REQUIREMENTS ELICITATION.

Phase – 1.

Project: E-Commerce Website.

Group Members:

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- Talha Tofeeq.
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- Abdullah Shafqat.

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Requirements Elicitation Document.

1: Abstract:

Our main goal is to make online shopping easier for our customers by creating a new website for our store. Our current website isn't very good, and it's hard for people to find and buy the products they want. So, we're building a new website that will be easy to use and will have lots of different products for sale. To do this, we'll use different computer languages to build the website. Think of it like building a house - we'll use bricks and cement (HTML, CSS, JavaScript) for the front of the house, and strong foundations (Node.js and MongoDB) for the back. This will make sure the website works smoothly for everyone. Our team, which includes Saim Imran, Talha Tofeeq, Azfar Nayyan, and Abdullah Shafqat, is working hard to make this new website great. We want it to be full of useful features and easy for people to use when they shop online.

2: Scope:

The e-commerce website project involves creating a complete online store with a wide range of products in different categories. This project will include features like allowing users to sign up, managing the list of products, letting customers add items to a cart, ensuring safe payment, and giving users a personalized shopping experience. The goal is to make a website that works well on different devices, keeps customer information safe, and is easy for people to use. It will also follow all the rules about protecting customer data and will offer many useful shopping features.

3: Feasibility Study:

The E-commerce Website project appears to be technically, economically, operationally, legally, and schedule-wise feasible. The project can have further development (modifications and updates) and implementation, with the flexibility to incorporate required necessities. The website's development will leverage tools such as HTML, CSS, JavaScript and MongoDB to create an efficient online marketplace that gives comfort to customers.

4: Similar Projects Review:

Literature Review
The analysis for these Websites is extracted from Quora Website In this comprehensive literature review, we have conducted an analysis of four prominent competitor e-commerce websites, drawing insights primarily from reputable sources such as Quora, to evaluate their performance across six critical features. Telebrand stands out for providing a scam-free, quality oriented, and affordable shopping experience but exhibits room for improvement in terms of theme consistency and concise content. Etsy excels in user experience with an attractive design and an organized layout, yet faces challenges in pricing competitiveness. Ajio emphasizes personalization but could enhance its pricing strategy and product quality, as suggested by experts on Quora. Sprout Coverage garners praise for its content consistency, impressive theme, and versatile filter options, while needing enhancements in secure payment options, competitive pricing, and product quality. Our e commerce website, Infinity Store, aspires to amalgamate the best attributes of these competitors, offering transparency, quality focus, affordability, and user friendliness, backed by a matching theme, concise content, personalized recommendations, secure payments, and consistent content structure. By leveraging these insights, we aim to establish a successful and competitive presence in the dynamic e-commerce store.All these literature reviews are shown in a table below:

Features	Matching Theme	Concise Content	Filter Option	No Scam	Good Quality	Low Price
Telebrand				●	●	●
Etsy	●	●	●	●	●	
Ajio	●		●			
Sprout Coverage	●	●	●			
Infinty Store	●	●	●	●	●	●

5: Elicitation Techniques:

5.1: Questionnaire:
Respondents Demographics:

1:	Age	60% were teenagers. 40% are adults.
2:	Occupation	55% were Students. 37% were employed. 8% not specified.
3:	Income	63% have never earned. They spare their parents money. 37% were earners.
4:	Location	- Lahore. - Islamabad.
5:	Gender	60% males. 40% females.

Questions and their Demographic view:

Q) In the context of our e-commerce platform, how valuable is the feature of accessing your previous order history for your online shopping experience?

a) Yes, it's a crucial feature for me, and I rely on it.
b) It would enhance my experience, but I could manage without it.
c) No, I don't find it necessary for my online shopping needs.

