**E-Commerce Application Project for Fractalsonics.com**

**1. Selected Business Overview**

**Business Name:** Fractalsonics.com  
**Products Sold:** Digital sound kits — including phrases, melodies, one-shots, MIDI patterns, and specialized kit types like loop kits, drum kits, Omnisphere banks, and Analog Lab banks.  
**Target Audience:** Hobbyist and professional music producers, influencers, and students seeking high-quality audio resources for use in any DAW (Digital Audio Workstation).

These kits are typically bundled into larger ‘collections’ (e.g., multi-kits or themed packs) but can also be purchased individually for more flexibility.

**2. Application Scope and Requirements**

**Main Components**

1. **Homepage** – Displays featured kits and search functionality.
2. **Product Catalog** – Organized with categories, genres, and filters.
3. **Product Display Page** – Includes previews, descriptions, and price.
4. **Search + Filter System** – Fast search and filtering by tag/type.
5. **Shopping Cart** – Lightweight, accessible from any page.
6. **Checkout System** – Accepts card/PayPal with optional guest checkout.
7. **User Account System** – Allows users to redownload purchases.
8. **Download Management** – Immediate file access after purchase.
9. **Admin Portal** *(optional for future)* – Manage products, analytics.

**Functional Requirements**

* Users can browse, search, and purchase products.
* Users can download products post-purchase.
* Registered users can log in and access purchase history.
* Products can be filtered by tags, categories, or type.
* Users can check out as guests or logged-in customers.

**Non-Functional Requirements**

* Secure transactions (HTTPS, encrypted payment processing).
* Fast load times (<2s on product pages).
* Mobile responsive layout.
* Scalable cloud hosting for high traffic.
* GDPR compliance (email storage, consent for marketing).

**3. User Experience Stories**

**User Story 1: Professional Producer – Efficient Search & Checkout**

**As an industry music producer,** I want to easily find and purchase one-shot kits and VST banks so that I can minimize my time spent on tasks that are not creating music.

* **Outcome**: Fast discovery and purchase of preferred products.
* **Features**:
  1. Search bar with filter options.
  2. Category and tag system (e.g., "Boom Bap", "Trap", "Omnisphere").
  3. Optimized checkout with saved card options.
* **Requirements**:
  1. Filterable product database.
  2. Instant product previews.
  3. Checkout in <3 minutes.
* **Flow**: Homepage → Search field → Apply filters → View kit → Add to cart → Checkout
* **Acceptance Criteria**:
  1. Producer finds a product using one or more filters in <20 seconds.
  2. Checkout completes without errors within 3 minutes.

**User Story 2: Hobbyist Producer – Account Access for Redownload**

**As a hobbyist music producer,** I want to log in and redownload my purchases so that I can use them on my new laptop or studio PC.

* **Outcome**: Easy access to previous downloads across devices.
* **Features**:
  1. Account login system.
  2. Purchase history with re-download links.
* **Requirements**:
  1. Account linked to purchase email.
  2. Cloud-based download hosting.
* **Flow**: Homepage → Login → View purchases → Click download
* **Acceptance Criteria**:
  1. Login works within 3 attempts.
  2. All purchases show downloadable links.

**User Story 3: Part-Time Producer – Guest Checkout**

**As a part-time music producer,** I want to buy sound kits without creating an account so that I don’t waste time on a product I may not like.

* **Outcome**: Frictionless purchasing without mandatory sign-up.
* **Features**:
  1. "Buy as guest" option.
  2. Simple checkout form.
* **Requirements**:
  1. Guest session linked to email for download.
  2. Email confirmation with download links.
* **Flow**: Product → Add to cart → Checkout → Enter email → Payment → Email receipt with link
* **Acceptance Criteria**:
  1. Guest purchase completes without registration.
  2. Email contains valid download link.

**User Story 4: Full-Time Remote Producer – Loyalty & Rewards**

**As a full-time remote music producer,** I want to earn rewards for my purchases so that I feel valued and can afford more kits.

* **Outcome**: Return incentives through discounts or points.
* **Features**:
  1. Loyalty program with points per purchase.
  2. Discounts unlocked after milestones.
* **Requirements**:
  1. Loyalty system tied to user accounts.
  2. Admin backend to manage reward values.
* **Flow**: Login → Purchase → Points added → Use points for discounts
* **Acceptance Criteria**:
  1. Rewards automatically added post-purchase.
  2. System tracks purchase totals accurately.

**User Story 5: Social Media Producer – Free Kits + Budget Shopping**

**As a social media music producer,** I want to download free kits and shop for trending paid kits so that I stay on trend without overspending.

* **Outcome**: Discover free resources and budget-friendly deals.
* **Features**:
  1. Free kit section with quick download.
  2. “Trending” or “Top kits” slider.
* **Requirements**:
  1. Separate free product listing.
  2. Trending determined by views or downloads.
* **Flow**: Homepage → Free Kits or Trending → Add to cart → Download or checkout
* **Acceptance Criteria**:
  1. Free kit downloaded in one click.
  2. Trending section auto-updates daily/weekly.

**4. Application Wireframe**

**Homepage**

* Top Navigation: Logo | Search | Categories | Free Kits | Login/Signup | Cart
* Banner: Featured Kits
* Sections:
  + Trending Kits (horizontal scroll)
  + Genre Categories (tiles)
  + Free Kits (download now)

**Product Page**

* Title | Kit Description | Audio Previews
* Add to Cart Button
* Related Kits

**Cart**

* Mini cart (pop-up or side panel)
* Checkout or Continue Shopping

**Checkout**

* Guest or Login
* Payment method (Stripe/PayPal)
* Email input (for download delivery)

**Account Page**

* Past Purchases
* Download Links
* Loyalty/Rewards balance (if enabled)

**5. Additional Features**

These are valuable but out of scope for the initial build:

* **AI-Powered Recommendations**: Suggest kits based on past purchases or DAW data.
* **DAW Integration (via Plugin or Drag-and-Drop)**: Auto-load kits into FL Studio, Ableton, etc.
* **Subscription System**: Monthly fee for unlimited downloads or exclusive content.
* **Collaboration Space**: Let producers share remixes or presets.
* **Analytics Dashboard (for sellers)**: View kit performance and buyer trends.
* **Mobile App**: Native Android/iOS app for browsing and previewing kits.
* **AI-Powered Chatbot**: Assist customers who may not have a deep understanding of what product fits them best or customers that have an issue they would like to resolve that may not require human intervention.