

PRODUCT REQUIREMENTS TEMPLATE EXAMPLE

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| PRODUCT TITLE | Project Phoenix - Bill Payment Feature for AltPay |
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OVERVIEW

63% of AltPay's monthly active users use the app for repeat financial transactions, mostly to send money, pay for services, or support dependents. Project Phoenix aims to introduce a Bill Payment feature that allows AltPay users to seamlessly pay utility bills (e.g, PHCN, DSTV, Airtel data, Spectranet, etc.) directly from their wallet.

Currently, Ghanaian users face difficulties paying utility bills across multiple platforms. They risk service disruptions when they miss payments, and they lack centralized, real-time tracking for recurring payments. They also risk paying the wrong bills due to manual errors.

We are introducing a Bill Payments Hub into the AltPay wallet, allowing users to make payments with over 50+ preset Ghanaian billers (PHCN, DSTV, Spectranet, Airtel data) in one tap. This Bill payments hub will also allow them to schedule recurring payments and track their bills in real time. This solution will help customers conveniently organize their bills, save time by reducing manual entry and eliminating human errors, such as late payments.

PRODUCT OBJECTIVES

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| OBJECTIVE 1 | Increase user engagement and retention by increasing daily and monthly active users, making AltPay the primary platform for bill payments. |
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| OBJECTIVE 2 | Reduce the time and friction associated with bill payments |
| OBJECTIVE 3 | Increase total wallet deposits and generate new revenue streams through bill payment transaction fees 25% and reduce churn by 15% among repeat transaction users |

SUCCESS METRICS

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| 1 | 20% of total monthly active users make at least 1 bill payment per month. Our target is to achieve this by Q4 2025 (North Star metric) |
| 2 | 25% in total wallet deposits |
| 3 | Reduce payment time by 70% for pre-set billers and records |
| 4 | 15% reduction in churn among users who perform repeat transactions. |
| 5 | Monitor the number of tickets related to bill payments. |

STAKEHOLDER IDENTIFICATION

| NAME | ROLE | RESPONSIBILITY | INTERESTS IN THIS PRODUCT |
|-------------------------|--------------------------------|---|---|
| Chidera Onyeagubor | Product Manager | Overall product vision, strategy, and feature delivery | User adoption, engagement, and meeting business objectives. |
| Melissa B. and Kiran G. | Marketing Team (Primary Users) | Provide insights into customer engagement needs, create a go-to-market strategy, user acquisition, and feature promotion. | User adoption, feature engagement, and brand perception. |

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|-----------------------------------|--|---|---|
| Patricia H. and Jose P. | Engineering Team | Develop and maintain the feature with API integrations, development, scalability, and maintenance. | Code quality, scalability, stability, and technical feasibility |
| Jane McDonald and Theresa Ayomide | Design Team | Provide insights on how user-friendly, visually appealing (UX/UI design, user research, prototyping), and intuitive the bill payment feature will be. | Seamless payment experience. |
| Alissia Sharon | Customer Support | Effectively assist users with questions and issues with using the new Bill Payments Feature. | Reduce ticket volume. |
| Maxwell John | Finance & Compliance | Ensure adherence to existing financial regulations in Ghana, fraud prevention, and reporting. | PCI-DSS compliance, AML/KYC procedures. |
| Sophiat Abdul | Data Analytics team | Setting up and maintaining performance metrics and user behavior analysis | Feature usage metrics, churn prediction. |
| Ebiere Ogechi | Business Development/Partnerships Lead | Negotiations and partnerships with billers. | Successful biller onboarding and network partnerships. |

FUNCTIONAL REQUIREMENTS

Detail the specific functionalities the product must have. Use user stories, scenarios, or use cases to describe how users will interact with the product and what the product needs to do.

Feature: One tap bill payment

User Story: As a busy small business owner, I want to pay PHCN bills in less than 10 seconds without manual inputs to avoid disrupted power.

Acceptance Criteria

- The system should support saving at least 5 different biller profiles (e.g, meter numbers, account numbers)
- The system should autofill the last used account number for a given biller
- The system should ensure payment initiation and completion for a saved profile in under 10 seconds.
- The system should display a clear, real-time success or failure message.

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Feature: Recurring payments.

User Story: As a small business owner, I want to automate DSTV payments 3 days before the due date to maintain service while taking care of my income fluctuations.

Acceptance Criteria:

- The system should allow users to set up recurring payment schedules on custom cycles (weekly, biweekly, monthly)
- Users should set up low balance alerts when their wallet balance falls below a custom threshold (e.g, 50 cedis)
- The system should include a "Skip Once" option to pause a single upcoming payment without canceling the entire schedule.

Feature: Bill Payments Hub

User Story: As a small business owner, I need a dashboard to track my payment history, so I can manage my finances and have a record for accounting.

Acceptance Criteria:

- The system should display a dashboard showing a history of all bill payments.
- Users should be able to download PDF receipts of past transactions.
- The system should include basic data visualizations, such as graphs showing spending trends over a period.