In the context of our e-commerce platform, how valuable is the feature of accessing your previous order history for your online shopping experience?

| Response	Value
No, I don't find it necessary for my online shopping needs.	0
It would enhance my experience, but I could manage without it.	6
Yes, it's a crucial feature for me, and I rely on it.	19
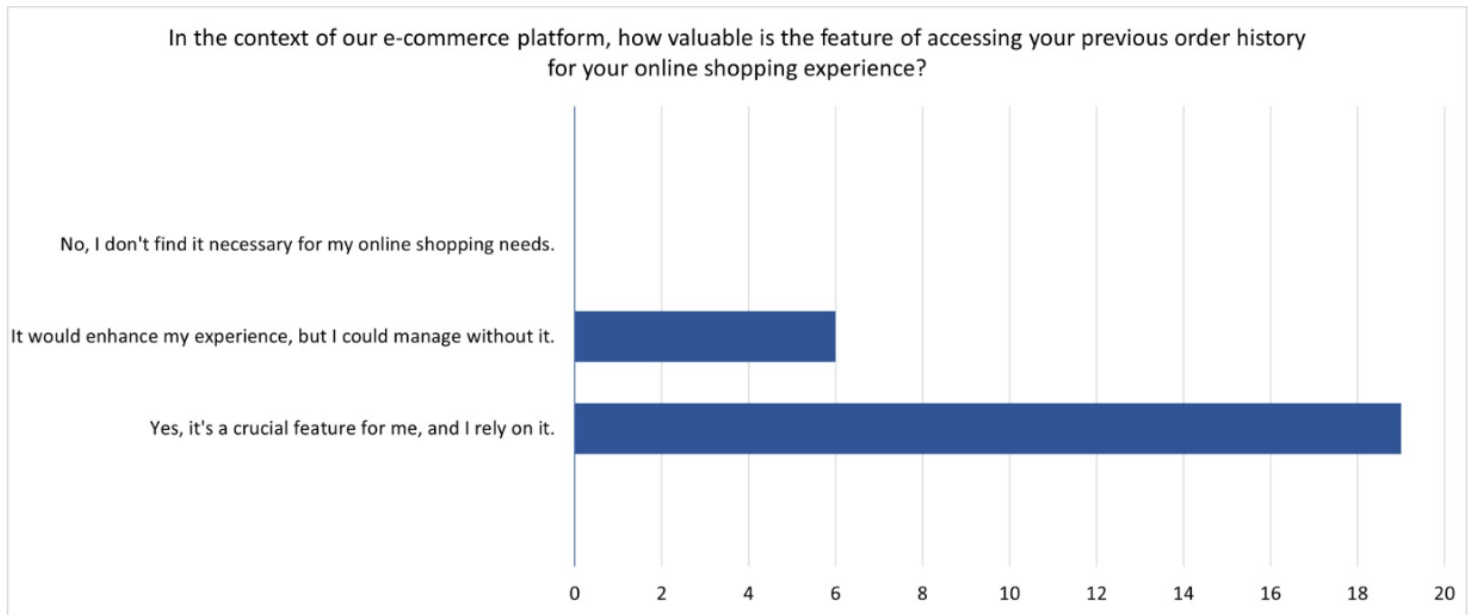
Q) Would you be interested in accessing streaming services like Netflix, Prime Video, etc., through an online shopping website?

a) Yes, if the prices are competitive
b) No, I prefer using separate apps/websites

Would you be interested in accessing streaming services like Netflix, Prime Video, etc., through an online shopping website?

