

One Smart Inc

Submitted By: Team Bit Byte

Introduction

The One Desktop Solution is a modernized Windows desktop application designed to help shopkeepers manage their inventory and billing processes efficiently. Built for One Smart Inc, this application bridges the gap between legacy systems and modern technology, ensuring a seamless transition for users. The application provides robust features such as inventory management, billing, expiry alerts, and cloud synchronization, all while working offline and syncing data to the cloud daily.

The One Desktop Solution is a user-friendly application that simplifies shop management for MSMEs. It allows shopkeepers to:

- **Add and Manage Inventory:** Enter product details, track expiry dates, and receive alerts for products expiring in the next 30 days.
- **Handle Billing:** Quickly search for products, confirm orders, and generate invoices.
- **Sync with Cloud:** Work offline and sync data to the cloud once a day for backup and accessibility.

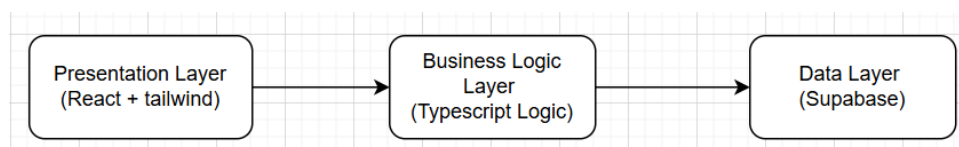
The application is built using modern technologies like **React, TypeScript, Vite, Tailwind CSS, and Supabase**, ensuring reliability, scalability, and ease of use. It retains the familiarity of the legacy system while introducing new features to enhance productivity and efficiency.

Design Details

- High-Level Design

The application follows a 3-Tier Architecture:

1. **Presentation Layer:** The user interface (UI) built using React and Tailwind CSS.
2. **Business Logic Layer:** Handles core functionalities like inventory management, billing, and expiry alerts.
3. **Data Layer:** Manages data storage using Supabase for backend services.



- Low-Level Components

UI Components

1. **Auth.tsx:** Handles user authentication (login, signup, etc.).
2. **Billing.tsx:** Manages the billing interface (product search, order confirmation, invoice generation).
3. **CloudSync.tsx:** Handles synchronization of data with the cloud.
4. **ExpiryProducts.tsx:** Displays and manages products nearing expiry.
5. **Inventory.tsx:** Manages inventory operations (adding, updating, and deleting products).
6. **Returns.tsx:** Handles the return process for expired or unwanted products.
7. **Sidebar.tsx:** Provides navigation for the application.

Working Application

1. Login Form

Inventory Store System

Sign in to manage your inventory

Email address

Password

Sign in

Sign up

2. Dashboard

Inventory Store System

Inventory

Billing

Returns

Expiring Products

Cloud Sync



Inventory Management

+ Add Product

Name	Specifics	Purchase Date	Quantity	Purchase Price	MRP	Expiry Date
Rice	Kg	3/5/2025	3	₹43	₹65	3/6/2025
Sugar	KG	2/14/2025	20	₹30	₹40	5/8/2025

3. Product Entry Form:

Add New Product

Product Name	Specifics
<input type="text"/>	<input type="text"/>
Purchase Date	Quantity
<input type="text" value="dd-mm-yyyy"/> 	<input type="text"/>
Purchase Price	Discount (%)
<input type="text"/>	<input type="text"/>
MRP	Expiry Date
<input type="text"/>	<input type="text" value="dd-mm-yyyy"/> 

Cancel

Save Product

4. Expiry Alert Pop-up:

Products Expiring Soon!

1 products will expire in the next 30 days. Check the expiring products section for details.

5. Billing Interface:

Q Search products...

Product	Quantity	Price	Total
Rice Kg	<input type="text" value="1"/>	₹65	₹65
		Subtotal:	₹65.00
		GST (18%):	₹11.70
		Total:	₹76.70

Payment

Payment Method

Cash


Card

UPI

Total Amount

₹76.70

Payment Received

 Print Bill

6. Invoice Generation:

Payment

Payment Method

☒ Cash ☐ Card ☐ UPI


Total Amount

₹76.70

Payment Received


Change

₹0.02

 Print Bill

7. Sync Status Screen:

Cloud Synchronization Not synced

 Sync Now

Sync Settings

☒ Auto-sync daily

☒ Sync on startup

☒ Sync inventory changes immediately

Assumptions

- The application is designed for single-user operation (no multi-user support).
- Cloud sync occurs once a day, and conflicts are resolved using a "last write wins" strategy.
- Shopkeepers manually trigger the return process for expired products.
- The application will be used in a Windows environment only.

Code Base

Github: <https://github.com/yogeshjangir16/One-Smart-Inc>

Video Link: https://drive.google.com/file/d/1jr8cwj_UPmqTK4uUDo4VeOA_ewaLF-35/view?usp=sharing

Deploy: <https://candid-cobbler-50ef1a.netlify.app/>

Conclusion

The One Desktop Solution is a modern, user-friendly application that addresses the core needs of shopkeepers in the MSME sector. By combining the familiarity of legacy systems with the power of modern technology, it enhances productivity, ensures data security, and provides a seamless user

experience. This project demonstrates the successful upgrade of a legacy system to meet the demands of today's businesses.

Thank you for the assignment.