

Changeh Ramses

Microfinance Loan Application Platform

A microfinance loan application platform is a digital platform that provides the process of applying for and managing microfinance loans online. It offers a convenient and efficient way for both borrowers and lenders to interact, reducing paperwork, physical meetings and manual processes which all saves time.

Some key Features of a Microfinance Loan Application Platform include

Online Application: For every user to be eligible to apply for loan, the user must apply online and own an account. Borrowers then submit loan applications online, eliminating the need for physical visits to lending institutions.

Eligibility Check: Before any user is been given the opportunity to collect a loan, the platform automatically assesses borrower eligibility based on predefined criteria, providing instant feedback.

Loan Product Catalog: The platform showcases various loan products with their terms, interest rates, and eligibility criteria. This thereby provides to users how the loan options function. Approved loans are then processed and loan agreements are generated digitally.

Repayment Tracking: The platform tracks all repayments made by borrowers, the platform sends automated reminders to borrowers about upcoming repayment

Methodology

The Agile Development Methodology suits best for a Microfinance Loan Application Platform because of various factors. .Agile methodology refers to an iterative and incremental approach that emphasizes flexibility, collaboration, and rapid delivery. This methodology passes through the following phases;

- ❖ **Requirement Gathering:** Collect and document requirements from users
- ❖ **System Analysis:** Analyses the requirements and define the system's functional and non-functional requirements.
- ❖ **System Design:** Design the Loan platform structure, including the database, user interface and security features.
- ❖ **Implementation:** Develop a loan platform architecture using selected programming languages, frameworks and tools.
- ❖ **Testing:** Conduct unit testing, integration testing and system testing to ensure that the System meets every requirement.
- ❖ **Deployment:** Deploy the system to meet record every day to day transaction
- ❖ **Maintenance:** Provide ongoing maintenance, updates and support to ensure the system continues to meet the the goals.

Technical Requirements:

Programming Languages:

- **VB.net:** VB.net is also a good option for this project because it is Essential for front-end development and interactive web elements.
- **Java:** Java is a very good option since is a widely-used language suitable for enterprise-level applications

Frameworks

- **ASP.NET MVC:**
- **Node.js**

. Databases:

- **Relational Databases: MySQL**

Nontechnical Requirements

- Ease of Use

- Easily Accessible
- Secured
- Transparency

Functional Requirements

- Borrower Registration & Login
- Loan Product Catalog
- Loan Application Submission
- Eligibility Checks and Repayment Management

Non-Functional Requirements

Performance & Scalability (Response time and availability)

Security (Data confidentiality and data integrity)

Usability & User Experience (UX) (User friendliness and Localization)

Maintainability and operational constraints

Problem statement: Several low-income individuals and small business owners in different parts of the world lack access to traditional banking services and formal credit channels, hindering their ability to access capital, invest in their businesses, and improve their economic well-being.

Project Objective: The objective of this Microfinance Loan Application Platform is to serve as a digital interface between the company and its users without any physical contact which is more time saving. The platform will provide all the features stated above.

Plan of Action

Week One: Project Research, information gathering and project Planning.

- At this stage, all necessary researches are carried out about my project.
- Information gathering from all reliable sources is the next step.
- The work planning for the project is also done at this stage.

Week Two: Project design (Front end development)

- Week two is wholly for the system designing beginning with the front end development. After the front end development is done, I first submit it to the supervisor for review and corrections.

Week Three: Back end development

- The third week will be used to design the Back end system for the a Microfinance Loan Application Platform and after that I submit to the supervisor for review and corrections

Week Four: Other Technical Requirements

- The fourth week Is create the database and connect it so that it interacts in the system
- Also to imply the framework for the system. After this is done, I submit to the supervisor for review and corrections.

Week Five: Testing, Deployment, and Maintenance

- At this stage, I will conduct system testing, integration testing, and others
- I will also carry out maintenance plan to schedule regular system updates.

Link to project repository

https://github.com/RamzyCash/Microfinace-Loan-App-Platform/settings/access?guidance_task=

Use Case Diagram

