

# **SYSTEM STUDY**

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# **REQUIREMENT ANALYSIS**

## **1.Project Overview**

It is a virtual store where customers can browse the catalog for ornaments , bags and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill or select a shipping address and payment information . The project also aims in renting accessories which is more cost-effective compared with purchasing with different catalog .In ordering process it allow users to select the desired item , specify rental duration and make payments . The rented item are shipped to user's specified location.Also facilitates an efficient return management process , enable users to schedule return pickups and track the status of the return .The admin should check the returned item.

## **2.To what extend the system is proposed for**

The proposed system for online fashion accessories store is designed to provide a user-friendly platform for customers to browse, purchase, and buy rented items on wide range of fashion accessories. It includes features like product catalog, secure payment processing, order management, and user profiles. However, it focuses exclusively on fashion accessories and may not cover other product categories. It operates with shipping options and customer support. It may include virtual try-ons and AI-based recommendations. The system adheres to data protection regulations to ensure user data security and privacy.

### **3.Specify the Viewers/Public which is to be involved in the System**

Customers – a customer is an individual who visits the platform to browse, shop, and make purchases online. Customers create accounts, add products to their carts, complete transactions, and may also leave reviews and ratings. They play a pivotal role in driving the success and growth of the eCommerce business.

### **4.List the Modules included in your System**

#### **1.Admin**

- Product Management:  
Add, edit, and delete product listings.  
Update product details, including images, descriptions, prices.
- Order Management:  
View and process orders from customers.  
Update order statuses (e.g., pending, shipped, delivered)
- Customer Management:  
Manage customer accounts and profiles.
- Pricing
- Payment and Checkout
- Shipping and Fulfillment:  
Configure shipping methods, rates

#### **2.Customer**

- Search for product from buying or rental catalog
- Order product
- Order tracking
- Viewing booking status
- Payment status
- Order history
- Product return request

### **3.Delivery Person**

- View assigned work
- Update status of the delivery
- Update location
- Track user
- Return pickup

## **Feasibility Study**

When complex problem and opportunities are to be defined, it is generally desirable to conduct a preliminary investigation called a feasibility study. A feasibility study is conducted to obtain an overview of the problem and to roughly assess whether a feasible solution exists prior to committing substantial resources to a project.

### **Aspect of conducting Feasibility Study:**

- **Economic Feasibility**
- **Technical Feasibility**
- **Operational Feasibility**

### **Economic Feasibility**

A systems development project may be regarded as economically feasible or 'good value' to the organization if its anticipated benefits outweigh its estimated costs. However, many of the organizational benefits arising from record keeping projects are intangible and may be hard to quantify. In contrast, many development costs are easier to identify.

These costs may include the time, budget and staff resources invested during the design and implementation phase as well as infrastructure, support, training and maintenance costs incurred after implementation. In these high risk situations it may be appropriate to assess financial feasibility.

The proposed system can be easily developed using the resources available in the organization and they do not invest in procurement of additional hardware or software. The cost of developing the system, including all the phases, has been

taken into account and it is strict minimum. Hence the system is economically feasible.

## **Technical Feasibility**

Technical feasibility is a study of function , performance and constraints that may affect the ability to achieve an acceptable system. During technical analysis, the analyst evaluates the technical merits of the system , at the same time collecting additional information about performance, reliability, maintainability and productivity . Technical feasibility is frequently the most difficult areas to assess. The main technical issue raised during feasibility is the existence of necessary technology and whether the proposed equipment has the capacity to hold required data. The technical guarantee of accuracy, reliability, ease and data were also investigated.

Technical feasibility is achieved in the proposed system through meticulous planning, suitable technology selection, and infrastructure readiness. By thoroughly analyzing requirements, choosing an appropriate technology stack, ensuring scalable infrastructure, implementing robust security measures, and optimizing performance, a strong technical foundation is established. Rigorous testing, documentation, cost management, and risk mitigation further enhance feasibility. Effective project management ensures timely execution. Achieving technical feasibility guarantees the system's capability to meet objectives while maintaining security, scalability, and performance, making it viable and sustainable.

## **Operational Feasibility**

Operational feasibility is a measure of how people feel about the system. Operational Feasibility criteria measure the urgency of the problem or the acceptability of a solution. Operational Feasibility is dependent upon determining human resources for the project . It refers to projecting whether the system will operate and be used once it is installed . If the ultimate users are comfortable with the present system and they see no problem with its continuance, then resistance to its operation will be zero. Behaviorally also the proposed system is feasible. A particular application may be technically and but may fail to produce the forecasted benefits . For the system, it is not necessary that the user must be a computer expert, but any computer operator given a little bit of knowledge and training can easily operate.

Our Project is operationally feasible since there is no need for special training for users. This project is being developed keeping in mind the general people who have very little knowledge of computer operation can go through the system and other related informations easily without any training.

## **Feasibility Questions**

### **Is the Required Technology Available?**

For the project , the necessary technology is indeed available. Numerous open-source e-commerce platforms, web development frameworks, and database systems cater to educational purposes. These readily accessible resources are well-documented, supported by a vibrant community, and offer valuable learning opportunities for students. Customization and experimentation with various technologies are feasible, aligning perfectly with the educational objectives of the

project. Therefore, the project can be effectively executed using existing technology resources.

### **Can the project Scale to Handle User Load?**

It can be scaled to handle increased user loads through careful design, employing scalable technologies, and utilizing cloud infrastructure. Horizontal scaling, and optimizing database queries can support growing user numbers. Content delivery networks (CDNs) can enhance performance. Cloud platforms like AWS, Azure, or Google Cloud offer auto-scaling capabilities to adapt to varying loads. Nevertheless, meticulous load testing and ongoing monitoring are essential to ensure the app accommodates user growth without performance degradation, particularly for the project where consistent availability and responsiveness are vital for user experience.

### **Integration with Backend Systems?**

Integration with backend systems for an website is crucial for its smooth operation. It involves connecting the customer-facing front-end with various backend components such as databases, payment gateways, inventory management, and order processing systems.

This integration ensures that product listings are up-to-date, inventory levels are accurate, and orders are processed seamlessly. It also enables secure payment transactions and user authentication. Additionally, backend integration allows for analytics and reporting, helping businesses make informed decisions.

To achieve this, APIs (Application Programming Interfaces) and middleware play a significant role in facilitating communication between the front-end and backend systems. Thorough testing and security measures are essential to ensure data



integrity and protect customer information. In summary, backend integration is fundamental to the functionality and success of the website.

## **Security and Data Protection?**

Security and data protection are paramount for an website. Robust measures are necessary to safeguard sensitive customer information, such as payment details and personal data. This includes implementing encryption, secure payment gateways, and adherence to PCI DSS compliance standards. Regular security audits, vulnerability assessments, and intrusion detection systems help identify and mitigate threats. Additionally, strong access controls, data encryption, and user authentication mechanisms are essential. Privacy policies should be transparent and compliant with data protection regulations .

## **Support for Different Devices and OS Versions?**

Ensuring support for various devices and OS versions is pivotal for the success of an website. It allows a wider audience to access and engage with the platform, potentially increasing sales. Employing responsive web design techniques and adaptive layouts ensures the site functions seamlessly on smartphones, tablets, and desktops, irrespective of the operating system in use. Regular testing and updates are vital to identify and resolve compatibility issues promptly. Prioritizing cross-device and cross-OS compatibility guarantees a user-friendly experience, ultimately enhancing the website's reach and usability for a diverse customer base.