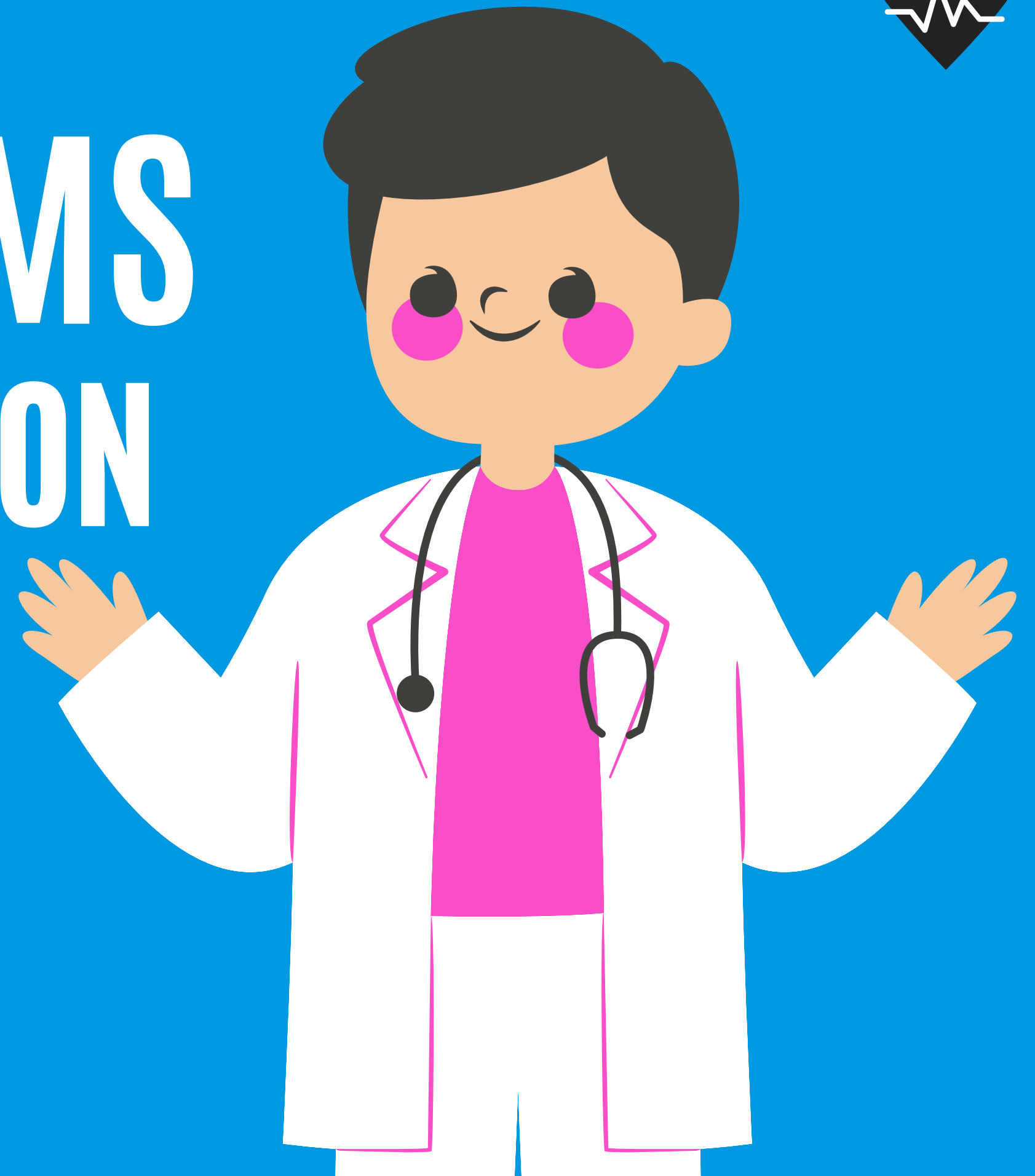


MEDI TRACK PMS DESKTOP APPLICATION

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AGENDA

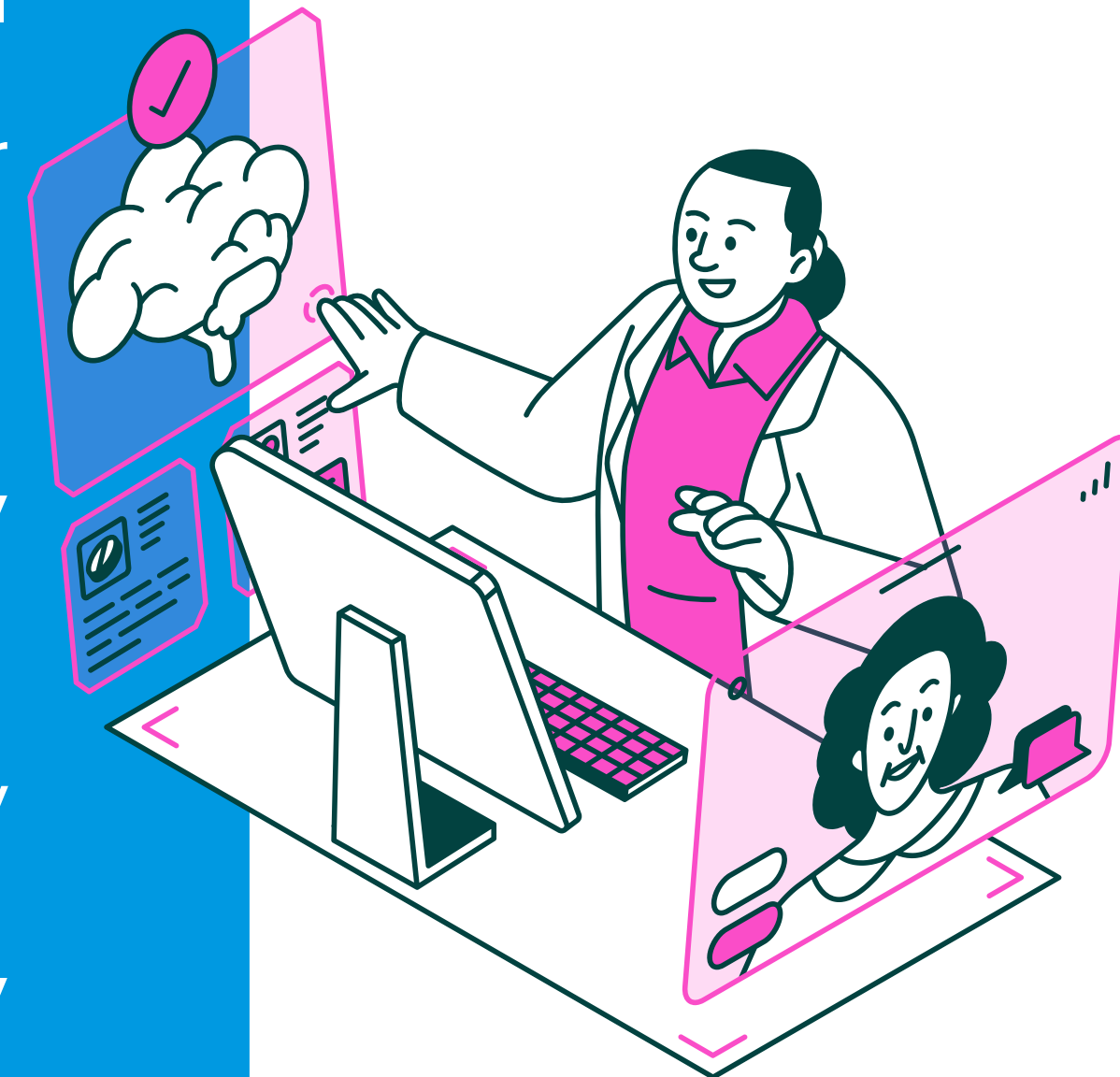
- Introduction
- Aims and Objectives
- Comparison with Existing Systems
- Tools and Technologies Used
- Functional Requirements
- Non-Functional Requirements
- Future Works
- Conclusion



