

Product Requirements Document

Software Products Marketplace with Admin, Customer, and Partner Portals

Document Type	PRD - Product Requirements Document
Product	Software Products Selling Web Application
Portals	Admin Portal, Customer Portal, Partner Portal
Prepared For	Software product sales and partner-driven distribution platform

This document defines the functional, business, UI/UX, reporting, security, and implementation requirements for a web application used to sell software products through direct customer purchase and partner-driven sales channels.

1. Overview

The objective is to develop a responsive web application that allows the company to showcase, sell, and manage software products through three main portals: Admin Portal, Customer Portal, and Partner Portal.

- Admin Portal - manage products, licenses, offers, coupons, testimonials, partners, purchases, badges, and analytics.
- Customer Portal - browse products, view details, request demos, add products to wishlist/cart, apply coupons, purchase licenses, and manage purchased products.
- Partner Portal - register partners, generate partner codes, promote products, create coupon offers, track sales, view income, and monitor badge progress.

The platform must use attractive, modern, responsive designs with advanced styling, graphical dashboards, cards, tables, and mobile-friendly layouts.

2. Business Goals

- Create a centralized platform to sell software products online.
- Enable customers to discover, compare, demo, and purchase software licenses easily.
- Provide admin users with full control over product, license, pricing, offer, coupon, partner, badge, and revenue management.
- Build a partner-driven sales model using referral codes, partner codes, and partner-generated coupon codes.
- Track partner performance, commission eligibility, income, badge level, and progress toward the next badge.
- Improve customer engagement through testimonials, product videos, FAQs, wishlist, cart, and demo booking options.
- Provide a scalable foundation for future software products, pricing plans, promotional campaigns, and partner programs.

3. User Roles

Role	Description	Primary Capabilities
Admin	Internal platform administrator.	Manage products, licenses, offers, coupons, testimonials, purchases, customers, partners, badges, reports, and analytics.
Customer	End user or buyer of software products.	Browse products, view details, add to cart/wishlist, book demo, purchase licenses, manage profile, view renewals, upgrade or downgrade plans.
Partner	External partner who promotes and sells products.	Register/login, receive partner code, create coupon codes, track referred customers, view sales, income, badge, and progress.

4. Admin Portal Requirements

4.1 Admin Dashboard

The admin dashboard should provide a high-level overview of the entire platform and help the admin quickly monitor revenue, customer activity, product performance, partner performance, and pending actions.

- Total products, total licenses, total customers, total partners, total purchases, and total revenue.
- Revenue by product, revenue by partner, active coupons, active offers, pending demo requests, top-selling products, and top-performing partners.

- Use revenue cards, product sales graphs, partner performance charts, recent purchase tables, badge progress widgets, customer growth charts, and coupon usage analytics.
- Dashboard must be responsive for desktop, tablet, and mobile screens.

4.2 Product Management

Admin should be able to add, edit, view, activate/deactivate, and delete software products.

Product Field	Description
Product name, slug, category	Basic product identity and URL-friendly product path.
Short and detailed description	Marketing summary and full product explanation.
Images, banner, logo/icon	Visual assets used on listing, detail, and landing pages.
Feature points and detailed points	Highlight important benefits and product capabilities.
Demo videos	Video URL or uploaded video for product demonstration.
Documentation link and FAQs	Support details and common questions for the product.
Related products	Optional mapping to recommend other products.
Status and display order	Control visibility and listing order.
SEO title and description	Metadata for search engine optimization.

- Admin can create a new product and update existing products.
- Admin can upload multiple product images and add one or more demo videos.
- Admin can add multiple FAQs and feature points for each product.
- Admin can map multiple licenses to a product.
- Admin can activate/deactivate a product and reorder product display order on the customer landing page.

4.3 License Management

Each product can have multiple licenses or pricing plans. A license defines the price, validity, limits, billing type, offers, coupons, and tax rules for a product plan.

