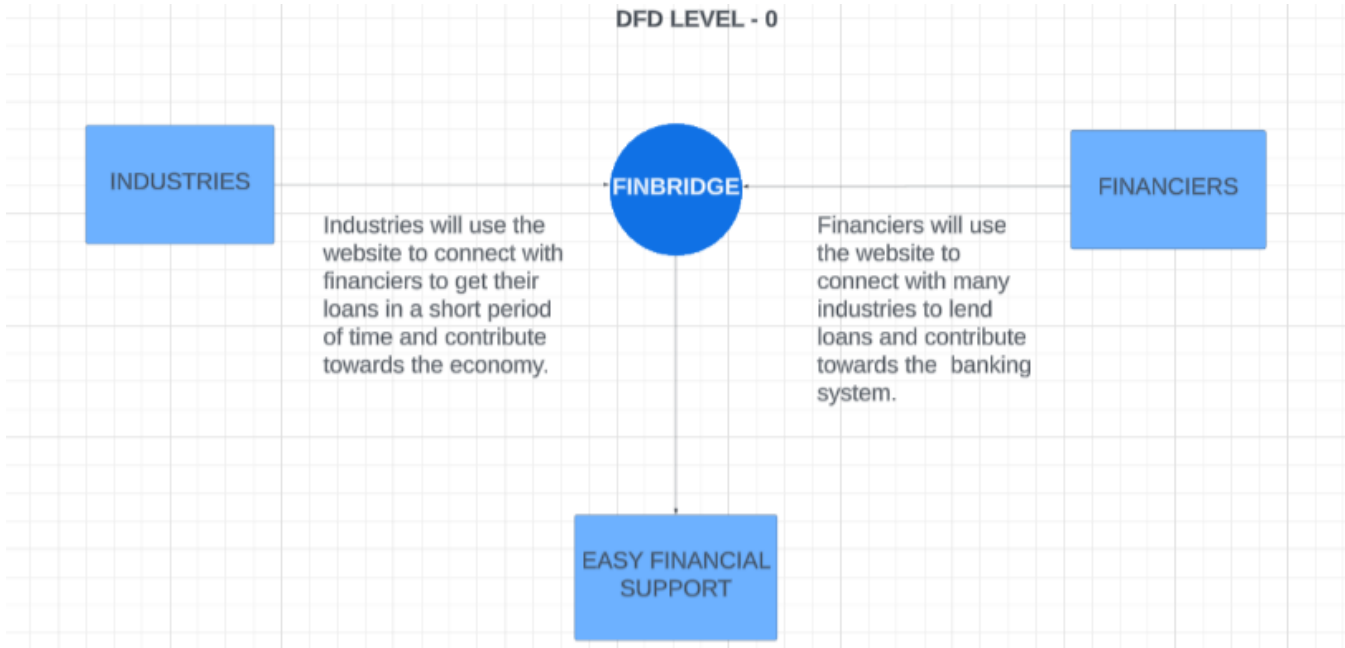
6. Real-Time Updates and Communication: FinBridge ensures real-time updates on application status and facilitates secure communication between MSMEs and financiers, streamlining the negotiation and agreement process.

7. Educational Resources: The platform includes educational materials and tools to help MSMEs improve their financial literacy and business management skills, enhancing their overall readiness for funding.