Response	Value
No, I prefer using separate apps/websites	10
Yes, if the prices are competitive	15
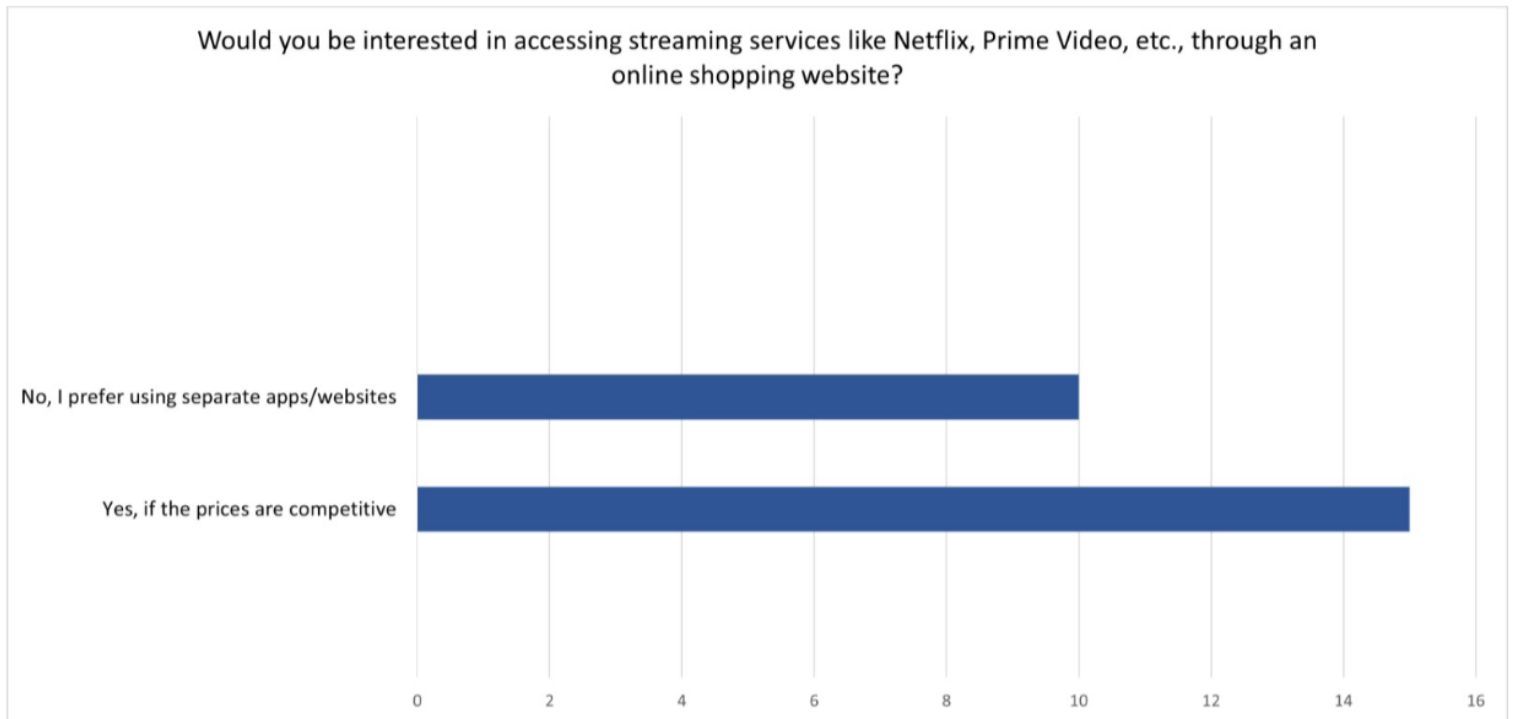
Q) In your online shopping experience, does a visually appealing website design and a well-thought-out theme significantly enhance your overall satisfaction with the platform?

a) Yes, a good theme and website design greatly enhances my shopping experience.
b) It's a nice addition, but my satisfaction isn't primarily dependent on the design.
c) No, website design and themes don't significantly impact my satisfaction with online shopping.

