

Software Requirements Specification (SRS)

ATM (Automated Teller Machine) System

1. Introduction

The ATM System provides bank customers with secure and convenient access to financial transactions without the need for human assistance. It allows users to withdraw cash, check balances, deposit funds, and transfer money between accounts, all while ensuring security and reliability.

2. Overall Description

The system interacts with customers through a user interface and connects to the bank's central server to verify credentials and process transactions. It includes hardware components like a card reader, cash dispenser, keypad, and receipt printer, working together to complete operations quickly and accurately.

3. Functional Requirements

- Authenticate users via ATM card and PIN.
 - Allow cash withdrawal, deposits, balance inquiry, and fund transfer.
 - Display transaction options and confirmations clearly.
 - Communicate with the bank server for authorization and balance updates.
 - Print transaction receipts.
 - Trigger alerts for issues (e.g., insufficient cash, card jam).
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4. Non-Functional Requirements

- **Security:** Encrypted communication and PIN protection.
- **Availability:** 24/7 system uptime.
- **Performance:** Transaction completion within 10 seconds.
- **Usability:** Clear interface with multilingual support.
- **Reliability:** Backup power and fault recovery features.

5. External Interfaces

- **User Interface:** Screen and keypad for customer interaction.
- **Card Reader:** Reads magnetic stripe or chip data.
- **Bank Server:** Processes and validates transactions.
- **Cash Dispenser & Deposit Module:** Handles money input/output.
- **Printer:** Issues transaction receipts.
- **Alarm System:** Notifies maintenance or security issues.