Integration Requirements Document

Project: Mobile Payment Application
Date: [YYYY-MM-DD]

1. Overview

This document outlines the integration requirements for connecting the Mobile Payment App with external systems such as payment gateways, banking APIs, user authentication, and notification services.

2. Stakeholders

- Project Manager
- Mobile App Developers
- Backend Developers
- Third-party API Providers
- Quality Assurance Team

3. Integration Scope

- Payment Gateway Integration (e.g., Stripe, PayPal)
- Bank API Integration
- User Authentication Service
- Push Notification Service

4. Functional Requirements

1. Process in-app payments using selected payment gateways.
2. Fetch and display user bank account balances.
3. Authenticate users via OAuth 2.0.
4. Receive and send real-time notifications to user devices.

5. Technical Requirements

Requirement	Description
API Protocols	RESTful APIs using HTTPS
Authentication	OAuth 2.0 / API Keys as required by external systems
Request Format	JSON
Response Format	JSON
Error Handling	Standardized error codes and messages
Rate Limiting	Handle API rate limits as specified by providers

6. Data Mapping

Field	App	External API
User Identifier	user_id	external_user_id
Payment Amount	amount	payment_amount
Transaction Status	status	txn_status

7. Security Requirements

- All data transmissions must use TLS 1.2 or higher.
- Sensitive data (e.g., payment info) should be encrypted at rest and in transit.
- API credentials must not be stored in the client application.

8. Testing & Validation

- Perform integration testing with sandbox/test environments for all vendors.
- Validate response data structure and error handling.
- Verify security compliance using penetration testing tools.

9. Change Management

- All changes to API integration must be reviewed and approved by the project lead.
- Versioning must be implemented for backward compatibility.

10. Appendix

- API Documentation Links
- Sample API Requests/Responses
- Contact Information