

Subhakamana Store Management System

Hosting Requirements Report

Local Prototype Hosting - Production Cloud Hosting - Database - Storage - Backups

Project	Subhakamana Store Management System
Business Type	Nepali fashion and clothing store
Report Purpose	Explain what hosting is needed for demo use and real production use
Report Date	July 13, 2026
Recommended Direction	Managed cloud hosting with backend API, PostgreSQL, object storage, HTTPS, backups, and monitoring

This report explains what type of hosting the system needs now and what type of hosting will be required when Subhakamana Store becomes a real live multi-user system.

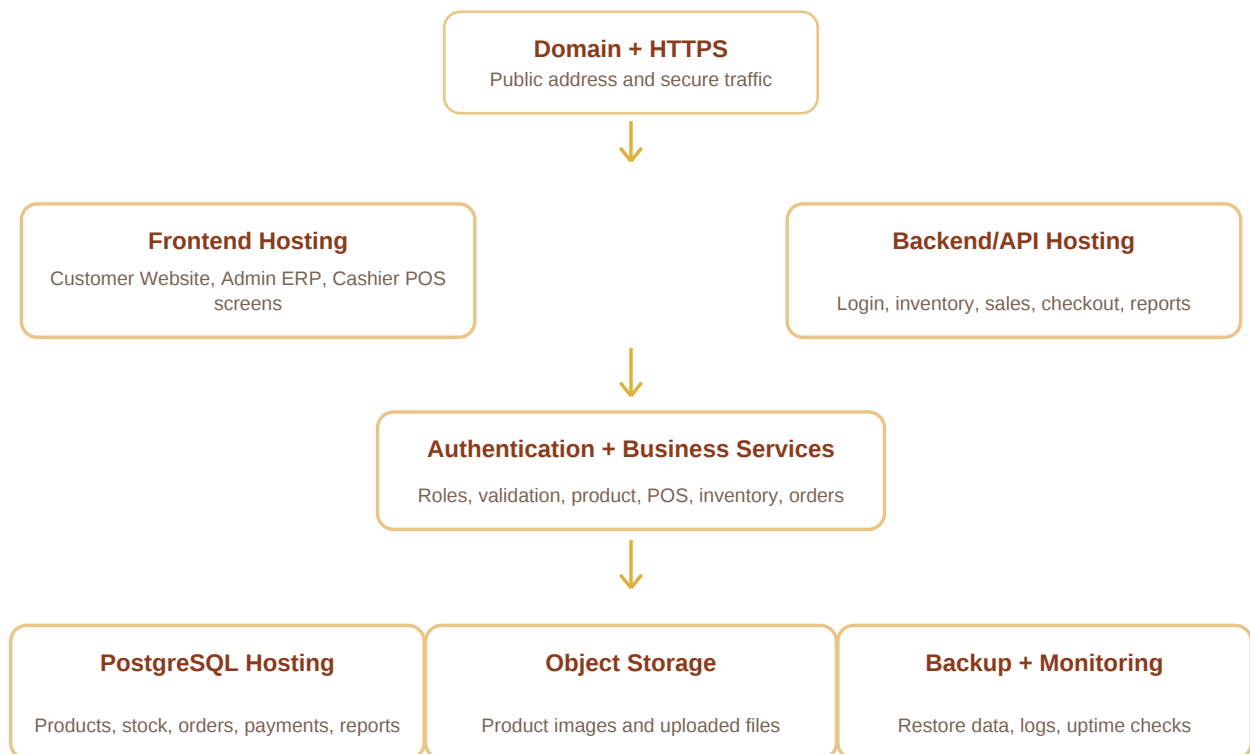
1. Executive Summary

The current Subhakamana Store Management System is a strong local front-end prototype. It can run on one computer without a domain, web hosting service, live backend, or production database. This is suitable for presentation and local demonstration.

For real business use, the system needs production hosting. The Customer Website, Admin ERP, and Cashier POS should connect to one secure backend API, one PostgreSQL database, object storage for product images, payment gateway verification, monitoring, and backup/recovery.

Main Recommendation

Use managed cloud hosting rather than simple shared hosting. Shared hosting is usually not enough for a retail ERP/POS system because the system needs backend services, database transactions, secure login, file upload, payment verification, and backups.



2. Current Local Hosting

The current version does not require paid hosting. It can run locally through the included launcher files and HTML files. This is useful for classroom demonstration, project submission, offline review, and store workflow walkthroughs.

Current Local Setup

- Local HTML files for the website and ERP/POS screens.
- Local launcher files for opening the project without a domain.
- Browser localStorage for demo data persistence.
- Local product images and project documents.

