**Department Of Computer Engineering**

**Academic Term: First Term 2023-24**

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

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| **Practical No:** | **1** |
| **Title:** | **Software Requirement Specification** |
| **Date of Performance:** | **01/08/2023** |
| **Roll No:** | **9625** |
| **Team Members:** | **Mohtashim Ali, Aditya Dhikale, Siddhant Murade**  **(9644) (9531) (9625)** |

**Rubrics for Evaluation:**

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| --- | --- | --- | --- | --- | --- |
| **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:**

**Requirements Specification (WildCart- Online Shopping Platform)**

**1. Abstract**

A web-based platform designed to offer a convenient and user-friendly shopping experience for customers. The website's core functionalities include product browsing, searching, selection, and online purchasing, with support for user registration, product catalogue management, order processing, payment processing, and customer support. The SRS document serves as a comprehensive reference for all project stakeholders, detailing the system's functional and non-functional requirements, scope, and limitations. This document guides the development team in creating a robust and scalable platform that enhances the online shopping experience for users, streamlines product and order management, and contributes to the overall success of the online retail business.

**2. Introduction**

**2.1 Purpose:**

The purpose of providing a user-friendly, efficient, and secure online shopping experience for customers while supporting the business in managing its e-commerce operations effectively and expanding its online presence.

**2.2 Scope:**

The scope of this project encompasses the development and implementation of an Online Shopping Website, which includes features like user registration, product catalogue management, shopping cart functionality, order processing, payment processing, and customer support. The project aims to provide a user-friendly and secure e-commerce platform while enhancing the online shopping experience for customers. However, it does not involve physical product handling, offline operations, or the development of dedicated mobile applications, among other aspects that are explicitly out of scope.

**2.3 Definitions, Acronyms, Abbreviations :**

Not applicable.

**2.4 References :**

[1]. International Research Journal of Engineering and Technology (IRJET) Volume: 02 Issue: 09 | Dec-2015

[2]. The Importance of Online Shopping Behavior in the Strategic Management of E-Commerce Competitiveness. Journal of Competitiveness.

[3]. A study on factors limiting online shopping behaviour of consumers

**2.5 Developer’s Responsibilities:**

1. System Development 2. Functional Implementation 3. Code Quality 4. Security 5.Performance Optimization 6. Integration 7. Testing 8. Documentation 9. Collaboration

10. Bug Fixes and Maintenance 11. Compliance 12. Timely Delivery

**3 General Description:**

**3.1 Product Functions Overview:**

1. User Registration: Allows users to create and manage accounts.

2. Product Catalogue: Displays product listings, descriptions, and images.

3. Shopping Cart: Enables users to add, manage, and review selected items.

4. Order Processing: Facilitates order creation, confirmation, and tracking.

5. Payment Processing: Securely handles various payment methods.

6. Customer Support: Provides support tools, contact forms, and FAQs.

**3.2 User Characteristic**

1. Shoppers: Individuals looking to browse and purchase products online.

2. Registered Users: Customers who create accounts for personalised features and order history.

3. Administrators: Those responsible for managing the product catalogue, orders, and customer support.

4. Support Staff: Individuals assisting users with inquiries and issues.

5. Guest Shoppers: Users who shop without registering for an account.

6. Mobile Users: Customers accessing the website from mobile devices.

7. Diverse Demographics: A broad range of users with varying preferences and needs.

**3.3 General Constraints**

The general constraints are budget, timeline, regulatory compliance, security, scalability, technology stack, accessibility, third-party integrations, geographic considerations, resource limitations, mobile responsiveness, and usability. These constraints impact various aspects of the project, from development and compliance to user experience and operational efficiency.

**3.4 General Assumptions and Dependencies**

Not applicable.

**4 Specific Requirements**

**4.1 Inputs and Outputs:**

**Inputs** typically include user data, product information, order details, payment information, and user queries or requests.

**Outputs** involve responses to user actions, such as displaying product listings, order confirmations, payment receipts, and customer support responses. These inputs and outputs are essential components of the system's functionality, facilitating user interactions and business operations.

**4.2 Functional Requirements:**

1. User Registration: Users can create accounts with personal information and login credentials.

2. Product Listings: Displaying products with details, images, and categorization.

3. Shopping Cart: Allowing users to add, manage, and review selected items.

4. Order Processing: Facilitating order creation, confirmation, and tracking.

5. Payment Processing: Securely handling payment transactions via multiple methods.

6. User Authentication: Ensuring secure user logins and data protection.

7. Search Functionality: Enabling users to search for specific products.

8. Customer Support Tools: Providing contact forms, FAQs, and inquiry submission.

9. Performance Optimization: Ensuring fast loading times and efficient resource utilization.

10. Security Measures: Implementing encryption, protection against security threats, and data privacy.

11. User Profile Management: Allowing users to edit account information and preferences.

**4.3 External Interface Requirements:**

1. User Interfaces: Ensuring accessibility across various devices.

2. Third-Party Services: Integration with secure payment gateways.

3. Product Data Sources: Accessing external databases for product information.

4. Communication Interfaces: Interacting with customer support and messaging tools.

5. Geographic Compliance: Adhering to data privacy regulations.

**4.4 Performance Constraints:**

Performance constraints are page load times, handling concurrent users, optimising database queries, ensuring scalability, considering available bandwidth, accounting for third-party service response times, and maintaining mobile responsiveness. Adhering to these constraints is essential for providing a fast, reliable, and user-friendly online shopping experience while ensuring the website's competitiveness and accessibility.

**4.5 Design Constraints:**

**Software Constraints:** The website needs HTML , CSS , Java Script , React JS for designing and running.

**Hardware Constraints:** Not applicable.

**Acceptance Criteria:** Acceptance criteria are specific conditions that functionalities and features must meet to be considered complete and accepted. These criteria cover aspects such as user registration, product catalogue accuracy, shopping cart functionality, order processing, payment security, search relevance, customer support, data protection, performance, and user profile management. Meeting these criteria is essential to ensure the system's quality and functionality align with stakeholder expectation

**Postlab : 1.**

Some of the specific impacts of a well-defined SRS on project success:

Reduced risk of project failure. A well-defined SRS helps to reduce the risk of project failure by preventing misunderstandings, scope creep, and defects.

Improved project efficiency. A well-defined SRS helps to improve project efficiency by providing a clear understanding of the requirements, which can lead to more efficient planning, development, and testing.

Increased customer satisfaction. A well-defined SRS helps to increase customer satisfaction by ensuring that the final product meets the needs of the stakeholders.

Overall, a well-defined SRS is a critical component of any software development project. By clearly defining the requirements, the SRS helps to improve the chances of project success.

2.The given sample srs can be further improved by adding abbreviations which could be added and also be used in the document. Adding the references to previous projects also helps to understand the technical feasibility of the project