**SOFTWARE REQUIREMENT ENGINEERING**

**ATM MACHINE APPLICATION**

**(FUNCTIONAL & NON-FUNCTIONAL)**

1. **FUNCTIONAL REQUIREMENTS:**

| **ID** | **Functional Requirement** | **Description** |
| --- | --- | --- |
| FR1 | Cash Withdrawal | Customers can withdraw cash securely from their accounts. |
| FR2 | Balance Inquiry | Customers can check their account balances. |
| FR3 | Fund Transfer | Customers can transfer funds between accounts. |
| FR4 | Cash Deposit | Customers can deposit money into their accounts. |
| FR5 | Authentication | System authenticates customers via card and PIN. |
| FR6 | Authorization | Verify customer has sufficient balance or permissions before transaction approval. |
| FR7 | Transaction Processing | Update bank system with real-time transaction details. |
| FR8 | Maintenance Operations | Technician can perform maintenance, refill cash, and fix the ATM. |
| FR9 | Transaction Monitoring & Reporting | Bank Admin can monitor transactions and generate reports for audit and management. |
| FR10 | Error Handling & Alerts | System notifies technician or admin on faults (e.g., cash jam, low cash). |

1. **NON-FUNCTIONAL REQUIREMENTS:**

| **ID** | **Non-Functional Requirement** | **Description** |
| --- | --- | --- |
| NFR1 | Security | Ensure secure authentication and data protection during transactions. |
| NFR2 | Reliability | System must operate continuously with minimal downtime. |
| NFR3 | Performance | Transactions should be processed quickly to avoid customer wait times. |
| NFR4 | Usability | Intuitive user interface for customers, technicians, and admins. |
| NFR5 | Scalability | Support increasing number of users and transaction volumes. |
| NFR6 | Maintainability | Allow easy updates and maintenance without disrupting service. |
| NFR7 | Availability | High availability to serve users 24/7 during operational hours. |
| NFR8 | Auditability | Keep detailed logs of all transactions and system activities for auditing and compliance. |