In your online shopping experience, does a visually appealing website design and a well-thought-out theme significantly enhance your overall satisfaction with the platform?
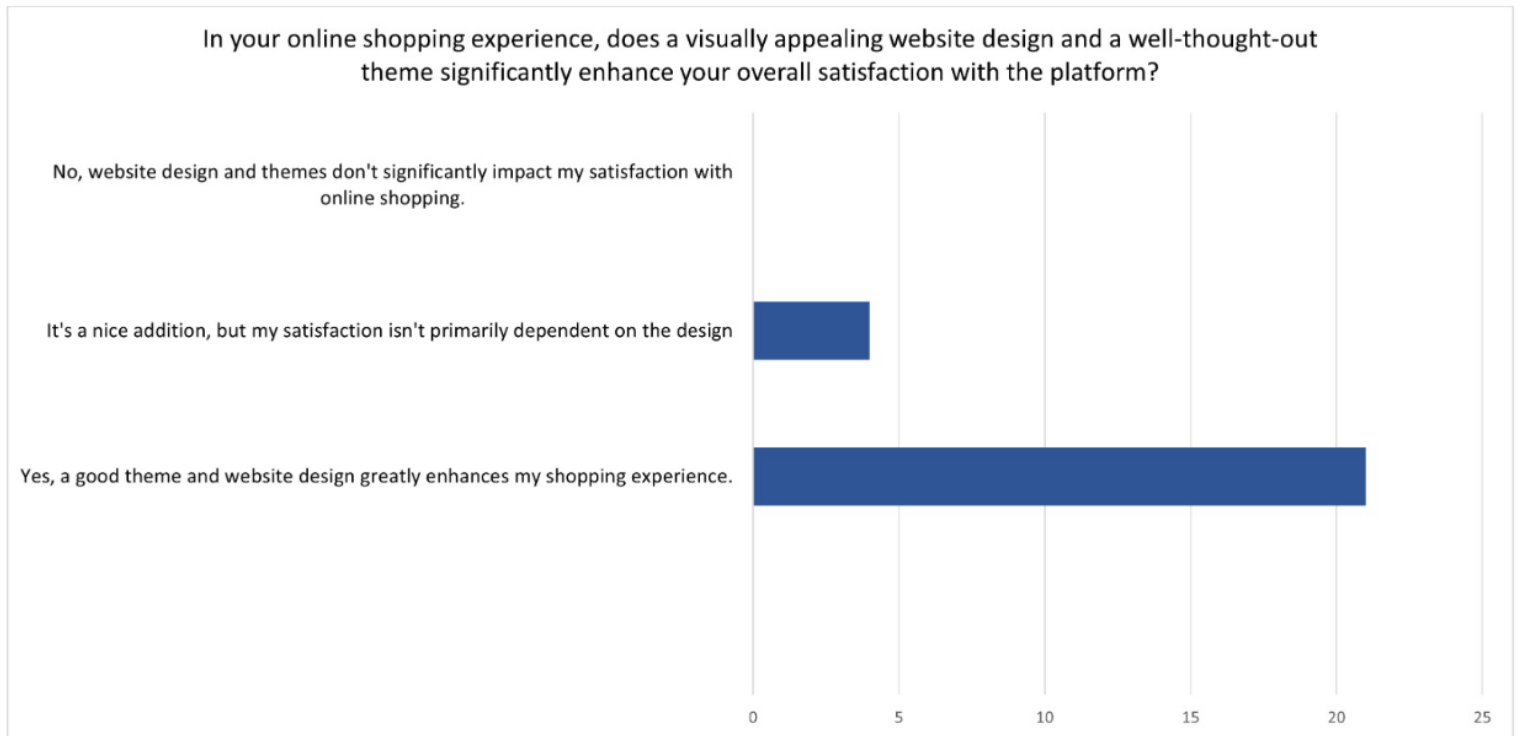
5.2: Group Work

Using group discussions and collaboration, we've learned a lot from our potential users about what they want from "Infinity Store." They've emphasized the importance of a secure login system, an easy-to-use product catalog, and a personal dashboard to track orders and more. They're also excited about our upcoming "Chill Section," which will offer popular streaming services at competitive prices. This shows that there's a strong demand for affordable access to entertainment platforms. In summary, the input from our users through group discussions has helped us align our offerings with their desires. We're confident that "Infinity Store" will not only meet but exceed our diverse customer community's expectations, offering a seamless and secure shopping experience, along with the exciting addition of the "Chill Section" for affordable digital entertainment.