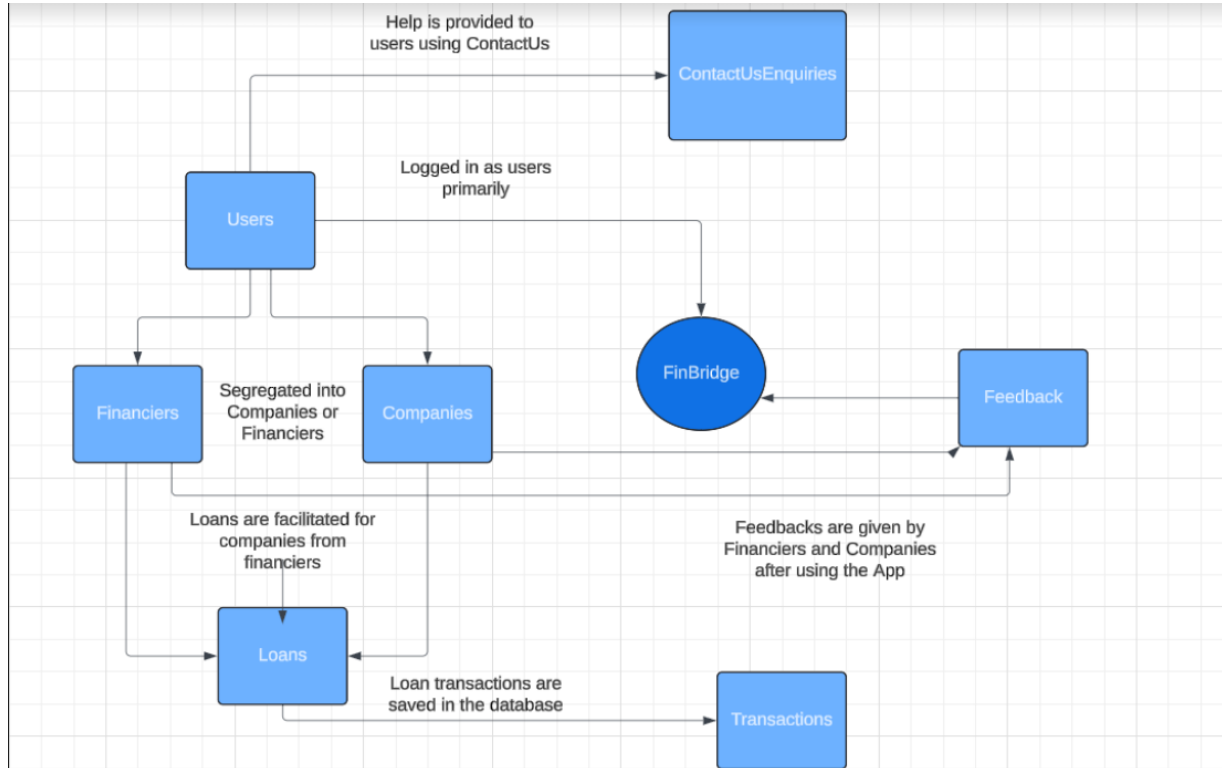
OBJECTIVES

1. Quick Funding for MSMEs: Create a platform for MSMEs to easily connect with financiers, addressing their urgent cash flow needs.
2. Support Small-Scale Financiers: Help small financiers compete with larger players by giving them access to more potential borrowers.
3. Boost Financial Inclusion: Provide funding options for MSMEs that don't have access to traditional banking services.
4. Increase Efficiency and Transparency: Make the funding process easy and clear for both MSMEs and financiers through a user-friendly platform.
5. Build Trust and Reliability: Include features like user reviews, ratings, and secure communication to build trust on the platform.
6. Offer Educational Resources: Provide educational materials to help MSMEs improve their financial knowledge and business management skills.

DFD Level 0



DFD Level 1



REQUIREMENT ANALYSIS

Hardware Requirements

- Server: High-performance server to handle web traffic and database operations.
- Storage: Sufficient storage capacity for user data, loan applications, and educational resources.
- Backup: Reliable backup system for data recovery and redundancy.

Software Requirements

- Frontend: HTML, CSS, and JavaScript for creating the user interface.
- Backend: PHP for server-side scripting and application logic.
- Database: MySQL for managing user data, loan applications, and transactions.
- APIs: Integration with external APIs for credit scoring and financial services.

Network Requirements

- WiFi required

FUNCTIONAL REQUIREMENTS

FR01: The registration module will capture user details such as name, contact information, business details for MSMEs, and loan offerings for financiers.

