

# Software Requirement Specification

Of

# EliteDecor

Project name: EliteDecor  
Document: SRS (Software Requirement Specification)  
Author: Karan Roshan  
Published on: 31-05-2024

## Table of Contents

<b>1. Introduction.....</b>	<b>4</b>
1.1 Purpose .....	4
1.2 Product Scope .....	4
1.3 Product Value .....	4
1.4 Intended Audience.....	4
1.5 Intended Use .....	5
1.6 General Description .....	5
<b>2. External Interface Requirements.....</b>	<b>8</b>
2.1 External interface requirements.....	8
2.2 Hardware interface requirements.....	9
2.2.1 Supported Devices.....	9
2.2.2 Network Requirements.....	9
2.2.3 Communication Protocols.....	10
2.3 Software Interface Requirements.....	10
2.3.1 Frontend Component.....	10
2.3.2 Backend Component.....	11
2.4 Communication Interface Requirements.....	12
2.4.1 Email Communication.....	12
2.4.2 Embedded Forms & Communication on the website.....	13
2.4.3 SMS Communication.....	13
2.4.4 Social Media Communication.....	14
2.4.5 Push Notification.....	14
<b>3. Non-functional Requirements.....</b>	<b>15</b>
3.1 Security.....	15
3.2 Capacity.....	15
3.3 Compatibility.....	15
3.4 Reliability.....	16

3.5 Scalability.....	16
3.6 Maintainability.....	16
3.7 Usability.....	16

# **1. Introduction**

## **1.1 Purpose**

A well-decorated home can have a positive impact on your mood and well-being. Colors, lighting, and decor choices can influence your emotional state and create a more pleasant atmosphere. Creating a Sense of Belonging: Decor can help create a sense of belonging and attachment to your home.

## **1.2 Product Scope**

The application allows users to:

- Users get 24/7 access from wherever.
- The website generated the output based on their wants or criteria.
- Each option provides users with several alternatives.
- Users receive proper information about the services.
- If the user has any issues or problems, they may quickly contact customer service and get the issue resolved within 48 hours.
- They will no longer have to surf over the internet without purpose.

## **1.3 Product Value**

Prior to our program, users would search the internet for their needs, which took more time and occasionally did not yield the desired results. However, after using our website, they have more time to complete their tasks and are no longer distracted by needless scrolling.

## **1.4 Intended Audience**

Working individuals are occasionally required to go to a new location for office work or to face a transfer, but most of the time they are unaware of these locations, but our website assists them in this situation by providing access to all

of these crucial items such as rooms, food, hospitals, and supermarkets. This will save them extra time.

## 1.5 Intended Use

The user will search based on their wants and requirements in order to obtain the desired and best results.

## 1.6 General Description

A home decoration e-commerce website is an online platform that specializes in selling a wide variety of products designed to enhance the aesthetics and functionality of homes.

### ➤ Homepage

- **Banner and Promotions:** The homepage typically features a large banner highlighting current sales, promotions, or new arrivals.
- **Navigation Bar:** A top navigation bar allows users to easily access different product categories, such as furniture, lighting, wall art, rugs, and more.
- **Search Functionality:** Prominently placed search bar for users to quickly find specific items.
- **Featured Collections:** Sections showcasing seasonal collections, trending items, or curated selections by interior designers.
- **Customer Testimonials:** A section with reviews and ratings from previous buyers.

### ➤ Product Categories

- **Furniture:** Items like sofas, chairs, tables, beds, and storage solutions.
- **Lighting:** Various lighting options including chandeliers, floor lamps, table lamps, and outdoor lighting.

- **Wall Art and Decor:** Paintings, prints, mirrors, clocks, and other wall decorations.
- **Textiles:** Rugs, curtains, cushions, and throws.
- **Outdoor Decor:** Patio furniture, garden decorations, and outdoor lighting.
- **Accessories:** Vases, sculptures, candle holders, and other decorative items.

## ➤ Product Pages

- **High-Quality Images:** Multiple high-resolution images from different angles.
- **Detailed Descriptions:** Information about materials, dimensions, and features.
- **Customer Reviews:** User-generated reviews and ratings.
- **Related Products:** Suggestions for similar or complementary items.
- **Availability and Delivery:** Stock status and estimated delivery times.

## ➤ User Experience

- **Account Management:** Options for users to create accounts, view order history, and manage wish lists.
- **Personalization:** Recommendations based on browsing history and past purchases.
- **Live Chat and Support:** Access to customer service through chatbots or live agents.
- **Mobile-Friendly:** Responsive design for seamless browsing on smartphones and tablets.

