# Product Requirement Document (PRD) - Version: 1.0

## Template Name:

Green Marketplace

## Goals & Objective:

We all want to make eco-conscious choices. The goal of this website is to provide a secure and efficient platform for individuals and businesses to access and purchase environmentally friendly products and services.  
  
From this website, users can:  
- Discover and purchase eco-friendly products and services with transparent pricing.  
- Access a transparent ledger showcasing all activities and transactions.  
- View detailed vendor and product certifications.  
- Engage with educational content to learn about sustainability.  
- Track their cumulative environmental impact through a dedicated dashboard.

## Client Information:

This PRD is designed for organizations or stakeholders interested in fostering sustainability and supporting the development of eco-friendly platforms.

## Product Type:

Web Application

## Key Features:

- Here’s the **simplified feature list** for the Green Marketplace, optimized for a university project:

### ****Simplified Feature List****

#### ****Phase 1: Core Features (Essentials)****

1. **User Registration & Profiles**
   * Basic user authentication (email/password).
   * Editable profile with fields like name, email, and address.
2. **Product & Vendor Listings**
   * Manually curated product and vendor list displayed in categories.
   * Basic details for products: name, price, and eco-certification.
3. **Search & Filtering**
   * Simple search by product name.
   * Category-based filtering only (e.g., "Organic", "Recyclable").
4. **Secure Payment Integration**
   * Simulated payment process with a "Payment Successful" confirmation.
5. **Order Tracking**
   * Display basic static status updates like "Processing," "Shipped," or "Delivered."

#### ****Phase 2: Engagement Features (Moderate Complexity)****

1. **Eco-Friendly Certification Badges**
   * Display static badges/icons for certifications (e.g., "Organic," "Carbon Neutral").
2. **Reviews & Ratings**
   * Allow users to submit star ratings and short text reviews.
   * Display reviews on product pages.
3. **Wishlist & Favorites**
   * Users can add products to a "Favorites" list, accessible from their profile.

#### ****Phase 3: Educational and Community Features (Optional)****

1. **Educational Resources**
   * A static page with articles or links about eco-friendly practices.
2. **Community Forum**
   * Simplify into a comment section for product pages or blogs.

#### ****Phase 4: Advanced Tools (Simplified)****

1. **Carbon Footprint Calculator**
   * Replace with a static table showing generic data like "Buying organic saves X CO2."
2. **Sustainability Impact Tracker**
   * Replace with a simple text summary: "You’ve saved X kg of carbon by using Green Marketplace."

This simplified list focuses on functionality that is feasible and impactful, ensuring the project is achievable within a university setting. Let me know if you need further refinements!

## Technology Stack:

- Frontend: React.js or Angular for dynamic UI.

- Backend: Node.js or Django for server-side functionality.

- Database: PostgreSQL or MongoDB for robust data management.

- Hosting: AWS or Google Cloud for scalable deployment.

## Implementation Phases:

- Phase 1: Core functionality including registration, product/vendor listings, and search. Launch basic educational resources.

- Phase 2: Develop advanced tools like carbon footprint calculator and implement payment systems and order tracking.

- Phase 3: Expand community features and sustainability impact tracker. Refine analytics and user recommendations.

## Risks & Mitigation:

- Risk: Low user engagement. Mitigation: Launch marketing campaigns and build partnerships.

- Risk: Vendor compliance issues. Mitigation: Strict verification for eco-certifications.

## Success Metrics:

- Number of users and active vendors.

- Monthly transactions and platform engagement.

- Reduction in carbon footprint as reported by users.

## Timeline:

- Phase 1: 3 months

- Phase 2: 4 months

- Phase 3: 3 months

## Budget Estimate:

- Development and Design: $XX,XXX

- Marketing: $XX,XXX

- Maintenance: $XX,XXX

## Stakeholders:

- Project Manager

- Development Team

- UI/UX Designers

- Sustainability Experts

- Marketing Team

- End Users and Vendors

Here’s the **12 features list** formatted like the table in the image you shared, with their corresponding phases, roles, user stories, and acceptance criteria:

| **Phase** | **Feature** | **Specification [Role]** | **User Story** | **Acceptance Criteria** |
| --- | --- | --- | --- | --- |
| **Phase 1** | Auth Feature | Consumers, Vendors, Admin | "As a user, I want to sign up, log in, and reset my password, so I can access the Green Marketplace securely." | - Users can sign up with an email and password.- Users can log in.- Users can reset passwords via email. |
| **Phase 1** | Dashboard | Consumers, Vendors, Admin | "As a user, I want a dashboard where I can see all key information and options specific to my role." | - Consumers see their orders and wishlist.- Vendors see product stats and orders.- Admins see reports and controls. |
| **Phase 1** | Product Listings | Vendors | "As a vendor, I want to list my eco-friendly products with details, so consumers can purchase them." | - Vendors can create, edit, and delete listings.- Listings include name, description, price, image, and category. |
| **Phase 1** | Product Search | Consumers | "As a consumer, I want to search and filter products, so I can easily find what I need." | - Search bar works for keywords.- Filters include categories and price range. |
| **Phase 1** | Order Management | Consumers, Vendors | "As a consumer, I want to track my orders, and as a vendor, I want to view and manage orders." | - Consumers see order history and status.- Vendors see and process incoming orders. |
| **Phase 2** | Profile Management | Consumers, Vendors | "As a user, I want to update my profile information to keep my account details accurate." | - Users can update their name, email, password, and preferences. |
| **Phase 2** | Payment System | Consumers | "As a consumer, I want a secure payment option, so I can pay for purchases easily." | - Secure payment gateway integrated.- Orders complete only upon successful payment. |
| **Phase 2** | Wishlist | Consumers | "As a consumer, I want to save products I like for future purchases." | - Consumers can add and remove products from their wishlist.- Wishlist persists between sessions. |
| **Phase 2** | Reviews & Ratings | Consumers | "As a consumer, I want to leave feedback for products and vendors to help others make decisions." | - Consumers can leave star ratings and short reviews.- Only verified purchases can leave reviews. |
| **Phase 3** | Notifications | Consumers, Vendors, Admin | "As a user, I want to receive notifications about order updates, approvals, and offers." | - Notifications show order status, special offers, and admin approvals.- Email notifications for key updates. |
| **Phase 3** | Admin Tools | Admin | "As an admin, I want to approve vendor accounts, manage listings, and monitor activity on the platform." | - Admins can approve/reject vendors.- Admins can monitor user activity and manage reported content. |
| **Phase 3** | Resources Section | Consumers | "As a consumer, I want to access sustainability articles and guides, so I can learn more about eco-friendly practices." | - Users can view articles and guides categorized by topic.- Admins can upload and manage content. |

This structure makes it easy to reference and aligns well with a simplified university project scope. Let me know if you'd like to refine or add anything!

# Html part

Here’s a breakdown of **all features** with their corresponding **HTML form elements** for creating a simple web application for the **Green Marketplace**.

### ****1. Auth Feature****

**HTML Form Elements:**

* **Sign Up Form:**
  + Input: Email, Password, Confirm Password
  + Button: Sign Up
* **Sign In Form:**
  + Input: Email, Password
  + Button: Sign In
* **Forgot Password Form:**
  + Input: Email
  + Button: Submit

### ****2. Dashboard****

**HTML Elements:**

* Display cards for:
  + Total Orders, Pending Orders, Earnings (Vendor), Activities
* List/Table:
  + For Order History or Stats
* Navigation:
  + Sidebar menu with links to different sections.

### ****3. Product Listings****

**HTML Form Elements (Vendor):**

* Input: Product Name, Price, Quantity, Category, Description
* File Upload: Product Image
* Dropdown: Category
* Button: Submit

### ****4. Product Search****

**HTML Elements:**

* Input: Search Query
* Dropdown: Category, Price Range, Eco-Certifications
* Button: Search

### ****5. Order Management****

**HTML Form Elements (Consumer):**

* List/Table:
  + Display Order Number, Product Name, Price, Order Status
* Button: Cancel Order (if applicable), Download Invoice

### ****6. Profile Management****

**HTML Form Elements:**

* Input: Name, Email, Phone Number
* File Upload: Profile Picture
* Button: Save Changes

### ****7. Payment System****

**HTML Form Elements:**

* Input: Card Number, Expiration Date, CVV, Billing Address
* Dropdown: Payment Method
* Button: Pay Now

### ****8. Wishlist****

**HTML Elements:**

* List:
  + Display products with:
    - Image, Name, Price, Add to Cart Button

### ****9. Reviews & Ratings****

**HTML Form Elements:**

* Text Area: Write a Review
* Star Ratings: (e.g., clickable stars for ratings 1–5)
* Button: Submit Review

### ****10. Notifications****

**HTML Elements:**

* List/Table:
  + Display notifications with:
    - Date, Notification Text, View More Button

### ****11. Admin Tools****

**HTML Form Elements:**

* List/Table:
  + For Vendor Applications with:
    - Buttons: Approve, Reject
* Input: Search Users or Search Products
* Button: Generate Report

### ****12. Resources Section****

**HTML Elements:**

* List/Grid:
  + Display resource cards with:
    - Image, Title, Short Description, Read More Button

These **HTML form elements** give a clear structure for implementing each feature in a simple web application. You can expand or simplify them as needed based on your university project constraints.