FR02: Users will be able to log in securely using their email and password, with an option for two-factor authentication.

FR03: MSMEs can fill out and submit loan applications online, including uploading necessary documentation.

FR04: The matching algorithm will analyze the loan requirements of MSMEs and match them with financiers based on criteria such as loan amount, interest rate, and repayment terms.

FR05: Users will have a personalized dashboard showing the status of their loan applications, messages, and other relevant information.

FR06: Users can leave reviews and ratings for each other after a loan transaction is completed, helping to build trust and reliability within the platform.

FR07: The platform will provide access to articles, videos, tutorials, and other resources to help MSMEs improve their financial literacy and business management skills.

FR08: The platform will integrate with external APIs for services such as credit scoring, payment gateways, and other financial services to enhance functionality and provide accurate data.

FR09: Users will receive notifications via email and in-app alerts regarding the status of their loan applications, new messages, and other important updates to keep them informed.

DATABASE DESIGN

The following database is created to meet with the requirements of the application.

```
mysql> show tables;
+-----+
| Tables_in_finbridge |
+-----+
| companies            |
| contactus inquiries  |
| feedback             |
| financiers           |
| loans               |
| transactions         |
| users               |
+-----+
7 rows in set (0.00 sec)
```

Users table

Stores information about all platform users.

```
mysql> desc users;
```

| Field | Type | Null | Key | Default | Extra |
|--------------|-----------------------------|------|-----|-------------------|---|
| user_id | int | NO | PRI | NULL | auto_increment |
| username | varchar(255) | NO | UNI | NULL | |
| password | varchar(255) | NO | | NULL | |
| email | varchar(255) | NO | UNI | NULL | |
| phone_number | varchar(20) | YES | | NULL | |
| user_type | enum('financier','company') | NO | | NULL | |
| created_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| updated_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |

Companies table

Stores further information from users about their company.

```
mysql> desc companies;
```

| Field | Type | Null | Key | Default | Extra |
|----------------|---------------|------|-----|-------------------|---|
| company_id | int | NO | PRI | NULL | auto_increment |
| user_id | int | YES | MUL | NULL | |
| company_name | varchar(255) | NO | | NULL | |
| industry | varchar(255) | YES | | NULL | |
| annual_revenue | decimal(15,2) | YES | | NULL | |
| employee_count | int | YES | | NULL | |
| credit_score | int | YES | | 50 | |
| created_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| updated_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |

Financiers Table

Stores information about financier details if they are trying to invest

```
mysql> desc financiers;
```

| Field | Type | Null | Key | Default | Extra |
|------------------------|--------------|------|-----|-------------------|---|
| financier_id | int | NO | PRI | NULL | auto_increment |
| user_id | int | YES | MUL | NULL | |
| company_name | varchar(255) | NO | | NULL | |
| investment_preferences | text | YES | | NULL | |
| created_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| updated_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |

Loans table

Stores information about the loan details including financier details, period of loan, amount and interest.

```
mysql> desc loans;
```

| Field | Type | Null | Key | Default | Extra |
|---------------|---|------|-----|-------------------|---|
| loan_id | int | NO | PRI | NULL | auto_increment |
| company_id | int | YES | MUL | NULL | |
| financier_id | int | YES | MUL | NULL | |
| amount | decimal(15,2) | NO | | NULL | |
| interest_rate | decimal(5,2) | YES | | NULL | |
| start_date | date | YES | | NULL | |
| end_date | date | YES | | NULL | |
| status | enum('pending','approved','rejected','completed') | YES | | pending | |
| created_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| updated_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |

Feedback table

Stores user feedback and rating.

```
mysql> desc feedback;
```

| Field | Type | Null | Key | Default | Extra |
|---------------|-----------|------|-----|-------------------|---|
| feedback_id | int | NO | PRI | NULL | auto_increment |
| user_id | int | YES | MUL | NULL | |
| feedback_text | text | YES | | NULL | |
| rating | int | YES | | NULL | |
| created_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| updated_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |