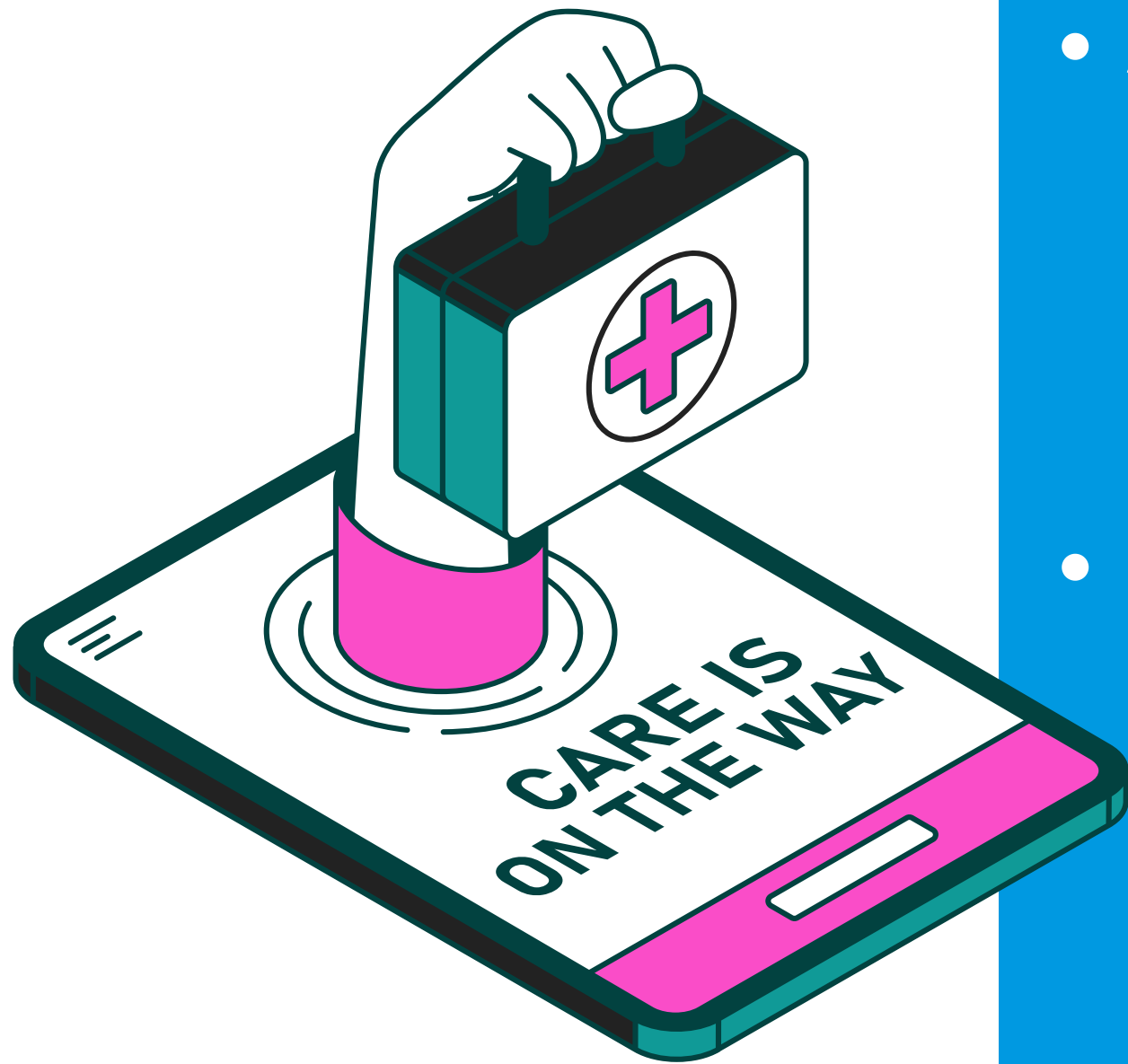
INTRODUCTION



- Background:
 - Small to medium-sized pharmacies often rely on manual processes.
 - Leads to inefficiencies, errors, and delays in customer service
- Problem Statement:
 - Need for an automated system to manage inventory, sales, and orders.
- Project Overview:
 - MediTrack PMS: A desktop application for pharmacy management.
 - Features role-based access, inventory management, sales, and online orders.
- Purpose:
 - Streamline operations, reduce errors, and improve efficiency.



AIMS & OBJECTIVES



- **Aim:**

- Design & Develop a desktop application to streamline pharmacy operations for small and medium-sized pharmacies.

- **Objectives:**

- Automate inventory management (add, view, update medicines).
- Enable secure user authentication and role-based access (Admin, Pharmacist).
- Facilitate sales processing with receipt printing.
- Integrate online order management via Jotform.
- Ensure usability and efficiency in daily operations.