5.3: Ethnographic Observation:

Through thorough ethnographic observation, which involved in-depth interviews, surveys, groupwork and the analysis of user behavior and preferences, we gained valuable insights into the digital entertainment habits of our potential customers. It has become evident that there is a strong demand for streaming services like Netflix, Prime Video, and Spotify at affordable prices. In response to this, we are excited to announce that we will be introducing a dedicated "Chill Section" in our E-commerce store, "Infinity Store." This section will provide users with access to these popular streaming services, allowing them to enjoy their favorite content conveniently and cost-effectively. We believe that this addition will not only enhance the overall user experience but also cater to the desires and preferences of our valued customers, making Infinity Store a one-stop destination for a wide range of digital entertainment options. We look forward to bringing this exciting feature to our platform and continuing to meet the evolving needs of our customers.

5.4: Interview:

We had the pleasure of speaking with Huzaifa Aziz, the CEO of ElyxiumTech Solutions. During our informal brainstorming interview/workshop session, we discussed various aspects. Let's review some of the questions and responses, and then summarize the key takeaways to improve our system.

Main Questions:

Question 1: In the context of our e-commerce drop shipping model, how can we leverage current e-commerce technology trends, such as order management systems and inventory tracking tools, to enhance our business's efficiency and customer satisfaction?

Key Takeaway: Incorporating modern e-commerce technology trends can streamline order processing, inventory management, and overall customer experience in our drop shipping
Model.

Question 2: Within the drop shipping domain, how can data analytics and insights be harnessed to optimize our product selection, inventory turnover, and vendor relationships, ensuring that our online store consistently offers a wide array of products to meet customer demand and maximize profitability?

Key Takeaway: Effective data analysis is critical for informed product selection, maintaining adequate inventory levels, and nurturing successful vendor partnerships, all of which are essential components of our drop shipping business.

Question 3: In the competitive landscape of drop shipping, what specific strategies and best practices, such as establishing a reliable communication system with vendors and ensuring rapid order fulfillment, can our e-commerce project implement to excel and secure a prominent position in the market, ensuring customer satisfaction and repeat business?

Key Takeaway: Emphasizing efficient communication with vendors and optimizing order fulfillment processes are essential for success in the drop shipping domain, as it can lead to customer satisfaction, loyalty, and sustained competitiveness.

5.5: Introspection:

In our project's requirements elicitation phase, introspection involved team members and stakeholders reflecting on our own experiences as potential users or customers of the "Infinity Store."

- Team members considered their own preferences, expectations, and insights related to the functionalities of the e-commerce platform.
- Through introspection, the importance of specific functionalities became apparent, such as a secure User Authentication system, a well-structured Product Catalogue, and a User Account Dashboard.
- Introspection highlighted the need for a seamless and secure login process, an organized catalogue for easy product discovery, and a personalized dashboard for users to track orders, wallet balances, and shopping points.
- This self-reflection helped align the project's direction with the desires and expectations of the diverse user community.

5.6: Brainstorming:

During our project, we conducted brainstorming sessions as collaborative discussions and workshops involving both stakeholders and team members.

- Participants in these sessions freely shared their ideas and insights, fostering creativity and generating a wide range of requirements.
- Brainstorming identified key features and functionalities that were crucial for the success of the "Infinity Store," such as the addition of the "Chill Section" offering popular streaming services at competitive prices.
- User feedback collected during brainstorming sessions emphasized the increasing demand for affordable access to digital entertainment platforms.
- This creative process led to the decision to introduce the "Chill Section" to cater to these user preferences, enhancing the overall user experience.
- Brainstorming also revealed that transparency and convenience were highly valued by customers in the shopping experience, influencing the project's direction.

6: User Classes: (Based on Respondents)

6.1: User Class 1: Age 10 to 20 (non-Earners).

