

MediLink Pharmacy Database Implementation Report

1. Introduction

This report presents the design and implementation of a database system for MediLink Pharmacy using Microsoft Access. The purpose is to replace manual processes with an automated system to improve accuracy, efficiency, and reporting.

2. Scenario Analysis

The system includes entities such as Medicines, Suppliers, Customers, Prescriptions, and Sales. Each entity has attributes and relationships that connect them.

3. Entity Relationship Diagram (ERD)

The ERD shows relationships between all entities using primary and foreign keys.

4. Data Structure Development

Tables were created with appropriate data types and relationships enforced using referential integrity.

5. Normalisation (3NF)

The database is structured to Third Normal Form to reduce redundancy and improve data integrity.

6. Sample Data

Example records include medicines like Paracetamol and Ibuprofen, with linked suppliers and customers.

7. Query Development

Queries include stock levels, sales tracking, and prescription records.

8. Validation and Testing

The system was tested to ensure accuracy, consistency, and usability.

9. Design Decisions and Reflection

The system was designed for simplicity and scalability. Future improvements may include automation and reporting dashboards.

10. References

References would be listed here in IEEE format.