

# Project Scope

## Refashioned E-commerce Website Development

### 1. Introduction

Refashioned is focused on transforming the fashion industry through sustainability, creativity, and ethical practices. We offer stylish, eco-friendly fashion that prioritizes both quality and the environment.

Refashioned is committed to revolutionizing the fashion industry by emphasizing sustainability, creativity, and ethical practices. Our goal is to offer stylish, eco-friendly fashion while prioritizing quality and environmental impact.

### 2. Objectives

- Develop a robust and scalable e-commerce platform using **Python Django** for the backend and **Next.js** for the frontend.
- Deliver an intuitive user interface for seamless browsing, searching, and shopping experiences.
- Ensure a secure, efficient checkout process integrated with popular payment gateways.
- Provide a personalized shopping experience through user accounts, wish lists, product recommendations, and dynamic pricing.
- Incorporate responsive design principles for accessibility across all devices.

### 3. Scope Description

**Inclusions:**

- Comprehensive e-commerce website with functionalities for buyers, sellers, and administrators.
- Backend implementation using Django and a frontend built with Next.js.
- Integration of machine learning features like product recommendations and dynamic pricing.

**Exclusions:**

- Physical delivery logistics.
- Support for offline sales channels.

### 4. Functional Requirements

#### Frontend Features

1. **User Registration and Login:**
  - Email-based and social media account registration.
  - Secure login with strong password enforcement.
2. **Product Catalogue:**
  - List of products with details (name, price, discount, and icons for wishlist, comparison, and viewing).
  - Filtering and sorting options.
3. **Search Functionality:**
  - Product search by name or keywords.
4. **Product Pages:**
  - Detailed product descriptions, images, and recommendations for similar products.
5. **Shopping Cart:**
  - Add, modify quantity, or remove products.
6. **Checkout Process:**
  - Streamlined checkout with secure payment options (Stripe, M-Pesa, PayPal).
7. **User Profile Management:**
  - View and edit user information, track orders, and view order history.
8. **Wishlist:**
  - Add/remove items to/from a wishlist.
9. **Reviews and Ratings:**
  - Leave and view product reviews/ratings.
10. **Notifications:**
  - Receive notifications for cart additions, wishlist updates, and order status changes.
11. **Live Chat:**
  - Engage in live chat with admin or sellers.
12. **Product Comparison:**
  - Compare multiple products.
13. **Multi-Language Support:**
  - Enable users to switch between languages.

## Backend Features

1. Database Management:
  - Efficient storage and retrieval of product, user, and transaction data.
2. User Authentication and Authorization:
  - Secure access control for buyers, sellers, and admins.
3. Product Management:
  - CRUD operations for product details.
4. Order Management:
  - End-to-end order processing, tracking, and status updates.
5. Payment Gateway Integration:
  - Support for multiple gateways like Stripe, M-Pesa, and PayPal.
6. Inventory Management:
  - Track stock levels and low inventory alerts.
7. Content Management System (CMS):
  - Admin tools for managing site content, banners, and promotions.
8. Analytics and Reports:
  - Sales performance, user behavior insights, and inventory trends.
9. Security Measures:
  - Data encryption, secure API access, and compliance with privacy regulations.
10. API Integration:
  - Connect with third-party tools for logistics, marketing, and analytics.
11. Machine Learning Features:
  - Personalized product recommendations.
  - Dynamic pricing adjustments based on demand and competition.

## 5. Stakeholders

- **Primary Stakeholders:**
  - Buyers: End-users shopping on the platform.
  - Sellers: Vendors listing products and managing sales.
  - Admins: Managing platform operations and content.
- **Secondary Stakeholders:**
  - Development Team: Building and deploying the platform.
  - Payment Gateway Providers: Ensuring secure transactions.

## 6. Deliverables

1. Fully functional ecommerce platform.
2. A visually appealing and user-friendly interface.
3. Responsive website compatible with all devices.
4. Backend functionality for product, order, and inventory management.
5. Admin dashboard for system management and reporting.
6. Secure payment processing and API integrations.

## 7. Assumptions

- The project will use widely adopted technologies (Django, Next.js, Stripe, etc.).
- Hosting infrastructure will be scalable to accommodate user growth.
- Third-party APIs (e.g., payment gateways) are functional and reliable.

## 8. Constraints

- Budget limitations for third-party services and integrations.
- Development timeline of 2 months.

## 9. Dependencies

- Third-party payment gateways and APIs.
- Hosting providers for server and CDN.

## 10. Success Criteria

- Functional website delivered within the specified timeline.
- Positive feedback from beta users regarding usability.
- Seamless end-to-end transactions with minimal downtime.

## 11. Milestones and Timelines

1. **Phase 1: Requirements Gathering** (1 week)
2. **Phase 2: Design and Prototyping** (1 week)
3. **Phase 3: Backend and Frontend Development** (1 months)
4. **Phase 4: Testing and QA** (1 week)
5. **Phase 5: Deployment and Launch** (1 week)

## 12. Risks and Mitigation

1. **Risk:** Delays in API integrations.
  - **Mitigation:** Early testing and fallback solutions.
2. **Risk:** Scalability challenges during peak traffic.
  - **Mitigation:** Use scalable cloud infrastructure.
3. **Risk:** User adoption issues.
  - **Mitigation:** Conduct user training and gather feedback early.