Name: Young Shoppers.
Characteristics:
- Typically, students or dependents do not earn an income.
- Tech-savvy and active on social media.
- Value affordability and discounts.

Behavior:
- Frequent online shoppers for personal items and gifts.
- Likely to explore budget-friendly options.
- Interested in products related to hobbies, fashion, and entertainment.

6.2: User Class 2: Age 20 to 30 (Earners).

Name: Working Professionals.

Characteristics:
- Employed and earning a regular income.
- Comfortable with online transactions and mobile apps.
- Seek convenience and quality in products.

Behavior:
- Regularly shop online for a variety of needs, including clothing, electronics, and groceries.
- May show interest in premium products and personalized shopping experiences.
- Value time-saving features and fast delivery options.

7: Personas:
7.1 For User Class 01:

Sarah Ahmed, BS in progress.
Primary Persona.

Age: 18.
Education: BS in business studies.
Occupation: Student.

Background:

Sarah is an 18-year-old high school student who falls into the "Young Shoppers" user class. She's currently dependent on her parents and doesn't have a steady income of her own. She lives in a suburban area with her family and is in her final year of high school. The "Young Shoppers" user class, represented by individuals like Sarah, typically consists of students or dependents aged 10 to 20 who do not have their own income. These users are tech-savvy and active on social media, where they stay informed about the latest trends. They highly value affordability and discounts due to their budget constraints. Their behavior involves frequent online shopping for personal items and gifts, with a strong inclination toward exploring budget-friendly options. Their interests span hobbies, fashion, and entertainment, making them enthusiastic consumers in these domains.

Goals:

Sarah's main goals are to stay within her budget, find affordable deals, and continue pursuing her interests and hobbies. She also aims to maintain her online presence and share her latest finds and experiences with her friends on social media. She wants to do well in school and become more independent by learning new things. She also wants to grow as a person, like getting better at her hobbies and fashion. Staying close to her friends and being active on social media are important to her. She's working on being good with money, and she likes trying new things and going to new places. So, she's a busy person with lots of different things she cares about.

Challanges:

One of the challenges Sarah faces is managing her limited budget while still satisfying her desire for new experiences and products. She must balance her spending to ensure she doesn't overspend and maintains a good relationship with her parents.

7.2: Persona For User Class 02:

Aniqa Sheikh, Software Engineer at a tech company.

Primary Persona.

Age: 27.
Education: BS in Computer Science.
Occupation: Software Engineer.

Background:

Aniqa is a 27-year-old working professional who recently graduated from university and landed her dream job at a reputable tech company. She completed her degree in computer science and has been working for the past three years as a software engineer. She lives in a rented apartment in the city and is financially independent. Aniqa, a 27-year-old working professional, is characterized by her steady employment as a software engineer and financial independence. She is highly tech-savvy, comfortable with online transactions and mobile apps. Sarah places a premium on convenience and quality in products, leading her to regularly shop online for various needs, including clothing, electronics, and groceries.

Goals:
- To efficiently manage her work-life balance and maximize her free time.
- To find high-quality products that make her life easier and more enjoyable.
- To explore new and exciting tech gadgets and stay up to date with the latest trends.
- To save money, when possible, without sacrificing quality.

Challenges:
- Balancing Work and Personal Life: Aniqa often struggles to find time for herself due to the demands of her job. She's always on the lookout for ways to simplify tasks and save time.
- Information Overload: With the abundance of products and choices available online, Aniqa can sometimes feel overwhelmed by the sheer volume of options. She values clear, concise product information and recommendations.
- Budgeting: While she has a steady income, Aniqa still wants to save for the future and avoid overspending. She faces the challenge of managing her finances effectively while indulging in occasional premium purchases.