- License fields: license name, license icon/image, product mapping, base price, tax percentage, final price, billing type, validity period, license limits, user limit, storage limit, feature limits, usage limits, and status.
- Admin can create multiple licenses for each product and define plan limits.
- Admin can apply direct offers to licenses and map coupon codes to licenses.
- Admin can define tax percentage for each license.
- Admin can activate/deactivate licenses.
- System must prevent a customer from purchasing multiple active licenses for the same product at the same time. Upgrade/downgrade must replace or modify the existing license as per business rule.

4.4 Offer and Coupon Management

Admin can manage product-level and license-level offers and coupons. Discounts may be fixed amount based or percentage based.

Item	Required Fields
Offer	Offer name, description, product mapping, license mapping, discount type, discount value, start date, end date, usage limit, and status.

Item	Required Fields
Coupon	Coupon code, description, product/license mapping, discount type, discount value, minimum purchase amount, maximum discount amount, usage limit per customer, total usage limit, start/end date, created by, partner mapping, and status.

- Admin can create global, product-specific, and license-specific coupons.
- Admin can set validity dates and usage limits.
- System validates coupon before checkout.
- Expired or disabled coupons must not be applicable.
- Coupon discount should be applied before tax calculation or as per confirmed business rule.

4.5 Testimonial Management

- Admin can add, edit, activate, deactivate, and reorder testimonials.
- Testimonial fields: customer name, customer image/logo, company name, star rating, review text, product mapping, display status, and display order.
- Testimonials can appear on the landing page and product-specific detail pages.

4.6 Partner Management

Admin should be able to view and manage all registered partners, their current status, income, sales, coupon usage, and badge progress.

- Partner details: name, email, phone, company name, partner code, registration date, current badge, total products sold, total revenue generated, total commission/income, current status, progress toward next badge, and coupons created by the partner.
- Admin can approve, reject, activate, deactivate, or suspend partners.
- Admin can view partner sales history, income, products sold, customers linked to the partner, and badge progress.
- Admin can manually update partner badge if required.

4.7 Badge Management

Admin can define partner badges based on sales targets, product sales count, time limits, and commission percentages.

- Badge fields: badge name, icon/image, description, sales target amount, product sales count target, optional time limit, commission percentage, validity period, next badge mapping, and status.
- Example rule: partner receives a 10% commission badge if they achieve ₹50,000 sales within 2 months.
- System should automatically calculate badge eligibility and show the partner's progress toward the next badge.

4.8 Purchase History Management

Admin can view all customer purchases and identify whether each purchase came from direct sale, referral code, or partner coupon.

- Purchase details: purchase ID, customer, product, license, base price, offer discount, coupon discount, tax amount, final amount, payment status, purchase date, renewal date, license status, partner code, coupon code used, and source.
- Admin can filter purchases by date, customer, product, partner, coupon, and payment status.
- Admin can export purchase reports and view partner-attributed purchases.

5. Customer Portal Requirements

5.1 Customer Landing Page

The landing page should promote the company, products, testimonials, and key value proposition of the software product portfolio.

- Hero section with headline and call-to-action.
- Product listing and featured products.
- Testimonials and company details.
- Why choose us section, partner registration CTA, FAQ section, contact section, and footer.
- Use product cards, testimonial carousel, responsive navigation, and strong CTA buttons such as View Product, Book Demo, and Buy Now.

5.2 Product Listing Page

- Customers can view all active products.
- Customers can search products, filter by category, and sort by popularity, price, latest, or name.
- Each card should show product image, name, short description, starting price, wishlist option, and link to product detail page.

5.3 Product Detail Page

Each product should have a dedicated page with complete product information, demo content, license comparison, FAQs, and purchase options.

- Sections: product overview, image gallery, product description, key features, detailed points, demo videos, license/pricing plans, FAQs, testimonials, related products, book demo CTA, add to cart, and buy now options.
- Customer can compare licenses, select a license, add it to cart, buy it directly, or book a free demo for available durations such as 7 days or 15 days.