## ➤ Checkout Process

- **Secure Payment Options:** Multiple payment methods, including credit cards, PayPal, and other e-payment solutions.
- **Shipping Information:** Clear details on shipping costs and policies.

- **Returns and Refunds:** Easy access to return policies and procedures for refunds or exchanges.
- **Order Tracking:** Real-time tracking information for shipped orders.

## ➤ Additional Features

- **Blog and Inspiration:** Articles, guides, and tips on home decor trends, DIY projects, and interior design ideas.
- **Newsletter Signup:** Option to subscribe to newsletters for updates on new products, sales, and exclusive offers.
- **Social Media Integration:** Links to the brand's social media profiles and user-generated content showcasing products in real homes.

## **2. External Interface Requirements**

### **2.1 External interface requirements**

#### **Homepage:**

- ◆ Clear and visually appealing design.
- ◆ Prominent search bar.
- ◆ Login/Sign-up options.

#### **Navigation:**

- ◆ Intuitive navigation with a well-organized menu.
- ◆ Easy-to-use filters for refining search results.

#### **Product Pages:**

- ◆ Detailed information about our all products.
- ◆ High-quality images and interactive media.
- ◆ Clear pricing details, including taxes and fees.
- ◆ Ratings and reviews from other users.

#### **User Accounts:**

- ◆ Simple and secure login and registration process.
- ◆ User profiles with ordered history and preferences.
- ◆ Options to save favorite products.

#### **Notifications:**

- ◆ Email & SMS notifications for ordered products.
- ◆ Alerts for special promotions or discounts.

### **Customer Support:**

- ◆ Easily accessible help or support section.
- ◆ Live chat support for real-time assistance.

## **2.2 Hardware interface requirements**

### **2.2.1 Supported Devices**

#### **Desktop Computers:**

- ◆ Windows PCs (running recent versions of Windows).
- ◆ Macintosh computers (running recent versions of macOS).
- ◆ Linux-based systems.
- ◆ Smartphones:
- ◆ iOS devices (iPhones and iPads).
- ◆ Android devices (phones and tablets).

#### **Tablets:**

- ◆ Compatibility with popular tablets, including iPads and Android tablets.

#### **Browsers:**

- ◆ Google Chrome, Mozilla Firefox, Apple Safari, Microsoft Edge, and other major browsers.

### **2.2.2 Network Requirements**

#### **Internet Connectivity:**

The software should be designed to operate over standard internet connections. Support for both high-speed broadband and mobile data connections.

### **Bandwidth:**

Optimize the application for varying levels of bandwidth to accommodate users with slower internet connections.

### **CDN Integration:**

Use Content Delivery Networks (CDNs) to optimize content delivery and reduce latency.

### **2.2.3 Communication Protocols:**

#### **HTTP/HTTPS:**

Use the Hypertext Transfer Protocol (HTTP) or its secure variant (HTTPS) for communication between clients and servers.

## **2.3 Software Interface Requirements**

### **2.3.1 Frontend Components:**

#### **HTML/CSS/JavaScript:**

- ◆ Foundation for building the user interface and handling client-side interactivity.
- ◆ Frameworks and libraries like React, Angular, or Vue.js can be employed for a structured frontend architecture.

#### **Frontend Framework (e.g., React):**

- ◆ React components for building a modular and dynamic user interface.
- ◆ Integration with state management libraries like Redux or Context API for managing application state.
- .

#### **CSS Framework (e.g., Bootstrap):**

- ◆ Utilize a CSS framework for responsive and consistent styling across different devices.

.

#### **JavaScript Libraries (e.g., jQuery):**

- ◆ If necessary, use JavaScript libraries for DOM manipulation and event handling.

#### **WebSockets (e.g., Socket.IO):**

- ◆ Employ WebSockets for real-time communication, enabling features like live chat or updates.

.

#### **GraphQL (optional):**

- ◆ Implement GraphQL for more efficient and flexible data retrieval, allowing the frontend to request only the data it needs.

### **2.3.2 Backend Components:**

- ◆ Backend Framework (e.g., Node.js, Django, Flask, Ruby on Rails):
- ◆ Use a backend framework to handle server-side logic, routing, and database interactions.

.

#### **Database (e.g., MongoDB, PostgreSQL, MySQL):**

- ◆ Store and retrieve data from a database to manage user information, bookings, and other relevant data.

