Department of Computer Engineering

Academic Term: First Term 2023-24

Class: T.E /Computer Sem – V / Software Engineering

Practical No:	**1**
Title:	**Software Requirement Specification**
Date of Performance:	25-08-23
Roll No:	9639
Team Members:	

Rubrics for Evaluation:

Sr. No	Performance Indicator	Excellent	Good	Below Average	Total Score
1	On time Completion & Submission (01)	01 (On Time)	NA	00 (Not on Time)	
2	Theory Understanding(02)	02(Correct)	NA	01 (Tried)	
3	Content Quality (03)	03(All used)	02 (Partial)	01(rarely followed)	
4	Post Lab Questions (04)	04(done well)	3 (Partially Correct)	2(submitted)	

Signature of the Teacher:

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Software Requirement Specific (SRS) as per IEEE Format

1. Abstract:

E-commerce thrift shopping website aims to provide a unique and personalized shopping experience for users. The website provides a platform for buyers and sellers to engage in transactions for used or pre-owned clothing items. The website features a user-friendly interface that enables users to easily navigate through the site and find products of interest. The website incorporates various features such as a search function, filter options, and user profiles that allow buyers and sellers to interact with each other. The website also offers secure payment and shipping options, as well as a rating and review system to ensure the quality of the products and the reliability of the sellers. Overall, the e-commerce thrift shopping website seeks to promote sustainability and affordability while providing a convenient and enjoyable shopping experience.

2. Introduction:

The e-commerce thrift shopping website is an online platform that offers sustainable and affordable shopping options to customers. The website provides a marketplace for second-hand and pre-owned clothing items that are still in good condition and can be reused. This platform aims to address the growing environmental concerns around fast fashion and waste, by promoting conscious and sustainable shopping practices. Building an e-commerce thrift shopping website using MERN stack (MongoDB, Express, React, Node.js).

- ### purpose:

  The purpose of our e-commerce thrift shopping website is to provide an alternative to traditional retail by offering customers affordable and sustainable options.

- Scope:

  The scope of the project involves designing, developing, and launching an e-commerce website that enables customers to donate their products and purchase items to support charitable organizations.

- References:

  [1] March 2014, Computer Science & Engineering School Of Engineering Cochin University Of Science & Technology Kochi-682022 (Shibin Chittil, Nidheesh Chittil , Rishikese M R) Already existing e-commerce thrift shopping website:
  [2] https://kiabza.com/ 2. https://www.amalfiindia.com

3. General Description

- Product Functions Overview:
  - To create a user-friendly and intuitive website that allows customers to easily browse, search, and purchase second-hand or used items.
  - To promote sustainable and affordable shopping by offering a platform for customers to buy and sell second-hand goods.
  - To differentiate the website from traditional retailers and other e-commerce websites by offering unique value propositions such as sustainability, affordability, and community.

3.1 User Characteristics:

- Diverse Demographics: Users of an e-commerce website can come from various age groups, backgrounds, and locations.
- Tech-Savviness: Users are generally comfortable navigating websites and making online purchases.
- Mobile Users: A significant portion of users access e-commerce websites through mobile devices.

- Shopping Intent: Users visit the website with the intention to browse, compare products, and make purchases.
- Impatience: Users expect fast-loading pages and streamlined checkout processes.
- Budget-Conscious: Many users are price-conscious and look for deals, discounts, or free shipping options.
- Security Conscious: Users value secure payment methods and data protection.
- Product Diversity: Users seek a wide range of products and categories on the website.
- Review Seekers: Users often read product reviews and ratings to make informed decisions.
- Repeat Customers: Some users are loyal to the website, making repeated purchases.

3.2 General Constraints:

- Security and Privacy: E-commerce websites must prioritize the protection of user data and secure online transactions.
- Payment Gateway Integration: Ensuring seamless and reliable payment processing is essential for customer trust.
- Scalability: The website should be designed to handle varying levels of traffic and accommodate future growth.
- User Experience: The website must offer a user-friendly interface and smooth navigation to enhance customer satisfaction.
- Mobile Responsiveness: With the increasing use of mobile devices, the website should adapt well to different screen sizes.
- Performance and Loading Speed: Fast-loading pages are crucial to prevent user frustration and bounce rates.

4 Specific Requirements:

4.1Input and Outputs:

Input:

- User Search Queries: Users input search keywords or product names they are looking for on the thrift shopping website.
- Product Listings: The website receives product information from sellers, including item details, images, descriptions, and prices.
- User Account Information: Users provide personal details and create accounts for a personalized shopping experience.
- Payment Information: Users input their payment details during the checkout process.
- Seller Information: Sellers input their product details, pricing, and shipping information when listing items for sale.

Output:

- Product Search Results: The website displays a list of products matching the user's search query.
- Product Pages: Detailed product pages showcase product images, descriptions, seller information, and pricing.
- Shopping Cart: Users can view and manage the items they wish to purchase before checkout.
- Order Confirmation: After successful payment, users receive confirmation of their order, including order details and delivery information.
- User Account Features: Registered users can access personalized features like order history, wishlists, and saved searches.

5 Functional Requirements:

1. User Registration and Authentication:
   - Allow users to create accounts with email or social media login.
   - Enable password recovery and account security measures.
2. Product Listings and Search:
   - Allow sellers to list their thrift items with product details, images, and pricing.
   - Implement a search functionality for users to find specific products.
   - Include filters to refine search results based on categories, price range, and other attributes.
3. Product Pages:
   - Display detailed product information, including images, descriptions, condition, and seller information.
   - Show the availability of multiple sizes, colors, or variations if applicable.
4. Shopping Cart and Checkout:
   - Enable users to add items to their shopping cart for purchase.
   - Provide a clear and streamlined checkout process with multiple payment options.
   - Calculate and display the total order cost, including shipping fees and taxes.
5. Payment Gateway Integration:
   - Integrate a secure and reliable payment gateway to process online transactions.
6. User Profile and Account Management:
   - Allow users to manage their profile information, shipping addresses, and payment methods.

- Provide options for users to save their favorite products or create wishlists.

5.1External Interface Requirements:

The e-commerce thrift shopping website should integrate secure payment gateways, shipping services, social media sharing, customer support, analytics tools, SEO optimization, mobile app integration, third-party APIs, email services, and responsive design.

5.2Performance Constraints:

The e-commerce thrift shopping website must maintain fast loading times, handle high traffic volumes, and ensure seamless checkout processes to provide a smooth and responsive user experience.

5.3Design Constraints:

The e-commerce thrift shopping website design must prioritize simplicity, intuitive navigation, and accessibility to cater to diverse user demographics and ensure an enjoyable shopping experience.

5.4Acceptance Criteria:

The e-commerce thrift shopping website will be deemed acceptable if it successfully meets all functional requirements, passes thorough testing for security and performance, and receives positive feedback from users during a trial period.

7. Post lab: Importance of SRS in Software Development and Requirement Elicitation Techniques

   Importance of SRS in Software Development:

   - Provides a clear understanding of software scope, functionality, and requirements.
   - Serves as a contract between stakeholders, guiding development and scope management.
   - Acts as a basis for evaluation and validation of the final product.

   Requirement Elicitation Techniques:

   - Interviews, surveys, and workshops gather stakeholders' perspectives and needs.
   - Prototyping and observations help refine requirements through user feedback.
   - Use case analysis and questioning clarify functional and non-functional requirements.