Research Proposal for Developing a Comprehensive Credit Control Platform for Landlords

1. Introduction

This research proposal covers a full project on the development of a credit control platform that supports landlords in managing tenant credit and risks in the most effective way. The developed system will be able to enable and provide real-time updates on tenant credit status to landlords, streamline lease management processes, generate invoices, and enable maximum data protection while enabling tenants and landlords to communicate.

2. Literature Review:

The literature review will be focused on the credit rating system, the process of evaluating tenant risk, and the current credit control platforms across industries.

The review aims to:

- Demonstrate familiarity with the literature concerning credit control and risk assessment in the landlord-tenant relationship.
- Mention areas where the existing credit control platform literature will be bridged.
- Look for research methodologies and approaches in other related research that have already been established to help in the design of the credit control platform.

3. Research Objectives:

This project has the following research objectives:

- Develop an end-to-end credit control system that empowers landlords to make a decision on leasing based on the right credit rating of the tenants.
- Develop an electronic, secure lease management system for keeping track of lease details, rental payments, and invoice generation.
- A system must be in place to monitor tenant's payment patterns and update credit scoring.
- This is an opportunity to better communicate with the tenants by sending them regular updates on the status of credit, payment reminders, and invoicing.

4. Research Design:

The research will embrace a mixed-method approach, with data collection methodologies both qualitative and quantitative.

a. Requirements Gathering:

- Add interviews and surveys among landlords and property management companies to understand better their credit control needs and main pains.
- Review current credit control processes and make them better.

b. System Design and Architecture:

- Design the system architecture, including the database schema, application components, and integration points.
- Select appropriate technologies and frameworks, such as Python Django for the back-end, React for the front-end, Inertia.js for the smooth merging between the two, and PostgreSQL for the database.

c. Creating a Credit Rating Algorithm:

- Use Django cron jobs to establish credit-scoring algorithms and models to determine tenants' creditworthiness.
- Implement credit monitoring features to track and continue updating tenants' credit scores.

d. Platform Development:

- Implement the credit control platform on selected technologies with good practices and coding standards.
- Design of a user-friendly interface allowing landlords to manage their leases, see the credit information of tenants and produce invoices, hence making it easy to contact tenants safely.

e. Testing and Quality Assurance:

- Do full testing, including unit, integration, and user acceptance, to ascertain the performance, reliability, and security of the platform.
- Eliminate detected issues or bugs by way of the iterative process of development and testing.

f. Implementation and Infrastructure Setup:

- Deployed on Amazon Web Services with the following services: Amazon EC2, Amazon RDS (PostgreSQL), Amazon S3, and AWS Elastic Beanstalk.
- Implement appropriate security measures, from OTP-based consent of the tenants for credit checks and security communication protocols, to access controls and encryption.

e. User Training and Documentation:

- There should be rich user training materials and documentation that can support landlords in how to use the credit control platform effectively.
- Establish training or webinars for end-users to ensure they know how to use all the features and functionalities of the platform.

5. Project Management and Time Table

The following project management plan will be established for the successful execution of the project:

- Project Scope: Establish the scope and objectives of the project, including the specific deliverables and milestones.
- Resource Allocation: Allocate needed resources—knowledge in software development and expertise in database management.
- Project Timeline: Develop an in-depth timeline detailing the tasks, dependencies, and due dates involved, over a 7-month time period.
- Risk Management: Identify probable risks, such as user denials about their association with the credit control department, and design mitigation strategies.
- Communication Plan: Use version control and GitHub project management for maximum efficiency in collaboration and feedback.
- Budget Estimate: Set aside a budget of \$500 USD to be used during project establishment and in running initial operations.

6. Ethical Issues Address related ethics regarding data privacy and security.

Put in place the mechanisms for protecting sensitive tenant data with measures such as encryption, access controls, and anonymization where necessary. Obtain informed consent from tenants by OTP-based tenant consent for credit checks to ensure compliance with regulation concerning data protection.

7. Expected Results The expected deliverables of the project are:

- Establish better credit control for landlords, ensuring that informed decisions are made regarding letting based on the credit rating of the tenant.
- Simplified lease management process through an electronic platform that tracks lease details, rent payments, and invoice generation.
- Enhanced communication with tenants; greater transparency in providing updates to the status of their credit, reminders for payments, and invoicing.
- The risks to landlords are minimized by early identification of high-risk tenants, thereby averting possible financial loss.

8. Conclusion:

Conclusion This research project provides a detailed project on developing a credit control platform that would enable landlords to control tenant credit and risks effectively. This proposed platform will allow for real-time updates, streamline the lease management process, and improve tenant communications for increased efficiency. The proposed credit control platform will enable landlords to be able to lease their premises to tenants with a high rent-paying ability, thereby reducing their financial risks in case the tenants default.