STOCK MAINTENANCE SYSTEM

**1.Introduction:**

**1.1 Purpose**- The purpose of the stock Maintenance System is to effectively manage and control the inventory of an organization, ensuring accurate stock levels, minimizing stockouts and preventing overstock situations.

**1.2 Scope -**The system will cover the entire inventory management process, including stock tracking, order management and reporting.

**1.3 Problem Statement –** A new Stock Maintenance System of a Electronics shop is to replace which is very efficient. The new stock maintenance system will allow the employee to record information of the appliances available in the mart.

This new model ensures that all data of the purchases of the items and present stock in the mart is availed on the daily basis. This model also creates the balance sheet without any human interference. This model is present on the administrator desktop and can be accessible by the himself and some other admins.

**2. Functional Requirements:**

**2.1 User Management-** Define user roles(admin, manager, stock clerk) with specific permissions,- Implement secure login mechanism.

**2.2 Stock Tracking-** Real time tracking of stock levels, including current stock, stock received, and stock issued.

**2.3 Order Management –** Ability to create purchase orders, sales orders, and transfer orders.

**2.4 Alerts and Notifications -** System-generated alerts for low stock levels, stockouts, and overstock situations. - Notifications for pending orders and order status updates.

**2.5 Reporting** - Generate standard reports, including stock status, sales analysis, and order history.

**2.6 Supplier and Customer Management -** Maintain a database of suppliers and customers. - Track supplier performance and maintain contact information.

**3. Non -Functional Requirements:**

**3.1 Performance -** The system should handle a large number of transactions simultaneously. - Response time for stock queries should be minimal.

**3.2 Security -** Implement role-based access control. - Encrypt sensitive data and ensure secure data transmission**.**

**3.3 Reliability -** The system should be available 24/7 with minimal downtime. - Regular data backups and recovery procedures.

**3.4 Scalability -** Design the system to handle an increasing number of products, users, and transactions.