5.4 Cart Management

- Customer can add a product license to cart, remove it, or update the selected license.
- Customer cannot add two licenses for the same product at the same time.
- Guest users can add products to cart and cart data should be stored in browser storage.
- When a guest user logs in, browser cart should sync to the database.
- Cart should show base price, discount, tax, and final amount.

5.5 Wishlist Management

- Customer can add products to wishlist and remove them later.
- Wishlist should be available after login.
- Guest wishlist can be stored in browser storage and synced after login.

5.6 Checkout and Purchase

Customers must signup or login before completing purchase. Checkout should validate coupons, apply discounts, calculate tax, and create purchase records after successful payment.

- Customer can apply coupon code during checkout.
- System validates coupon code and applies valid discount.
- System calculates tax percentage and displays final payable amount.
- If customer signed up using a partner referral code, the purchase should be mapped to that partner.
- If customer uses a partner coupon code, the purchase should be mapped to that partner.

Pricing Step	Description
1. Base license price	Start from selected license base price.
2. Offer discount	Apply product/license offer if available.
3. Coupon discount	Apply valid coupon discount.
4. Tax calculation	Calculate configured tax percentage.
5. Final payable amount	Show final amount and complete payment.

5.7 Customer Authentication

- Customer can signup, login, logout, and reset password.
- Signup form should include optional referral code field.
- Referral code should be validated against partner codes.
- Customer account should be mapped to partner if a valid referral code is used.

5.8 Customer Profile

- Customer can view/edit name, phone number, profile picture, and change password.
- Customer can view purchased products, license details, license limits, renewal date, and usage status.
- Customer can upgrade to a higher license or downgrade to a lower license.
- Customer cannot buy two licenses of the same product simultaneously.

6. Partner Portal Requirements

6.1 Partner Registration and Login

- Partner can register from landing page and login after registration or approval.
- Registration fields: partner name, email, phone number, company name, address, password, profile image/logo, and business details.
- Each partner receives a unique partner code.
- Partner account status can be pending, approved, rejected, active, inactive, or suspended.

6.2 Partner Dashboard

Partner dashboard should show sales, income, coupon performance, product-wise sales, referred customers, and badge progress.

- Dashboard metrics: total sales amount, total products sold, total customers referred, total commission/income, current badge, progress toward next badge, sales required for next badge, time remaining for badge target, coupon usage count, and product-wise revenue.
- Use revenue cards, sales charts, badge progress bars, product-wise sales table, coupon performance table, and customer referral list.
- Dashboard design should be modern, attractive, responsive, and optimized for mobile and desktop screens.

6.3 Partner Code and Referral Tracking

- System generates a unique partner code during partner registration or approval.
- Customer signup form should include referral code field.
- If customer enters a valid partner code, customer should be linked to that partner.
- All future purchases by that customer should be counted under the partner.

- Admin and partner should be able to view partner-attributed purchases.

6.4 Partner Coupon Management

- Partner can create coupon codes and map them to products or licenses.
- Partner coupon fields: coupon code, product mapping, license mapping, discount type, discount value, start date, end date, usage limit, and status.
- Partner can provide additional offers through coupon codes.
- Admin may approve partner-created coupons before activation, if required.
- If a customer purchases using a partner coupon code, the purchase should be counted as partner sale.
- Partner can view coupon usage and revenue generated.

6.5 Partner Sales and Income

- Partner can view total products sold and purchase history linked to them.
- Partner can view sales generated by referral code and partner coupon code.
- Partner can view commission/income.
- Partner can filter sales by date, product, customer, and coupon.
- Partner can export sales reports, if required.

6.6 Partner Badge Progress

- Partner can see current badge, target for next badge, sales achieved, remaining sales required, time remaining, and commission percentage linked to badge.
- Badge progress should be displayed visually using cards, progress bars, and achievement indicators.