Contact us table

Stores contact details of anyone trying to reach out for queries.

```
mysql> desc contactusinquiries;
```

| Field | Type | Null | Key | Default | Extra |
|--------------|--------------|------|-----|-------------------|-------------------|
| inquiry_id | int | NO | PRI | NULL | auto_increment |
| name | varchar(255) | YES | | NULL | |
| email | varchar(255) | YES | | NULL | |
| phone_number | varchar(20) | YES | | NULL | |
| message | text | YES | | NULL | |
| created_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |

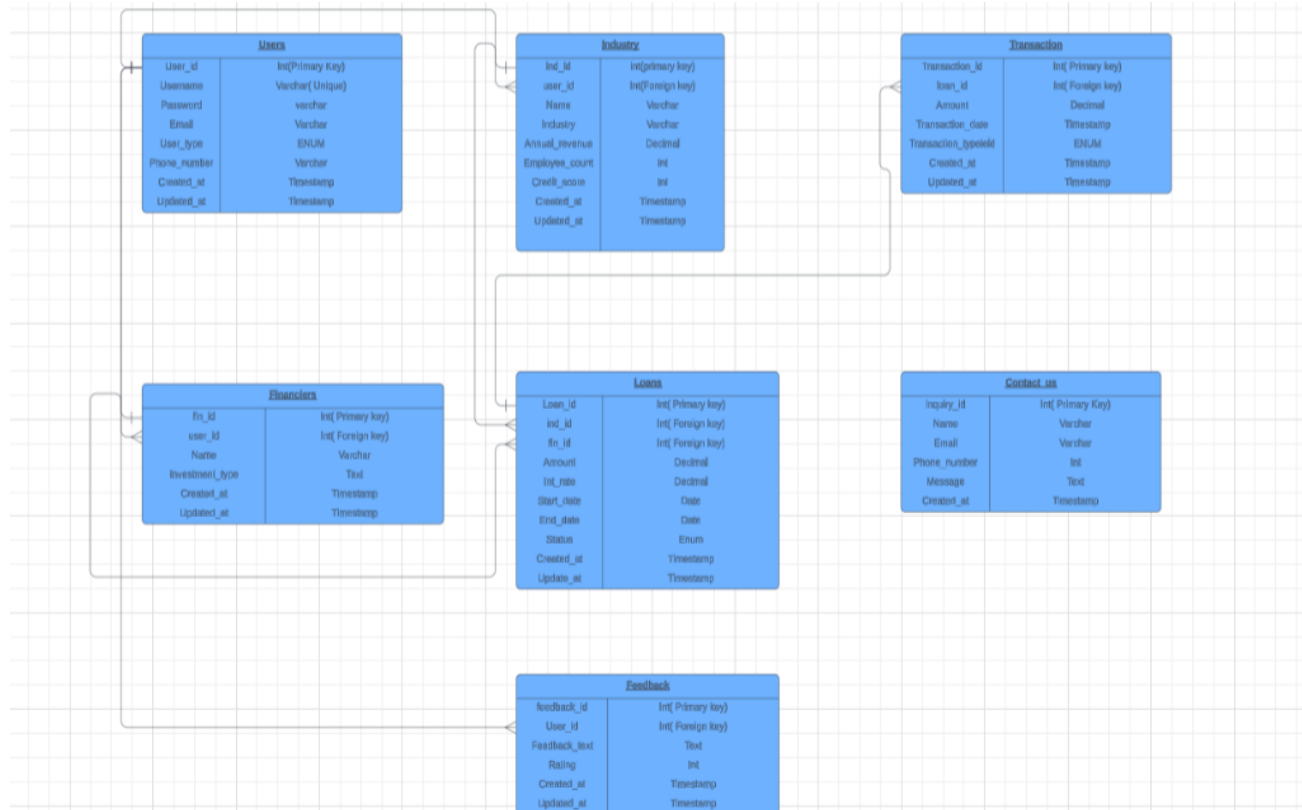
Transactions table

Stores transaction details.

```
mysql> desc transactions;
```

| Field | Type | Null | Key | Default | Extra |
|------------------|--------------------------------|------|-----|-------------------|---|
| transaction_id | int | NO | PRI | NULL | auto_increment |
| loan_id | int | YES | MUL | NULL | |
| amount | decimal(15,2) | NO | | NULL | |
| transaction_date | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| transaction_type | enum('payment','disbursement') | NO | | NULL | |
| created_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| updated_at | timestamp | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |

