**Software Requirements Specification**

**For project e-Furniture**

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**November 11, 2024**

**2. Overall Description**

**2.1. Product Perspective**

Currently, furniture stores often conduct transactions directly at the store, this is a traditional method of buying and selling with high operating costs. To optimize this process, we propose implementing a multi-platform online sales system, e-Furniture. The e-Furniture system reduces costs associated with the traditional transaction model, including space rental costs and personnel costs. Customers can view and shop for furniture products anytime, anywhere through online platforms. This brings convenience and flexibility to customers. The system allows stores to easily reach and market to target customers through online advertising and promotion strategies. Customers can easily search, compare, and choose products conveniently. The system also provides interactive features such as reviews and comments, helping to enhance the online shopping experience. The future will see the ability to order and quickly deliver products to your door, bringing a classy and convenient shopping experience to customers. Deploying a multi-platform online furniture sales system not only helps optimize business processes but also opens up many new opportunities. We believe that integrating technology into your business model will bring greater development and efficiency to your furniture store.

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**2.2. User Classes and Characteristics**

* Customer: Customers are people who need to buy furniture for their living space, including products such as sofas, dining tables, beds, cabinets, and decorative items. They can place multiple furniture orders at any location. Orders can be made by customers through the store's website.
* Staff: They will receive orders from e-Furniture System, confirm, prepare and request delivery of orders. They will also participate in data management and reporting to administrators.
* Administrator: They are the people who will monitor and manage the system. Receive reports and handle related issues.
* Delivery person: Once the order has been approved and packaged, the delivery person will be asked to pick up and deliver the order to the orderer. The delivery person's interactions are mainly about the delivery process and confirmation of whether the order has been delivered or not.

**2.3. Operating Environment**

OE-1: The e-Furniture System shall operate correctly with the following web browsers: Google Chrome; Microsoft Edge; Apple Safari; Opera; Mozilla Firefox; and Samsung Internet.

OE-2: The e-Furniture System shall permit user access from the corporate Intranet, from a VPN Internet connection, and by Android, iOS, and Windows smartphones and tablets.

**2.4. Design and Implementation Constraints**

CO-1: The e-Furniture System shall operate on a server running the current corporate-approved version of the JavaScript framework Node.js.

CO-2: The Electronic Furniture system needs to be compatible and work correctly with the MongoDB database.

**2.5. Assumptions and Dependencies**

AS-1: The system can accommodate varying traffic levels throughout the day, with possible spikes during promotional events, holidays, or weekends.

AS-2: Users can browse the site without making a purchase, and can add items to the cart without completing the purchase.

AS-3: Website optimized for various devices (desktop, tablet, smartphone) and compatible with popular web browsers (Chrome, Firefox, Safari, Edge).

AS-4: The website must load quickly to provide a smooth user experience and be able to handle concurrent user requests without significant crashes or slowdowns.

AS-5: Users can make secure payments using various methods (credit/debit cards, PayPal, etc.). The reliable payment gateway complies with security standards to protect user data.

AS-6: The system can accurately monitor inventory levels to prevent overselling, and warn when inventory levels are low to reorder products promptly.

AS-7: Users can easily search for products using keywords, filters, and categories.

AS-8: Users know shipping costs and delivery times, and can track their order status.

AS-9: The system ensures compliance with relevant laws and regulations, such as data protection (e.g. GDPR), consumer rights, and taxes.

AS-10: The system accommodates future developments in users, products, and features.

DE-1: Users need a stable internet connection to access the website and make purchases.

DE-2: The website needs reliable hosting to ensure uptime and performance.

DE-3: The website needs a domain registrar to register and manage the website's domain name (e.g. [www.yourfurniturestore.com](http://www.yourfurniturestore.com/)).

DE-4: Integration with payment gateways (e.g. PayPal, Stripe, Square) is essential to securely process online payments.

DE-5: The website needs a database system (e.g. MySQL, PostgreSQL, MongoDB) to store product information, user data, order details, and other related data.

DE-6: The website should implement security solutions such as firewalls, intrusion detection systems, and malware scanning that help protect your website from security threats.