7. Core Business Rules

- A product can have multiple licenses.
- A license belongs to one product.
- A customer cannot purchase two active licenses for the same product at the same time.
- A customer can upgrade or downgrade an existing product license.
- Guest users can add products to cart and the cart should be stored in browser storage.
- Guest cart should sync to database after login.
- Customers must login or signup before purchase.
- Referral code during signup should map the customer to a partner if valid.
- All purchases made by a referred customer should count as partner sales.
- If a customer uses a partner coupon code, the purchase should count as partner sale.
- Coupons and offers can be fixed amount or percentage based.
- Tax should be calculated during checkout.
- Partner badge should be calculated based on defined target rules.
- Partner commission percentage should depend on current badge or applicable badge rule.
- Admin should be able to activate/deactivate products, licenses, coupons, offers, testimonials, and partners.

8. Suggested Pages

Portal	Pages
Admin Portal	Admin login, dashboard, product list, add/edit product, license list, add/edit license, offer management, coupon management, testimonial management, customer list, purchase history, partner list, partner detail, partner income report, badge management, reports and analytics, admin profile/settings.
Customer Portal	Landing page, product listing, product detail, cart, wishlist, checkout, signup, login, forgot password, customer profile, purchased products, license detail, upgrade/downgrade plan, demo booking.
Partner Portal	Partner registration, partner login, partner dashboard, partner profile, partner sales report, partner coupon management, add/edit partner coupon, partner customers, partner income, badge progress.

9. Data Entities

Entity	Important Fields
Product	id, name, slug, category_id, short_description, detailed_description, images, banner_image, icon, feature_points, demo_videos, faqs, status, display_order, created_at, updated_at
License	id, product_id, name, icon, price, tax_percentage, billing_type, validity_period, license_limits, user_limit, storage_limit, feature_limits, status, created_at, updated_at
Offer	id, product_id, license_id, name, discount_type, discount_value, start_date, end_date, usage_limit, status
Coupon	id, code, product_id, license_id, discount_type, discount_value, minimum_purchase_amount, maximum_discount_amount, usage_limit, usage_limit_per_customer, start_date, end_date, created_by_type, partner_id, status
Customer	id, name, email, phone, profile_picture, password_hash, partner_referral_id, status, created_at, updated_at
Partner	id, name, email, phone, company_name, partner_code, profile_image, current_badge_id, status, created_at, updated_at
Badge	id, name, icon, description, sales_target_amount, product_sales_target, time_limit_days, commission_percentage, status
Purchase	id, customer_id, product_id, license_id, partner_id, coupon_id, base_price, offer_discount, coupon_discount, tax_percentage, tax_amount, final_amount, payment_status, license_status, purchase_date, renewal_date, created_at
Cart	id, customer_id, product_id, license_id, quantity, created_at
Wishlist	id, customer_id, product_id, created_at
Demo Booking	id, customer_id, product_id, demo_duration_days, preferred_date, status, created_at

10. UI/UX Requirements

General Design

- Modern SaaS-style design with responsive layouts for desktop, tablet, and mobile.
- Clean typography, consistent color palette, product-focused landing page, card-based layouts, smooth hover effects, and clear CTA buttons.
- All pages must support mobile phone screens with readable spacing and touch-friendly controls.

Admin Portal Design

- Sidebar navigation, dashboard cards, analytics charts, data tables with filters, status badges, partner progress bars, and revenue widgets.

Customer Portal Design

- Attractive landing page, product cards with images and pricing, product detail page with sections and tabs, pricing/license comparison cards, wishlist icon, sticky mobile cart/buy button, and smooth checkout experience.

Partner Portal Design

- Professional dashboard, sales summary cards, badge achievement section, graphical sales overview, coupon performance table, income summary, and progress bars toward next badge.

11. Reports and Analytics

Report Area	Reports
Admin Reports	Product sales report, customer purchase report, partner sales report, revenue report, coupon usage report, offer performance report, badge achievement report, and demo booking report.
Partner Reports	Sales by product, sales by coupon, sales by referred customer, income report, and badge progress report.