SCHEMA DIAGRAM

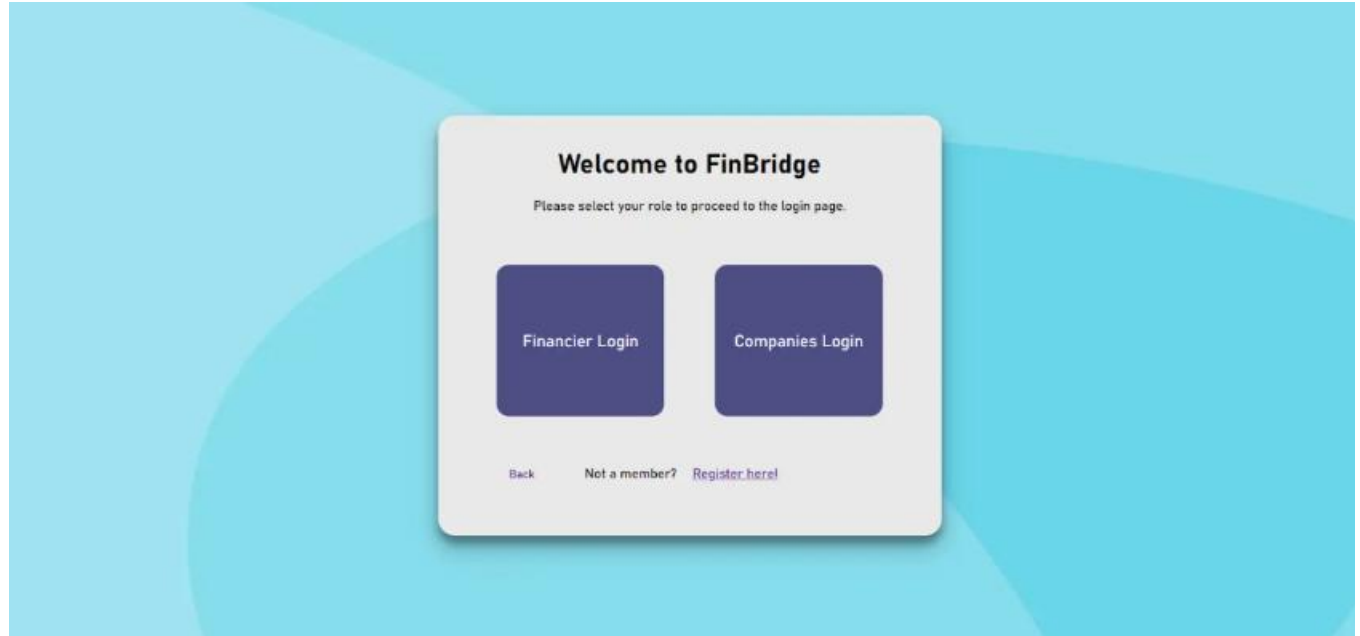


UI Design

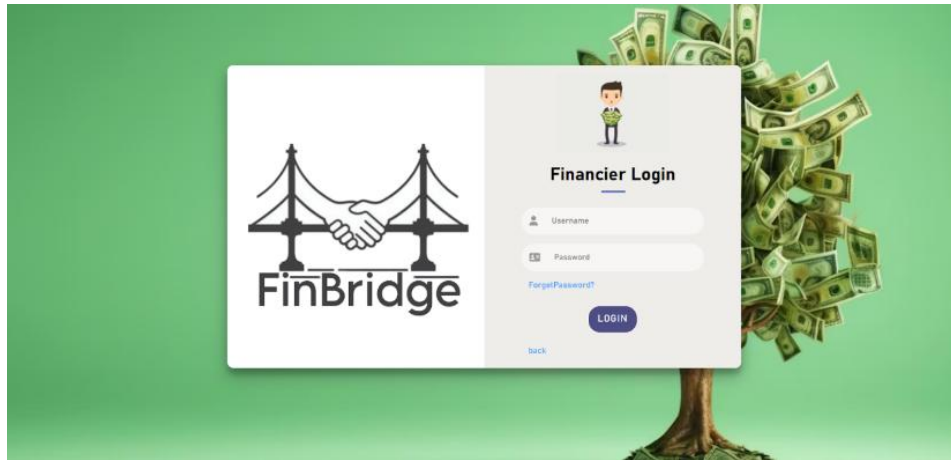
LANDING PAGE:



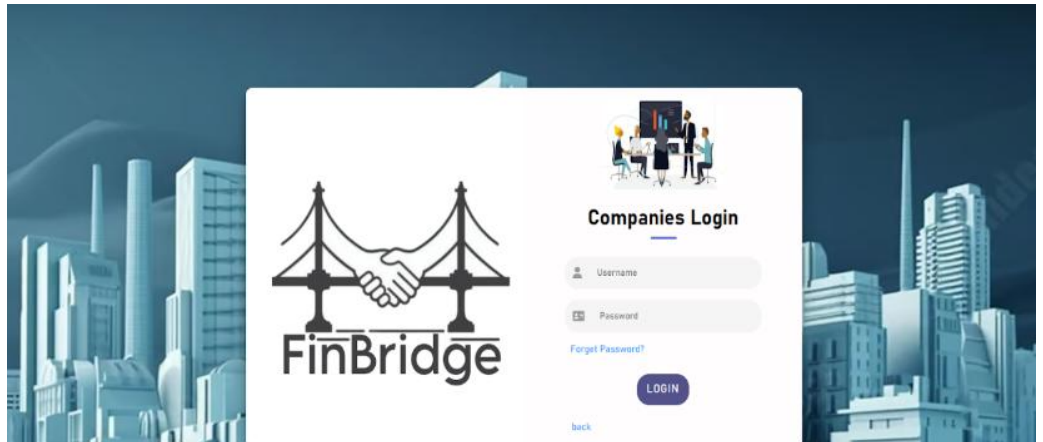
LOGIN PAGE:




FINANCIER LOGIN



MSME COMPANY LOGIN





Register

Companies

Business Name

Industry

Contact Number

Name

Email

Username

Password

Confirm Password


Annual Revenue

Employee Count

Credit Score

Already have an account? [Login](#)

[SIGN UP](#)



