**CHAPTER 02- ANALYSIS**

**2.1 Introduction**

The process of determining user expectations for a new or modified product is known as Requirement analysis. Requirements must be quantifiable, relevant and detailed. In Software engineering, such requirements are often called functional specifications. Requirement analysis is an important aspect of project management.

In requirement analysis, frequent communication with system users to determine specific feature expectations, resolution of conflict or ambiguity in requirements as demanded by the various users or groups of users, avoidance of feature creep and documentation of all aspects of the project development process from start to finish is included.

The process of determining the requirements of the client and analyzing them to fit a project plan is briefly outlined in this chapter.

**2.2 Requirement gathering techniques**

Before analyzing the requirements, the requirements should be obtained from the client. Various techniques are used to gather the requirements. Requirements gathering techniques used to analyze this project has been mentioned below.

**2.2.1 Interviews**

Interviews are the most common technique for gathering requirements.

Gathering background information on business needs, customer and user issues, and concerns of support staff and other relevant stakeholders are vitally important in requirement analysis process.

Due to current pandemic situation, interview was conducted by using online platforms. A lot of essential factors had been identified by the interview.

**2.2.2 Observations**

there are times when direct observation may be better suited in requirement gathering.

Better understanding about the current process was obtained through observations and surveying it further.

Observations were very useful when analyzing of factors.

**2.2.3 Related websites**

Nowadays, consumers are tempted to use online shopping. A lot of online shopping stores are available to get services. Therefore, several factors can be obtained by studying those websites.

**2.3 Analyzing the current manual system**

2.3.1 Customer Registration

This current business doesn’t have any proper mechanism to register customer. Only the Phone number and address have been taken.

2.3.2 Product Details

Sample designs are posted on the Facebook and Instagram pages. Details of the products are displayed and promoted by using social media pages such as Facebook, Instagram, TikTok and WhatsApp.

2.3.3 Taking Orders

Products can be ordered through social media. Customer will be able to purchase the product by chatting or making a phone call through social media.

2.3.4 Order Handling

Although, different sizes are available, if the customer preferred it to her measurements, then the ordered product is completed as customer desires. Once the order is completed, it will be delivered to the customer

2.3.5 Delivery

Products are delivered through a courier service.

2.3.6 Payments Handling

Cash on Delivery method is used to handle the payment. Card payment method is not available in this current process. And, all the transaction details are recorded manually.

**2.4 Functional requirements**

Functional requirements are the basic facilities that the system should offer. All these functionalities must be inevitably integrated into the system as a part of the contract. They are basically the requirements stated by the user which one can see directly in the final product.

Functional requirements that identified by analyzing the system are mentioned below:

2.4.1 Admin Module

* Log in to the system

Admin will be able to log in to the system.

* Manage product

Admin will be able to add, remove, update product details and will be able to view stock

* Manage user accounts

Admin will be able to manage and maintain user accounts and will be able to view customer details

* View customer feedbacks

Admin will be able to view feedbacks of customers about the products

* View most selling products

Admin shall be able to view the most selling items

* Payment handling

Admin will be able to view payment information and will be able to handle the payment methods.

* Add Promotion details

Admin will be able to add promotions and will be able to offer discounts

* Handle Delivery

Admin will be able to handle delivery methods

* View Notifications

Admin will be able to view all the orders done by the customers. It will appear as a notification

**2.4.2 Customer Module**

* Customer Registration

Customers are required to register on the website before they place orders. Several features are provided for the non-registered customers.

* Log into the system

Registered customers will be able log in to the system and place orders. After the registration, non-registered customers also will be able to place orders by log in to the system.

* Manage own details

Customer will be able to view and edit their own details.

* Search

This facility is provided to both registered and unregistered customers. Customer will be able to search product details, sizes chart, categories according and search products according to the price.

* Order Products

Customer will be able to place orders as they desire after the registration.

* Manage order

Customer will be able to view, update and cancel own order as desire

* Give feedbacks

Customer will be able to write reviews about the product and also, they will be able to view others’ feedbacks.

* Add to cart

Customer will be able to add products that they like to the cart and can be removed if not required later.

* Add to Wishlist

Customer will be able to add products that they wish to buy to the Wishlist and can be removed as desire.

* Select payment method

Customer will be able to select payment method. (Card Payments/ Cash on Delivery

2.4.3 Report Generating Module

* System will be able to generate sales reports

**Non-Functional Requirements**

These are basically the quality constraints that the system must satisfy according to the project contract. The priority or extent to which these factors are implemented varies from one project to other.

2.5.1 Security

Attaining security requirements is the most essential non-functional requirement in a system. Most of the important details are stored in the system such as private details of the admin and customers. As this is a web-based application, admin and customer will be able to access the system. Access is allowed to the admin by inserting correct username and password. Registered customer as well unregistered customer will be able to view product details. But all the customers must be registered before placing orders. Therefore, all the details of customers must be protected. All the password are encrypted. And also, customer will be able to manage their accounts. All the things in the system are managed by the admin. Therefore, admin will be able to add new admins as desire.

2.5.2 Usability

Attractive interfaces are designed to enhance usability requirement. Appealing colors are used to design interfaces and used navigational bars to achieve usability.

2.5.3 Accuracy

Validation techniques are used to attain accuracy requirements in the system. Therefore, database problems are not occurred.

Complete BSOs (At least three)

online shopping is used by a lot of people these days. as a result of that, platforms for e businesses are rapidly increased.

"sandu fashion " is a newly started business. therefore, it will become a huge issue that the business doesn’t have an automated system. because, only whatsapp and facebook are their platforms.

automated system is needed to overcome the competition over this industry.

Several options to automated this business are mentioned below

Mobile app can be implemented.

Nowadays mobile apps are frequently used by people. App is a computer program or software application designed to run on a mobile device or desktop. As the most of the people are having smart phones and tablets, most of the apps are designed to run on mobile devices. Apps must be downloaded and installed to the device. Some apps can be downloaded for free as well as some apps must be purchased.

Web based application can be implemented

Web based application may be client-based application that accessed over a network connection. But the processing is done over the internet on an external server. Web browser is used to run a web-based application. Web based application can be appeared in the customer’s device. And web-based application doesn’t need to download.

Standalone application can be implemented

Standalone application is an application running topically on the computer and more to be usable. It a portable application which can be performed without an installation procedure or an internet connection.

It is a software that installed on one device and used by only one user.

Cost benefit analysis

Selected BSO with a sound justification

Gantt chart