**Software Requirements Specification (SRS)**

**1. Introduction**

**1.1 Purpose**

The purpose of this document is to outline the technical and functional requirements for the development of the **Cozy Creations** e-commerce platform. This website aims to provide customers with tailored furniture and interior design services.

**1.2 Scope**

The platform will include:

* A landing page to showcase key services.
* A chatbot to guide users through furniture customization and interior design requirements.
* Product pages, a gallery, authentication, and checkout functionality.
* A dynamic quotation system based on user inputs.

The website will prioritize responsiveness and accessibility across devices.

**1.3 Audience and Intended Use**

This document is intended for:

* Developers (frontend, backend, and chatbot engineers).
* Designers (UI/UX specialists).
* Project stakeholders.

**2. System Overview**

**2.1 High-Level Features**

* **Landing Page**: Highlight services with a minimalistic design.
* **Authentication**: Secure sign-in and sign-up for user engagement.
* **Products Page**: Interactive catalog with filters and customization options.
* **Chatbot Integration**: Rasa-powered chatbot for customer interaction.
* **Quotation System**: Dynamic price generation based on measurements and design inputs.
* **Responsive Design**: Optimized for all screen sizes using Vue + Tailwind CSS.

**2.2 Tech Stack**

* **Frontend**: Vue 3 + Vite, Tailwind CSS.
* **Backend**: Python-based (Flask/Django).
* **Database**: PostgreSQL.
* **Chatbot**: Rasa (custom NLP chatbot).
* **Hosting**: Netlify for frontend deployment, scalable for production.

**3. Functional Requirements**

**3.1 User Interface Requirements**

**Landing Page:**

* Header with logo, navigation menu, and a “Get Started” CTA button.
* Hero section with background image, heading, and CTA.
* Highlights section showcasing key offerings (cards).
* Footer with social media links, contact info, and sitemap.

**Products Page:**

* Display products in a grid layout with filters (categories, colors, etc.).
* Each product includes an image, name, price, and a "Customize" button.
* Product details modal to view customization options.

**Designs Page:**

* Gallery of completed interior design projects.
* Links to "Start Your Design Project."

**Authentication Pages:**

* Forms for email/password login and social login options.
* CTA for account creation.

**Checkout/Quotation Page:**

* Summary of user-selected customizations with pricing details.
* Finalize orders through “Accept Quotation” button.

**3.2 Backend Requirements**

* **User Authentication**:
  + JWT-based secure login and session management.
  + Password hashing with bcrypt.
* **Quotation System**:
  + Dynamically calculate prices based on user inputs (dimensions, materials, and styles).
  + Store all user submissions in the database.
* **Chatbot**:
  + Rasa-based chatbot for NLP and dynamic user interaction.
  + Ability to store and retrieve user inputs during the design process.

**3.3 Non-Functional Requirements**

* **Scalability**:
  + Support up to 1000 concurrent users.
* **Performance**:
  + Fast page load times (<2 seconds) on both desktop and mobile.
* **Security**:
  + Use HTTPS, secure APIs, and validate user inputs to prevent vulnerabilities.

**4. Wireframes**

Refer to the detailed wireframes provided earlier for the layout and structure of each page.

**5. Development Workflow**

**5.1 Project Phases**

1. **Planning**: Finalize requirements, wireframes, and tech stack.
2. **Frontend Development**: Build responsive pages using Vue + Tailwind CSS.
3. **Backend Development**: Set up PostgreSQL, REST APIs, and Rasa integration.
4. **Testing**: Perform unit, integration, and UX tests.
5. **Deployment**: Use Netlify for hosting and deployment.

**5.2 Milestones**

* **Week 1-2**: Complete Landing Page and Authentication.
* **Week 3-4**: Build Products Page and Designs Gallery.
* **Week 5**: Integrate Rasa chatbot and dynamic quotation system.
* **Week 6**: Finalize testing and deploy.