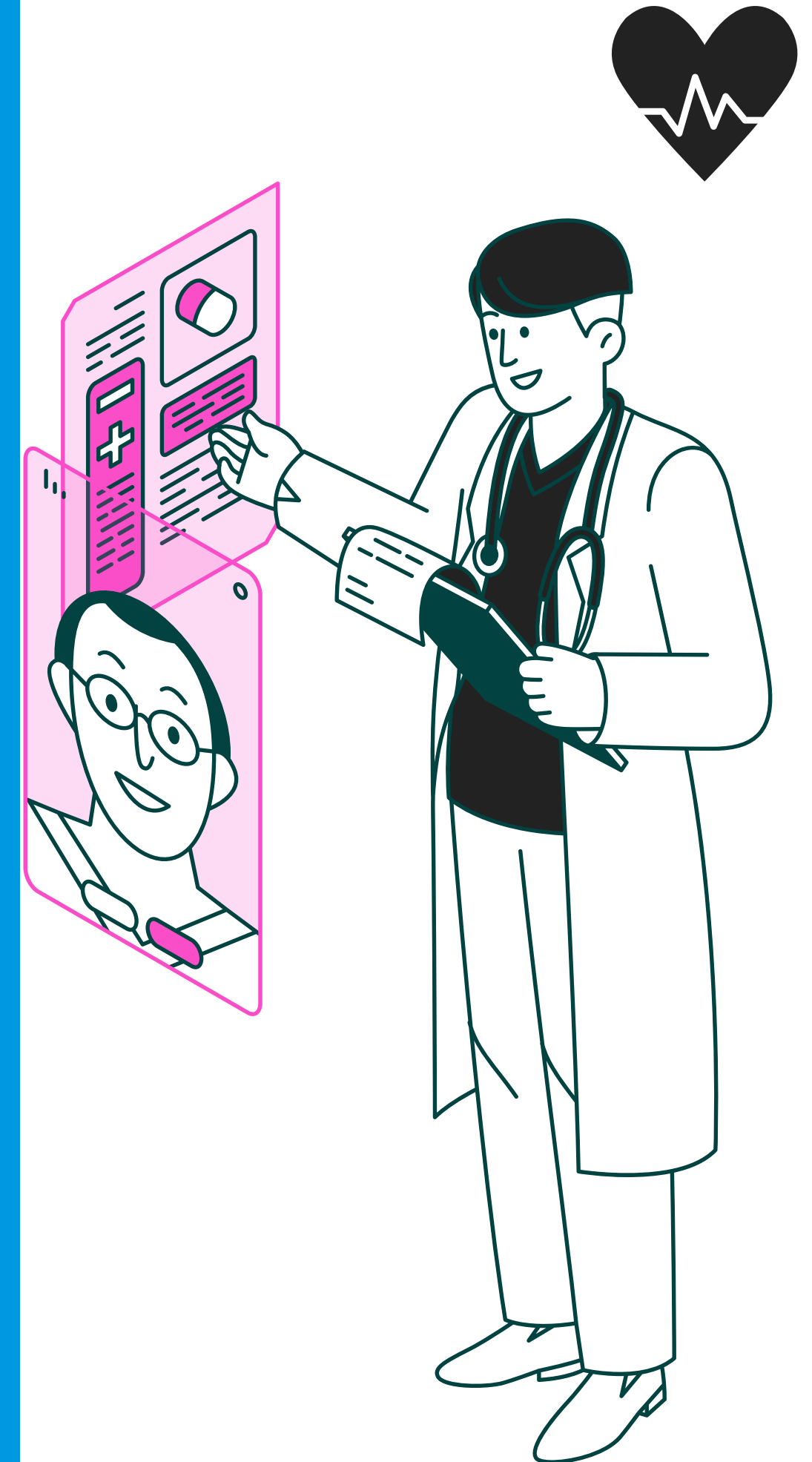
COMPARISON WITH EXISTING SYSTEMS



Feature	MediTrack PMS	System A (Manual)	System B (Online)
User Authentication	Role-based (Admin, Pharmacist)	None	Basic Login
Medicine Management	Add/View/Update/Validity Check	Manual Records	View Only
Sales Processing	Automated with Receipt Printing	Manual Billing	Online Payment Only
Online Order Integration	Jotform API Integration	Not Available	Full Online System
Offline Capability	Fully Offline	Fully Offline	Online Only