NON-FUNCTIONAL REQUIREMENTS

Category: Performance

Requirements: 95% of payments should process in about 2 seconds

Measurement method: Load testing with MTN Ghana SIM networks.

Ghana-specific rationale: MTN covers 85% of Ghana, and latency should be checked for areas with low 3G

Category: Security

Requirement: Zero customer PII stored locally.

Measurement method: Quarterly Penetration Testing (PEN tests).

Ghana-specific rationale: Compliance with the Data Protection Act, 2012 is mandatory

Category: Reliability

Requirement: 99.5% uptime during 7 to 10 pm peak hours.

Measurement method: New Relic APM+ biller webhook monitoring

Ghana-specific rationale: Peak usage aligns with post-work hours, making this a critical window for reliability.

Category: Accessibility

Requirement: VoiceOver support for users.

Measurement method: WCAG 2.1 AA certification.

Ghana-specific rationale: 42% of Ghanaian adults are functionally illiterate (UNESCO, 2022); hence, voice-based accessibility will aid broad adoption.

Go-To Market Strategy

Initial rollout: We will launch the Bill Payment Hub to a closed beta group of 1,500 AltPay users who have a history of repeat transactions.

Marketing & Communication:

- **In-App promotions:** Banner and notifications within the AltPay app about the beta app to announce the new feature.
- **Email & SMS campaigns:** targeted messaging will be sent to our most engaged users.
- **Social media:** A targeted campaign on Twitter and Instagram after the beta phase to expand the user base.
- **Offline adverts:** billboard advertisements and activation hubs at business conferences in Accra.

ASSUMPTIONS AND CONSTRAINTS

ASSUMPTIONS

1: Key billers in Ghana provide reliable APIs with $\geq 99\%$ uptime.

2: 70% of target users can navigate saved profiles without training

3: No major fintech regulation changes before Q2 of 2026

4: Users maintain 50 cedis or more in their wallet balances for auto payments.

CONSTRAINTS

Initial development budget limited to \$500,000.

We must reuse AltPay's existing AWS infrastructure, so there's no multi-cloud

Core features must be ready by November 30th, 2025, to target the Ghanaian holiday season.

Restrictions of the Bill Payment hub to Ghana (no Pan-African scaling)

DEPENDENCIES

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| DEPENDENCY 1 | Integration with Flutterware Payment Gateway (Contingency plan is switching to Paystack (pre-vetted)) and the deadline is 2025-09-15 |
| DEPENDENCY 2 | DSTV/PHCN API documentation (Contingency plan involves screen scraping if there is 6 week delay). Deadline is 2025-08-30 Ghana Data Protection Compliance (Contingency plan is Interim data localization in AWS Accra. Deadline is 2025-10-01) |

ACCEPTANCE CRITERIA

Clearly define the conditions that must be met for each requirement to be considered successfully implemented and accepted.

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| Basic Bill payment | <ol style="list-style-type: none">1. Process 95% of PHCN payments in <8s2. Auto-detect 80% meter number errors pre-submission |
| Saved Biller profiles | <ol style="list-style-type: none">1. 90% profile reuse rate for repeat users2. Biometric auth success rate $\geq 98\%$ |
| Recurring Payments | <ol style="list-style-type: none">1. Execute 99% scheduled payments within a 15-minute window2. "Skip once" usage $\leq 20\%$ of enrollment |
| Data encryption | <ol style="list-style-type: none">1. Zero PII in client-side storage2. AES-256 for all transactions |

RISK ANALYSIS

| RISK | IMPACT | PROBABILITY | MITIGATION |
|----------------------------------|--------|-------------|---|
| Billers API rate limits exceeded | High | Medium | Cache billers' catalogs for 6 hours, Partner with Nsano for API aggregation. The team in charge is Engineering |
| Fraudulent recurring payments | High | Low | Mandate biometric authentication for over 500 cedis. Use AI anomaly detection features. The team in charge is Engineering and Compliance. |
| Low adoption among rural users | Medium | High | USSD fallback shortcode, Agent network training. The team in charge is Marketing. |

PRIORITY EFFORT

| REQUIREMENT | PRIORITY LEVEL | ESTIMATED EFFORT REQUIRED |
|---|--------------------|------------------------------|
| Basic bill payment for all supported bill types (should allow for one-time bills, and error handling) | Must Have | Estimated effort: 3 weeks. |
| Payment tracking via real-time status updates and SMS/email receipts | Should Have | Estimated effort - 6 weeks. |
| Automation for saved biller profiles and basic scheduling | Must Have | Estimated effort - 8 weeks. |
| Basic scheduling for future-dated payments | Could Have | Estimated efforts: -10 weeks |

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| Smart recurring for dynamic cycles and usage triggers | Won't Have (Future) | Estimated effort: 8 weeks |
| Spending insights (trend analysis, anomaly alerts) | Won't Have(Future) | Estimated effort: 6 weeks |

VISUAL AIDS

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