Local Limitations

- No shared database for multiple staff devices.
- No real customer account system.
- No real payment gateway verification.
- No central stock synchronization.
- No production admin security.
- No central backup and recovery.

3. Hosting Components Needed

Hosting Component	Purpose	Production Need
Domain Name	Public website address for customers and staff.	Required
DNS Management	Connects the domain to hosting and subdomains.	Required
Frontend Hosting	Hosts Customer Website, Admin ERP, and POS screens.	Required
Backend/API Hosting	Runs login, checkout, POS, inventory, reports, and business rules.	Required
PostgreSQL Database Hosting	Stores products, stock, orders, payments, suppliers, staff roles, and reports.	Required
Object Storage	Stores product images, upload files, QR images, and documents.	Required
SSL/HTTPS	Secures all customer and staff traffic.	Required
Email/SMS Service	Sends order, delivery, and notification messages.	Recommended
Monitoring and Logs	Tracks uptime, errors, API health, and security issues.	Required
Backup Storage	Protects database and file records.	Required

4. Hosting Type Comparison

Hosting Type	Suitable For	Strengths	Weaknesses	Recommendation
Local Computer	Demo and offline review	Free and simple	Not a real shared business system	Keep for demo
Shared Web Hosting	Simple static websites	Cheap and beginner-friendly	Weak backend/database support for ERP/POS	Not recommended
VPS Hosting	Small production app	Flexible and affordable	Needs server maintenance and security knowledge	Good with developer support
Managed Platform Hosting	Frontend, backend, database, deployment	Easier deploy, HTTPS, logs, scaling, backups	Monthly cost and platform limits	Recommended
Enterprise Cloud	High-scale business system	Strong security, scale, monitoring	More complex and expensive	Future growth option

Best Practical Setup

- Frontend hosting for Customer Website and Admin ERP/POS.
- Backend API hosting for business logic.
- Managed PostgreSQL database.
- Object storage for product images.
- HTTPS, daily backups, logs, uptime checks, and environment variables.

5. Recommended Platform Categories

The final provider can be chosen based on budget, developer comfort, Nepal payment availability, and required reliability. Exact pricing should be checked at the time of purchase because hosting prices change.

Layer	Possible Provider Categories
Frontend Hosting	Vercel, Netlify, Cloudflare Pages, or static hosting on a cloud provider.
Backend Hosting	Render, Railway, Fly.io, DigitalOcean App Platform, AWS, Google Cloud, or Azure.
Database Hosting	Supabase PostgreSQL, Neon PostgreSQL, Railway PostgreSQL, Render PostgreSQL, DigitalOcean Managed PostgreSQL, AWS RDS, or Google Cloud SQL.
Object Storage	AWS S3, Cloudinary, Firebase Storage, Supabase Storage, or Google Cloud Storage.
Monitoring	Platform logs, uptime checks, error tracking, and API health checks.

Minimum Production Requirements

- 1 Domain name and DNS setup.
- 2 HTTPS/SSL.
- 3 Frontend hosting.
- 4 Backend API hosting.
- 5 Managed PostgreSQL database.
- 6 Object/image storage.
- 7 Daily database backup.
- 8 Environment variables and secret management.
- 9 Basic logging and uptime monitoring.
- 10 Payment gateway verification setup.

6. Security, Backups, and Go-Live Checklist

Security Hosting Requirements

- HTTPS for all pages and APIs.
- Secure login and password hashing.
- Role-based access control.
- Protected backend API endpoints.
- Environment variables for secrets.
- File upload validation.
- Rate limiting for login and checkout.
- Audit logs and admin activity tracking.

Backup and Recovery

- Daily PostgreSQL database backup.
- Weekly full backup.
- Backup retention policy.
- Product image storage backup.
- Restore testing.
- Export archive for important reports.

Go-Live Checklist

- Domain is purchased and connected.
- Frontend, backend, database, and object storage are deployed.
- Environment variables and payment credentials are configured.
- Admin login and role permissions are secure.
- Backup job, logs, and monitoring are active.
- Smoke test is completed after deployment.

7. Final Recommendation

For the current project demonstration, no paid hosting is required. The local launcher and complete folder are enough.

For real business use, Subhakamana Store should not depend on only shared web hosting. The recommended solution is a managed cloud setup with frontend hosting, backend API hosting, managed PostgreSQL, object storage, HTTPS, backups, monitoring, and payment gateway verification.

Current Demo Need	Local files and local launcher only.
First Live Version	Managed frontend + backend + PostgreSQL + object storage + HTTPS + backups.
Not Recommended	Shared hosting as the only platform for the full ERP/POS system.
Best Direction	Managed cloud hosting with room to grow.