Cost	Low (Desktop App)	None (Manual)	High (Subscription)

TOOLS & TECHNOLOGIES USED

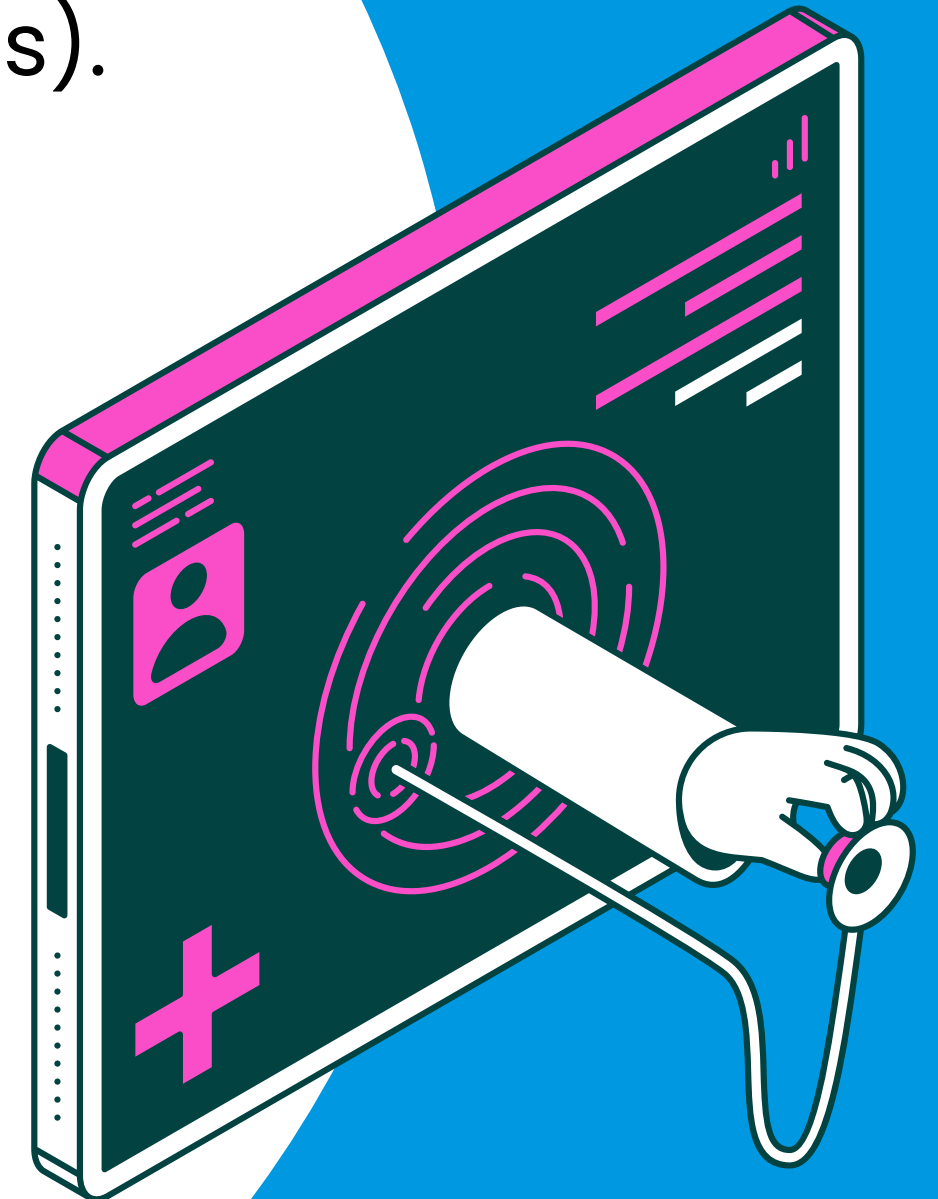
- Programming Language:
 - C# with Windows Forms for the application interface.
- Database:
 - SQL Server for data storage (users, medicines, sales, orders).
- Third-Party Libraries:
 - Guna.UI for enhanced UI components (e.g., DataGridView).
 - DGVPinter for receipt printing in Sell Medicine functionality.
- External Integration:
 - Jotform API for online order management.
- Development Environment:
 - Visual Studio 2022.