12. Notifications

User Type	Notifications
Customer	Signup confirmation, purchase confirmation, demo booking confirmation, license renewal reminder, upgrade/downgrade confirmation.
Partner	Partner registration confirmation, partner approval notification, coupon approval notification, sale notification, badge achievement notification.
Admin	New customer signup, new purchase, new demo booking, new partner registration, partner coupon creation, badge achievement alert.

13. Integrations

- Payment gateway integration for online purchases.
- Email/SMS integration for signup, purchase, demo booking, renewal reminders, and partner updates.
- Video hosting support for YouTube, Vimeo, or direct upload based on implementation preference.

14. Security Requirements

- Secure authentication for admin, customer, and partner users.
- Passwords must be encrypted/hashed.
- Role-based access control must be implemented.
- Admin APIs must not be accessible by customers or partners.
- Partner data must be isolated from other partners.

- Customer purchase data must be protected.
- Coupon validation must happen on the server side.
- Payment data must be handled securely through payment gateway standards.
- Input validation must be implemented for all forms.
- File uploads must be validated for type and size.

15. Performance Requirements

- Landing page should load quickly.
- Product listing should support pagination or lazy loading.
- Images should be optimized.
- Dashboard charts should load efficiently.
- Search and filters should be fast.
- APIs should support scalable data volume.

16. Acceptance Criteria

Admin Portal

- Admin can add, edit, activate, and deactivate products.
- Admin can create multiple licenses for each product.
- Admin can manage offers and coupons.
- Admin can view customer purchase history.
- Admin can view registered partners and their performance.
- Admin can manage badges and commission percentages.
- Admin can view graphical and tabular analytics.

Customer Portal

- Customers can browse products and view detailed pages.
- Customers can add products to cart and wishlist.
- Guest cart works using browser storage and syncs after login.
- Customers can apply valid coupons and tax is calculated correctly.
- Customers can purchase a product license and view purchased products in profile.
- Customers can upgrade or downgrade plans.
- Customers cannot buy two licenses of the same product simultaneously.

Partner Portal

- Partners can register and login.
- Each partner receives a unique partner code.
- Customer signup supports partner referral code.
- Purchases from referred customers are mapped to partners.
- Partner coupon purchases are mapped to partners.
- Partners can view sales, income, coupon usage, and badge progress.
- Partner dashboard includes cards, charts, tables, and progress indicators.

17. Recommended Development Phases

Phase	Scope
Phase 1 - Core Platform	Authentication for all portals, product management, license management, customer landing page, product listing/detail, cart, checkout, and basic purchase history.
Phase 2 - Partner System	Partner registration/login, partner code generation, referral tracking, partner dashboard, partner coupon system, and partner sales reports.
Phase 3 - Admin Analytics and Badge System	Badge management, partner badge calculation, admin dashboard charts, revenue analytics, coupon analytics, and advanced reports.
Phase 4 - UI Enhancement and Automation	Advanced responsive UI, demo booking workflow, notifications, renewal reminders, upgrade/downgrade refinement, and export reports.

18. Future Enhancements

- Subscription auto-renewal.
- Wallet system for partners.
- Partner payout management.
- Invoice generation.
- Multi-currency support.
- GST/tax invoice management.
- Product trial automation.
- Live chat support.
- AI-based product recommendation.
- Advanced CRM integration.
- API access for enterprise customers.

19. Open Points for Confirmation

- Payment gateway to be used.
- Whether partner coupons require admin approval before activation.
- Whether commission is calculated on base price, discounted price, or final paid amount excluding tax.
- Whether tax should be applied before or after coupon discount.
- Whether licenses are monthly, yearly, one-time, or mixed.
- Whether demo booking means a free trial license or only a scheduled demo session.
- Whether partner income payout management is required in the first version.
- Whether invoice generation is required in the first version.