**Software Requirements Specification (SRS) for E-commerce Project**

**1. Introduction**

**1.1 Purpose**

The purpose of this document is to provide a comprehensive description of the functional requirements for the e-commerce project, ensuring a common understanding among project stakeholders.

**1.2 Scope**

This SRS document covers the functional requirements of the e-commerce platform, focusing on core features, user interactions, and system functionality.

**1.3 Definitions, Acronyms, and Abbreviations**

* **SRS**: Software Requirements Specification
* **CMS**: Content Management System
* **UI**: User Interface
* **API**: Application Programming Interface
* **DB**: Database

**2. Functional Requirements**

**2.1 User Management**

*2.1.1 User Registration*

* The system shall allow users to register with a valid email address.
* User registration shall require a unique username and a password.
* Users shall receive a verification email to activate their accounts.

*2.1.2 User Login*

* Registered users shall be able to log in with their username and password.
* Users can also log in using social media accounts (e.g., Google, Facebook).

*2.1.3 User Profiles*

* Users can view and edit their profiles, including personal information, shipping addresses, and payment methods.

**2.2 Product Management**

*2.2.1 Product Listings*

* The system shall display a list of available products, including details like name, price, and images.
* Products shall be categorized and searchable.

*2.2.2 Product Details*

* Users can view detailed information about a product, including descriptions, specifications, and customer reviews.

*2.2.3 Shopping Cart*

* Users can add and remove products from their shopping carts.
* The system shall calculate and display the total order amount.

**2.3 Ordering and Checkout**

*2.3.1 Order Placement*

* Users shall be able to place orders by adding products to their cart and proceeding to checkout.

*2.3.2 Payment Processing*

* The system shall support various payment methods (credit/debit cards, PayPal, etc.).
* Users will be required to provide payment information securely.

*2.3.3 Order Confirmation*

* Users shall receive order confirmation emails with order details.
* Users can view their order history in their profile.

**2.4 Admin Functions**

*2.4.1 Product Management*

* Administrators shall be able to add, edit, or remove products from the system.
* They can categorize and set product pricing.

*2.4.2 User Management*

* Administrators can view and manage user accounts, including banning or deleting accounts when necessary.

*2.4.3 Order Management*

* Administrators can view and manage orders, change order statuses, and generate reports.

**2.5 Search and Navigation**

*2.5.1 Search Functionality*

* The system shall provide a search bar for users to search for products.
* Search results should be filtered and sorted.

*2.5.2 Browsing and Filtering*

* Users can filter products by category, price range, and other criteria.

**2.6 Security**

*2.6.1 Authentication and Authorization*

* The system shall ensure secure authentication and authorization mechanisms.
* Users' sensitive data (e.g., passwords and payment information) shall be encrypted.

*2.6.2 Data Security*

* The system shall implement security measures to protect data integrity and prevent unauthorized access.

**3. Conclusion**

This section concludes the functional requirements outlined in this SRS document. Further sections of the SRS would typically cover non-functional requirements, system constraints, and any additional information necessary for project implementation.

Please note that the above outline is a simplified example. In a real project, each requirement would require more detail, such as use cases, acceptance criteria, dependencies, and more. Collaborating with stakeholders and conducting a thorough requirements analysis is crucial for a successful e-commerce project.