FUNCTIONAL REQUIREMENTS



- User Management (Admin):
 - Add, view, and manage users (Admin/Pharmacist roles).
 - Update user profiles (email, mobile, picture).
- Medicine Management (Pharmacist):
 - Add, view, update medicines in inventory.
 - Check medicine validity (expired/valid).
- Sales Processing (Pharmacist):
 - Sell medicines, calculate total, print receipts.
- Online Order Management:
 - Sync orders via Jotform, view, and process orders.
- Dashboard:
 - Admin: View total users, medicines, daily sales.
 - Pharmacist: View stock levels, expired medicines.



NON FUNCTIONAL REQUIREMENTS

- Performance:
 - System should load dashboards within 2 seconds.
 - Handle up to 1,000 medicine records efficiently.
- Usability:
 - User-friendly interface with clear navigation.
 - Pharmacy-specific terminology (e.g., "Medicine ID").
- Security:
 - Role-based access control (Admin vs. Pharmacist).
 - SQL injection prevention using parameterized queries.
- Reliability:
 - Ensure data consistency during sales and inventory updates.
- Scalability:
 - Support future addition of features (e.g., mobile app).



FUTURE WORKS



- Website Development:
 - Replace Jotform with a dedicated website for online orders.
- Mobile Application:
 - Develop a mobile app for on-the-go inventory management.
- Stock Alerts:
 - Add notifications for low stock and expiring medicines.
- Advanced Analytics:
 - Implement sales trend analysis and inventory forecasting.
- Security Enhancements:
 - Encrypt user passwords using AES-256.
 - Add multi-factor authentication (MFA).



CONCLUSION



- Project Summary:
 - MediTrack PMS automates pharmacy operations for small to medium-sized pharmacies.
 - Achieved all objectives: secure user access, inventory management, sales processing, and online order integration.
- Key Achievements:
 - Enhanced efficiency: Automated sales process with receipt printing.
 - Improved usability: Intuitive interface for admins and pharmacists.
- Impact and Significance:
 - Reduces manual errors, saving time for pharmacists.
 - Scalable solution to modernize pharmacy operations in Sri Lanka.
- Next Steps:
 - Develop a mobile app and add stock alerts for broader accessibility.