Register

Financier

Company Name

Contact Number

Name

Email

Username

Password

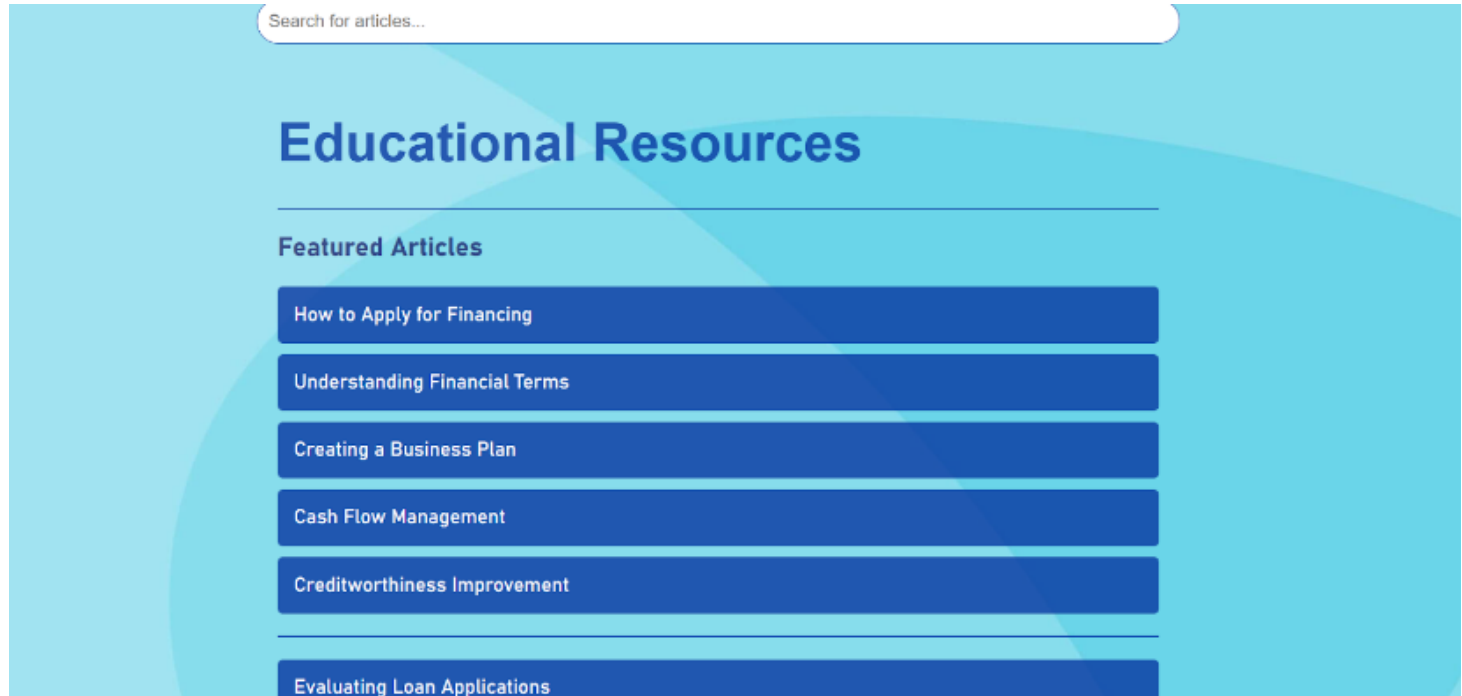
Confirm Password

Investment Preferences

Already have an account? [Login](#)

[SIGN UP](#)

EDUCATIONAL RESOURCES:



Loan Application

Loan Application

Fill in your details

Loan Ampunt (INR):

Preferred Interest Rate (%):

Start Date:

End Date:

Purpose of the Loan:

Application View

Loan Application ID: 14

MSME ID: 1

Loan Amount: INR 50000.00

Interest Rate: 2.00%

Start Date: 2024-09-25

End Date: 2024-09-30

Status: Pending

Created At: 2024-09-25 00:09:29

Updated At: 2024-09-25 00:09:29

[View Company Profile](#)

Finance

Loan Application ID: 15

MSME ID: 1

Loan Amount: INR 900000.00

Interest Rate: 3.00%

Start Date: 2024-09-25

End Date: 2024-09-30

Status: Pending

Created At: 2024-09-25 00:17:59

Updated At: 2024-09-25 00:17:59

[View Company Profile](#)

Finance

Contact Us Page

localhost/FinBridge/Contactus.php

FinBridge Home Apply loans View loans Educational resources Contact

Get in touch with us

Name

Email

Phone Number

Your Message

Send Message

Loan calculator page

Loan Interest Calculator

Select Transaction:

Transaction ID: 32 (INR 300,000.00) ▼

Enter Time Period (in days):

40

Enter Interest Rate (in percentage):

5

Calculate

₹ 301,643.84

The total amount to be paid is INR 301,643.84.

Main dashboard/ Rating page

Feedback

Select a transaction

Write your feedback...

★ ★ ★ ★ ★

Submit Feedback

THANK YOU