.

#### **Authentication (e.g., OAuth, JWT):**

- ◆ Implement secure authentication mechanisms to ensure user data and transactions are protected.

.

#### **Payment Gateway Integration (e.g., Stripe, PayPal):**

- ◆ Connect with payment gateways to handle financial transactions securely.

.

### **Server-Side Caching (e.g., Redis):**

- ◆ Implement server-side caching for frequently accessed data to improve performance.

### **Middleware:**

- ◆ Use middleware components for tasks such as request processing, logging, and security.

.

### **Server:**

- ◆ Deploy the backend on a server, which could be a cloud-based solution like AWS, Azure, or Google Cloud.

## **2.4 Communication Interface Requirements**

### **2.4.1 Email Communication:**

#### **User Registration:**

Send a welcome email upon user registration, providing information about the account and services.

.

#### **Order Confirmations:**

Instantly email users with detailed ordered product confirmations.

.

#### **Promotions and Deals:**

Periodically send promotional emails featuring special deals, discounts, or exclusive offers to encourage repeat business.

.

#### **Feedback and Reviews:**

Request user feedback and reviews post-travel, contributing to the improvement of services and building customer trust.

.

### **Password Recovery:**

Provide a secure mechanism for users to reset their passwords through email verification.

## **2.4.2 Embedded Forms and Communication on the Website:**

### **Contact Forms:**

Implement user-friendly contact forms on the website for general inquiries and support requests.

### **Customer Support Chat:**

Integrate a live chat feature for real-time customer support, allowing users to ask questions or get assistance while browsing the site.

### **Feedback Forms:**

Include feedback forms on various pages to collect user opinions about the website's usability and content.

### **Cancellation and Refund Requests:**

Provide an embedded form for users to submit cancellation or refund requests with necessary details.

## **2.4.3 SMS Communication:**

### **Order Confirmations and Updates:**

Send instant SMS notifications for ordered product.

### **Two-Factor Authentication (2FA):**

Implement SMS-based two-factor authentication for enhanced account security.

#### **2.4.4 Social Media Communication:**

##### **Social Sharing:**

Enable users to share their experiences on social media platforms directly from the website.

.

##### **Customer Engagement:**

Use social media channels to engage with customers, address queries, and promote special offers.

#### **2.4.5 Push Notifications:**

##### **Mobile App Alerts:**

If there is a mobile app, implement push notifications for timely alerts, updates, and personalized offers.

.

##### **Browser Push Notifications:**

Allow users to opt-in for browser push notifications for updates even when they are not actively using the website.

### **3. Non-functional requirements**

#### **3.1 Security**

Privacy and Data Protection Regulations:

- General Data Protection Regulation (GDPR):
- Payment Card Industry Data Security Standard (PCI DSS):
- Electronic Communications Privacy Act (ECPA):
- CAN-SPAM Act:
- Data Breach Notification Laws:
- Privacy by Design:
- Cookie Consent (ePrivacy Directive):

#### **3.2 Capacity**

The various functionalities and features that it provides to ensure a seamless and effective shopping experience for both the customers and the business.

#### **3.3 Compatibility**

Hardware Requirement for the Software

- Processor: Minimum 1 GHz; Recommended 2GHz or more
- Ethernet connection (LAN) OR a wireless adapter (Wi-Fi)
- Hard Drive: Minimum 32 GB; Recommended 64 GB or more
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above
- Sound card w/speakers
- Some classes require a camera and microphone.
- A modern web browser that supports accessing online services.

### **3.4 Reliability**

Critical failure time would depend on various factors:

- **System Maintenance:** Regular maintenance and updates to ensure optimal performance and security.
- **Infrastructure Stability:** The reliability of the infrastructure hosting the AI model, including servers, networks, and data centers.
- **Software Stability:** The robustness of the software implementation, including error handling, redundancy, and fail over mechanisms.
- **Usage Patterns:** The demand on the system and the frequency of interactions with users.

### **3.5 Scalability**

Ability of the website to handle increasing numbers of users, transactions, and data volume without compromising performance, speed, or user experience. Website must efficiently accommodate more traffic, a larger product catalog, more frequent transactions, and an expanding user base.

### **3.6 Maintainability**

Website can be updated, modified, and managed over time.

### **3.7 Usability**

To make software user-friendly:

- Intuitive User Interface (UI)
- Accessibility
- Responsive Design
- Help and Support Resources
- Feedback Mechanisms
- Error Handling
- Regular Updates