Software Requirement Specification (SRS)

Project Title: Amazon Shopping Experience

1. Introduction

1.1 Purpose

The purpose of this document is to outline the requirements for developing the **Amazon Shopping Experience**. This application will enable users to browse, search, and purchase products seamlessly, with functionalities for cart management, secure payment, and order tracking.

1.2 Scope

The system will allow users to:

- Search and browse products by category, brand, or price
- Add/remove products from the cart
- Create/manage accounts
- Checkout using various payment options
- Track orders and view order history
- Submit product reviews

2. Overall Description

2.1 User Classes and Characteristics

- **Guest Users**: Can browse and search products but must sign up to purchase.
- **Registered Users**: Can manage their cart, make purchases, and review order history.
- Admin: Manages product listings, user accounts, and reviews.

2.2 Assumptions and Dependencies

- Internet connection is required
- Users must have a valid payment method
- The backend services (payment, inventory, user authentication) are assumed to be operational

3. Functional Requirements

3.1 User Registration & Login

- FR1.1: Users can register using email/password or social login (Google, Amazon)
- FR1.2: Users can reset passwords via email

3.2 Product Browsing and Search

- FR2.1: Users can browse by category, brand, and price range
- FR2.2: Users can search using keywords with autocomplete suggestions

3.3 Product Details

• FR3.1: Users can view product image, price, specifications, stock status, and reviews

3.4 Cart Management

- FR4.1: Users can add/remove products from the cart
- FR4.2: Cart should persist across sessions for logged-in users

3.5 Checkout and Payment

- FR5.1: Users can select address and payment method (Card, UPI, Amazon Pay, etc.)
- FR5.2: Users receive email confirmation after successful order

3.6 Order Management

- FR6.1: Users can track delivery status
- FR6.2: Users can cancel orders if not yet shipped

3.7 Reviews and Ratings

• FR7.1: Users can submit reviews and ratings only after purchase

4. Non-Functional Requirements

4.1 Performance

• System must support 1 million concurrent users

4.2 Security

- All transactions must be encrypted via HTTPS
- User passwords must be hashed and stored securely

4.3 Availability

• System should maintain 99.9% uptime

4.4 Usability

• UI must be responsive and mobile-friendly

5. System Interfaces

5.1 External Interfaces

- Payment Gateway (e.g., Stripe, Razorpay)
- Email Service Provider (e.g., SES)
- Delivery/Logistics System