Software Requirements Specification

For

E-Commerce site for differently abled people

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15/02/2023

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1. Introduction

We would like to design an e-commerce platform for individuals with disabilities that aims to empower them with the choice of services they need.
The site will be web-based and accessible through the internet, offering a clear and user–friendly interface for seeming less navigation

1.1 Purpose

The goal of this project is to empower individuals with disabilities and give them the opportunity to use our platform independently, based on their abilities. We also prioritize privacy by offering a secure and private environment for individuals with disabilities to make purchases without the need for assistance from others.

1.2 Need Motivation

Today, there are many individuals with disabilities who find it challenging to complete daily tasks independently. They often require assistance from others.

However, with the advancements in technology, people with disabilities are often excluded from using it as they lack of accessibility and consideration for their needs in the design of these technologies.
Our web application is designed to empower and encourage them, and we believe that this makes a small step towards creating a more inclusive society where technology is accessible to everyone.

2. Overall Description

2.1 Product Features

1. Accessibility: We plan to make the website accessible for users with various disabilities by incorporating features such as screen reader compatibility for the visually impaired, keyboard navigation for users with motor impairments, and adjustable text size for users with visual or cognitive impairments.
2. User-friendly design: Our goal is to design the website with a clean and simple layout, intuitive navigation, and language that is easy to understand for all users.
3. Product descriptions: To help users make informed purchasing decisions, we plan to provide detailed and clear product descriptions that include information on size, weight, and materials.
4. Large images: To assist users with visual impairments, we will display large images of products on the website.

5. Search and filter options: To make it easier for users to find what they are looking for, we plan to provide search and filter options based on criteria such as price, brand, and category.
6. Reviews and ratings: We encourage users to leave reviews and ratings for products to help others make informed purchasing decisions.
7. Customer support: To ensure that users can get the help they need, we plan to offer customer support through multiple channels, such as email, phone, and live chat.
8. Easy checkout process: Our aim is to make the checkout process simple, fast, and secure, with options for saved payment methods and easy order tracking.

2.2 User Classes and Characteristics

1. Visual Impairments:
    - User Characteristics: Low vision or complete blindness, difficulty reading small text, using a screen reader.
    - Recommendations: Large font sizes, high-contrast colour schemes, alternative text for images, clear labelling of buttons and links, compatibility with screen readers.
2. Mobility Impairments:
    - User Characteristics: Difficulty using a mouse, limited fine motor control, using a keyboard or switch device instead of a mouse.
    - Recommendations: Large clickable areas, compatibility with keyboard navigation, adjustable time limits for inactivity, and customizable controls for interacting with the site.
3. Auditory Impairments:
    - User Characteristics: Difficulty hearing, using a text-to-speech screen reader, or closed captioning.
    - Recommendations: Closed captioning for videos, clear and descriptive audio descriptions, transcriptions of audio content, and compatibility with text-to-speech screen readers.
4. Cognitive Impairments:
    - User Characteristics: Difficulty understanding complex information, short attention span, memory limitations.
    - Recommendations: Simple language, clear and organized information, avoid overwhelming the user with too much information at once, and provide clear calls to action.
5. Deafness or Hard of Hearing:
    - User Characteristics: Inability to hear or difficulty hearing, need for visual information to understand spoken language.
    - Recommendations: Closed captioning for videos, clear and descriptive audio descriptions, transcriptions of audio content, sign language interpretation, or video relay services.

2.3 User functionalities

Admin user functionalities:

- Add new products to the e-commerce site.
- Update existing products on the e-commerce site.
- Normalize the rates of the products on the e-commerce site.
- Manage customer accounts and orders on the e-commerce site.
- Create and manage promotions and discounts for the products on the e-commerce site.
- View and respond to customer feedback and inquiries on the e-commerce site.
- View sales reports and analytics to monitor the performance of the e-commerce site.

Customer user functionalities:

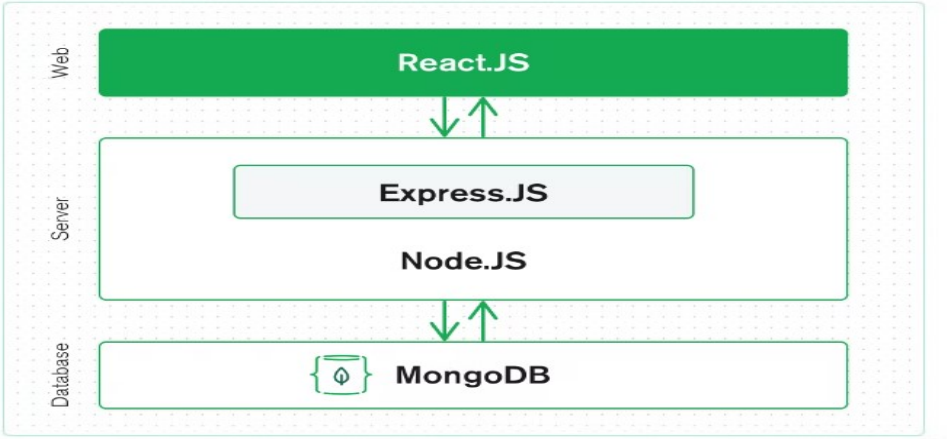
- Log into the e-commerce site, create an account, and access the site's features.
- Browse through the products on the e-commerce site.
- Add desired products to the cart on the e-commerce site.
- Create a wish list on the e-commerce site.
- Customize the interface of the e-commerce site according to their requirements.
- Use the accessibility features of the e-commerce site to make it more user-friendly for differently abled customers.
- Leave ratings and reviews on the products on the e-commerce site.
- View their order history on the e-commerce site.
- Use the search and filter options to find products quickly and efficiently on the e-commerce site.
- Share product details and recommendations with friends and family through social media platforms from the e-commerce site.

2.4 Technologies used

- Our project is an e-commerce website that will be developed using React.js for the front end and Node.js for the back end. We have chosen to implement this website using the **M E R N architecture**, which stands for **Mongo DB, Express, React, and Node** – are the four key technologies involved in the development process.
- **Mongo DB — document database**
- **Express(.js) — Node.js web framework**
- **React(.js) — a client-side JavaScript framework**
- **Node(.js) — the premier JavaScript web server**

The **MERN** architecture allows you to easily construct a three-tier architecture (front end, back end, database) entirely using **JavaScript** and **JSON**. Most importantly we implement these using

Agile development methodologies such as Scrum to ensure that the project is delivered on time and meets the needs of our clients and end-users.



2.5 Wireframes-User Workflow