8: Main Scenario:

Imagine a person shopping on our website. He begins by searching for a product, and our system is there to assist him in finding what he wants quickly and easily. As he selects a product that catches his eye, the system provides him with all the details he needs, including images, prices, and customer reviews. Additionally, the system suggests other items based on his selection, making his shopping experience more enjoyable. As he adds items to his cart, our system keeps a real-time tally of the total cost. When he's ready to make a purchase, our system guides him through the payment process step by step, ensuring that all the information he enters, such as shipping and payment details, is accurate and error-free. After he successfully completes the payment process, our system generates an order confirmation page, displaying essential information such as the order number, delivery details, and an estimated delivery date. Simultaneously, the system updates our product inventory, deducting the purchased items to prevent overselling. It also communicates with our shipping partner to arrange for the delivery, providing the user with a unique tracking number to monitor the delivery's progress. Once the order is delivered, our system may request feedback from him to help us enhance our services and product offerings, ensuring that we continue to meet his needs and preferences. Throughout this entire process, our system's goal is to provide a user-friendly and accurate shopping experience for him.

9: Features:

1. User Authentication: User accounts with secure login and registration processes.
2. Product Catalog: A well-organized product catalog with categories and subcategories. Also, detailed product data with images, descriptions and prices.
3. Shopping Cart and Checkout: A customer shopping cart to add, edit, or remove items. Also, secure checkout process with multiple payment options
4. User Reviews: Allow customers to leave reviews for products and show them to customers before buying.
5. Inventory Management: Real-time inventory tracking and add, edit, or remove options for store admin.
6. Order History for Customer: Customers can view their order history and can track their purchased items.
7. Customer Wallet: Customer wallet which includes the customer money and customer can add more money to wallet.
8. Product Sharing: Customer can share products to others on different platforms.
9. Product search: Customer can search for desired product.
10. User Account Dashboard: Customer profiles with order history, wallet and shopping points.
11. Discount Code: Allow customers to use the discount code at the time of billing (if any).

10: Categorization:

10.1: Business Requirements:
- Implement SEO best practices to improve search engine rankings and drive organic traffic to the site.
- Customer engagement using personalized recommendations and marketing strategies.
- Enable integration with external services such as social media, email marketing, and inventory management systems.

10.2: Business Rules:
- Customers must create an account to make a purchase.
- Discounts can only be applied once per transaction.

10.3: Constraints:
- The website must adhere to local and international data protection laws, such as GDPR, ensuring customer data privacy.
- The payment gateway must comply with industry security standards.

10.4: External Interface Requirements:

- Integrate with social media platforms for easy sharing of products e.g use Facebook or instagram to easily share information to customers.
- Integration with shipping carriers (TCS, leopard) to provide real-time shipping rates and order tracking.

10.5: Functional requirements:

- Customer must register before making purchases and must login through their accounts to shop.
- Customers can add and remove products from their respective carts.
- Orders must be recorded in the database to keep a permanent track of sales.
- Customers must be able to search for products by the keywords of any product or categories.
- Customers must be able to pay their respective bill by different payment options available for the product.
- Admin can add more products or remove any product from the inventory database.
- Customers can add money to their store wallet from different account methods.
- The customer must be able to add a review for the product purchased by him.

10.6: Non-functional requirements:

- The customer login must be efficient and responsive in a minimal amount of time.
- The system should easily accommodate a growing number of products and users.
- The system must be safe and secure for customers and the payment gateway should be fully secure

10.7: System requirements:

- Compatible with major web browsers (Chrome, Firefox, Safari, etc.).
- The website should have a responsive design to ensure optimal viewing experience across different devices e.g laptop, phones etc.

10.8: User requirements:

- Allow users to track their order status.
- Provide personalized recommendations based on previous purchases.

10.9: Quality Attributes:

- Performance: The website should be responsive.
- Security: Protection of sensitive user data.
- Usability: Easy navigation and easy to use interface.
- Reliability: High availability and uptime

11: Conclusion:

The development of this eCommerce website presents an exciting opportunity to enter the thriving eCommerce market. By delivering a user-friendly platform with a diverse product range, we aim to meet the evolving needs of online shoppers and establish a successful and profitable online business.

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