

Business Requirements Document (BRD)

Business Objectives

- Develop an intuitive and scalable e-commerce platform tailored for fashion and lifestyle products.
- Enhance user experience with seamless browsing, filtering, and purchasing capabilities.
- Enable efficient management of inventory, orders, and users through an admin dashboard.
- Provide actionable insights through advanced analytics for business growth.
- Ensure secure and reliable payment processing through major payment gateways.
- Achieve go-to-market readiness within the stipulated timeline.

Stakeholders and Their Roles

- Client/Business Owner: Define product catalog, approve designs, and oversee project delivery.
- Project Manager: Coordinate activities, ensure milestones are met, and manage risks.
- Business Analyst: Gather and document requirements, communicate with stakeholders.
- Product Manager: Prioritize features, manage the product roadmap.
- Development Team: Build and deploy the e-commerce platform.
- QA Team: Conduct rigorous testing to ensure platform quality.
- Marketing Team: Plan product launches, promotions, and marketing strategies.

High-Level Requirements

Functional Requirements:

- User registration, login, and account management.
- Product catalog with search and advanced filtering.
- Wishlist, cart management, and checkout process.
- Integration with payment gateways (e.g., Razorpay, PayPal).
- Order tracking and management for users and admins.
- Admin features: inventory management, user management, and reporting tools.

Non-Functional Requirements:

- High performance: Page load time under 3 seconds.
- Scalability: Handle up to 10,000 concurrent users.
- Security: Implement SSL, encryption, and compliance with PCI DSS.
- Responsiveness: Fully optimized for mobile and desktop devices.
- Availability: 99.9% uptime with robust error handling mechanisms.

Functional Specifications Document (FSD)

1. User Features

Product Browsing:

- Dynamic categories (e.g., Men, Women, Kid's Accessories).
- Thumbnail images, product titles, prices, and ratings displayed.

Product Filtering:

- Filter by price, brand, size, color, and ratings.

User Profiles:

- Manage personal details, order history, and Wishlist.

Cart Management:

- Add/remove products, view subtotal and taxes.

Checkout:

- Multi-step process: shipping details → payment → confirmation.

2. Admin Features

Inventory Management:

- Add/edit/delete products, manage stock levels.

Order Tracking:

- Real-time order status updates.

User Management:

- Activate/deactivate accounts, assign roles.

Reporting:

- Generate reports on sales trends, inventory, and user behavior.

3. Payment Gateway Integration

- Support for Razor pay, PayPal, and credit/debit cards.
- Automated payment confirmation and invoice generation.

4. Analytics Dashboard

- Track KPIs: daily sales, conversion rates, average order value.
- User behavior insights: popular categories, session durations.
- Website performance metrics: traffic and page load times.

Timeline and Milestones

Phase	Duration	Key Deliverable
Requirement Gathering	2 weeks	Finalized BRD and stakeholder sign-off
Design	3 weeks	Wireframes, UI/UX mockups
Development	8 weeks	Functional platform with all features
Testing	3 weeks	QA sign-off, bug fixes
Deployment	1 week	Go-live, post-launch monitoring

Total Estimated Timeline: 17 weeks

Diagrams and Flowcharts

User Journey Flowchart

- **Visit Homepage** → Browse Products → Filter/Search → Select Product → Add to Cart → Checkout → Payment → Order Confirmation
- For Admins: Login → Manage Inventory → Track Orders → Generate Reports

System Architecture

- **Frontend:** React.js for dynamic, responsive design.
- **Backend:** Node.js for scalable server-side operations.
- **Database:** PostgreSQL for structured product and user data.
- **Payment Gateways:** APIs for Razor pay, PayPal