

BUSINESS REQUIREMENT DOCUMENT FOR CAERUS

1. Executive Summary

- **Project Name:** CAERUS Real Estate Investment Platform
- **Purpose of the Document:** To define the business requirements for the development of the CAERUS platform, a real estate investment platform focused on delivering accessible and secure property share purchases and management for users, including a robust wallet system for handling transactions.
- **Business Need:** To provide individuals with a reliable, easy-to-use investment platform for real estate that ensures transparency, secure transactions, and effective portfolio management. The platform will democratize access to real estate investing by offering shares in properties to a wider audience.
- **Stakeholders:** CAERUS business management team, software development team, investors (users), financial regulators, payment service providers (Paystack, Flutterwave), NIN API providers.

2. Project Objectives

Key Objectives:

- Allow authenticated users to invest in real estate properties by purchasing shares and expect a return on investment after a 12-month investment cycle.
- Ensure seamless verification and security of users via the Nigerian NIN API and OTP for sensitive actions (like password resets and withdrawals).
- Facilitate easy fund management through the wallet system, offering deposits, withdrawals, and tracking of transactions.
- Deliver transparency with transaction history, dividend tracking, and reinvestment options for users looking to grow their portfolios.

3. Scope of the Project

- **In-Scope:**
 - **User Management:**
 - User registration and login with OTP and email verification.
 - NIN verification for profile updates and investment eligibility.

- OTP-based password reset and 2-factor authentication for secure actions like withdrawals.
- **Wallet System:**
 - Unique account number generation for each user.
 - Wallet functionalities: deposit funds, withdraw funds, transaction history, auto-reload, and fund transfers.
- **Property Listings:**
 - Categorized real estate properties (gold, silver, bronze, diamond, platinum) for users to browse and invest.
- **Investment Management:**
 - Share purchasing with options for fractional or full investment in properties.
 - ROI tracking after 12 months, with options for reinvestment or withdrawal.
- **Admin Dashboard:**
 - Manage properties, transactions, user verifications, and generate reports for business analytics.
- **Security and Notifications:**
 - Real-time notifications for transactions, withdrawals, and investment updates.
 - Secure transactions through encrypted connections and compliance with Nigerian financial regulations.
- **Out-of-Scope:**
 - Global market integration (planned for future phases).
 - Automated real estate forecasting and predictive analytics (future scope).

4. Detailed User Journey

Onboarding/Registration Flow:

- **Step 1:** User visits the platform and initiates the sign-up process.
- **Step 2:** User enters personal details (name, email, phone number).
- **Step 3:** OTP sent to user's phone number for verification.

- **Step 4:** User completes OTP verification and creates a password.
- **Step 5:** User is assigned a unique wallet account number and prompted to verify their identity through the NIN API for investment eligibility.

Profile Update:

- **Step 1:** User accesses their profile and chooses to update information.
- **Step 2:** User submits their NIN details to verify their identity through a secure API.
- **Step 3:** Successful verification allows the user to proceed with investments.

Wallet System:

- **Step 1:** User can load money into the wallet using integrated payment platforms (Paystack, Flutterwave).
- **Step 2:** User tracks their balance in the wallet and can view transaction history (deposits, withdrawals, investments).
- **Step 3:** User can set up auto-reload for seamless investments or initiate withdrawals when needed.
- **Step 4:** Notifications are sent for every transaction.

Property Investment:

- **Step 1:** User navigates the platform to browse available properties categorized by investment tiers (gold, silver, etc.).
- **Step 2:** User selects a property and sees detailed property information, including ROI, investment amount, and share availability.
- **Step 3:** User purchases shares using available wallet funds.
- **Step 4:** User can track the status of their investment, projected ROI, and investment cycle countdown.

Dividends & Reinvestment:

- **Step 1:** At the end of the 12-month cycle, dividends are calculated based on the user's investments.
- **Step 2:** User receives a notification of their available ROI and can choose to either reinvest or withdraw.

- **Step 3:** Reinvestment adds to their portfolio, while withdrawals are processed through the wallet system, secured by OTP or 2-factor authentication.

5. Requirements

Functional Requirements:

- **User Management:**
 - Enable registration with OTP verification.
 - Allow profile updates and NIN-based verification.
- **Wallet System:**
 - Unique account number assignment.
 - Deposit, withdraw, transfer, and view transaction history.
- **Property Listings:**
 - Filter properties by investment categories.
 - Show real-time share availability and purchase options.
- **Investment Management:**
 - Process shares purchases and calculate ROI at the end of investment cycles.
- **Admin Dashboard:**
 - Manage properties, user verification status, and generate reports.

Non-Functional Requirements:

- **Performance:** The system should be able to handle 10,000 concurrent users at peak times.
- **Security:** End-to-end encryption for user data, compliant with Nigerian data protection regulations.
- **Reliability:** 99.9% uptime to ensure availability of services.
- **Scalability:** The platform should be scalable to accommodate future features and geographic expansion.

6. Assumptions

- The platform will rely on Nigeria's NIN verification system for identity checks.

- Payment processing will be through Paystack or Flutterwave.
- Investors will have basic financial literacy and understand the risks of real estate investments.

7. Constraints

- Dependency on third-party APIs for payment processing and NIN verification.
- Legal and financial regulations for real estate investments in Nigeria.
- Potential transaction processing delays due to network downtimes or high demand.

8. Timeline

- **Phase 1 (1-4 Months):** MVP launch with basic wallet and property investment functionality.
- **Phase 2 (4-7 Months):** Advanced features like auto-reload, reinvestment, admin dashboard, and reporting.
- **Phase 3 (Long term goal):** Geographic expansion, currency conversion, and international market integration.

9. Success Metrics

- **User Adoption:** Achieve 10000 registered users within the first 6 months.
- **Transaction Volume:** Process ₦500M in property investments in the first 12 months and ₦2B in 3 years.
- **Customer Retention:** 80% of users reinvest their dividends at the end of the first investment cycle.
- **System Uptime:** Maintain 99.9% system uptime during peak periods.

10. Risks

- **Technical Risk:** Potential downtimes or delays in NIN verification and payment processing APIs.
- **Regulatory Risk:** Changes in Nigerian real estate investment or fintech laws that might affect platform operations.
- **User Adoption Risk:** Lower-than-expected user adoption due to lack of awareness or user trust issues.

11. Open Issues and Dependencies

- **Payment Provider Integration:** Confirmation of whether to use both Paystack and Flutterwave, or just one for simplicity.
- **Regulatory Review:** Ongoing discussions with financial regulators to ensure compliance with Nigerian real estate and fintech regulations.
- **API Rate Limits:** Dependency on third-party API rate limits (NIN verification, payment processing) to ensure smooth user experience.

12. Conclusion

The CAERUS platform is poised to revolutionize real estate investing by making property share purchases accessible to a broad range of users. With its secure wallet system, transparent investment tracking, and automated dividend management, CAERUS will create a reliable investment environment for individuals looking to diversify their portfolios. This document serves as the foundation for the development and successful implementation of the platform, ensuring that the business needs are met through clear objectives, defined requirements, and a well-planned execution strategy.

Signature:

A handwritten signature in blue ink, appearing to read 'Kingsley', with a stylized flourish extending from the end.

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