Requirements

During this project, in the requirements analysis or design phase or later in the implementation

phase we can make the decision of what requirements need to be changed or how it will

be designed or what will be implemented.

Mr & Mrs Best Buy is an online shopping system for selling clothes. Customers will

be able to browse and order the clothes from the online shop. Sales manager and In-

ventory manager will manage the product information and sales order through the

online system.

During the requirements analysis , we have analyzed the application domain,

requirements, entities and datasets required to develop this application. During the

implementation phase, when we will face the challenges to develop the application and

new requirements are discovered, then the documentation will be refined. So the analy-

sis, design and implementation process will be iterated.

Users

Here, the users are those people who will actively use the system. Deshi Store online

application will be used by Customers, Inventory manager, and Sales Manager.

1.Customer

The Customers, all around the world and mainly in Finland, are the main users of this

application. In general, Customers will be able to browse and buy the products, to

make the payments, to check their order status etc.

2.Sales Manager

The sales manager is responsible for checking the payments and other sales related

services. After receiving the customer’s order through the online system or phone, the

sales manager will check the payment. If the payment is confirmed, the sales manager

12will update the order status in the system and inform the inventory manager to deliver

the product to the customer address.

3.Inventory Manager

Inventory Manager will use this application to manage the products information like

uploading, updating the product details, images, color and prices. After receiving the

delivery order from the Sales manager, he will send the products to the delivery address

and will update the delivery information in the online system.

Requirements elicitation

In Requirements elicitation process, software developer gathered the requirements by

working with all kinds of stakeholders or end users who will interact with the system or

will be affected by the system .

There are several ways to collect the system requirements. Some of them are:

Interview

Brainstorming

Document analysis

Reverse engineering

Prototyping

Observation

Each of them is effective in different circumstances. Sometimes multiple techniques

are used to collect or discover the requirements.

In requirements elicitation of Deshi Store Online shopping application, we am the de-

veloper, owner and sales manager, one of the main users or actors of the system. So we

can decide which requirements should be implemented and which not and how to im-

plement. But we don’t know very well about the customers’ requirements. we need to un-

derstand the customers’ requirements.

In my requirements elicitation process we have used combination of three techniques.

- Interview

- Observation

- Brainstorming

Observation

Typically, Observation means observing the end users at their real work environment.

In this project, the Deshi Store online shopping application is not a running applica-

tion but it is just an anticipated application and it has no real customer yet. So, we have

observed two things. One is that the how the people use the existing online shopping

systems when they buy something from online and second thing is that we myself has

observed the existing online shopping application in the market. Several times we have

bought products from online store and visited many online stores, specially, the online

stores in India. When we have gathered my experiences and my observations of how

the people interact with the online shopping application, we have got really a very good

collection of required functions for an online shopping system.

Interviews

Interview is a good technique to get an overall understand-

ing of what stakeholders do, how they might interact with the system and what makes

them feel good and bad. But it is not so good technique to elicit the organizational

During the observation phase, we have understood what features are available in the ex-

isting online shopping system, what functions people generally use. But just by obser-

vation it is not possible to understand what is in the customers’ mind, what they feel

about buying from online store and also usability and non functional issues.

we designed a list of questions for potential customers to find out more about the non-

functional and usability perspective of the application. The interview session was about

20 minutes. The questions were open ended. To the customers the Questions were,

1. How often do you buy in online?

2. Which are the sites you have bought from in online?

3.What did you like in these shopping websites?

4. What you did not like in these websites?

5. How would you change these websites to feel better?

6.What and how it concern you most about the products (e.g. color, real look of

clothes, size,) when you buy in online?

7.What and how it concerns you most about the online shopping application/ web-

site (e.g. secure payment)?

8. What and how it concerns you most about the total online shopping system (e.g.

decision making to buy online, delivery date, return policy)

9.Do you think people will make more shopping online?

10Anything else you want to comment about?

During the interview, We asked the questions to potential customers and we discussed

about the issues and we wrote down the answers shortly. We asked the customers to visit

their favorite online shopping site and how they use application. Though the estimated

time was 20 minutes but most of the potential customers were happy to talk more than

20 minutes.

After the interview we listed down all the online shopping sites used by the interviewees.

And we went through those sites to analyze the interviewees’ expectation and available

features in those shopping sites and we discovered several features that we can implement

in my application. But most interesting thing is that during these interviews we discov-

ered some interesting usability and business strategy issues which we did not realize dur-

ing observation phase. Some of them we have pointed out here-

Usability perspective

1. Should be multilingual, English must.

2. Product specification needs to be exact as the real product is.

3. A product detail is well organized and easy to read.

4. HD video of the product is expected.

5. Payment system is easy and simple.

Business Perspective

1. People like to buy from online, when these products are not available in the physi-

cal market within the customers close proximity.

2. The seller and product is more important than the look and feel of the web site.

3. Customers prefer online shopping when they find the products with cheaper price

and ability to choose from wide range of products and sellers.

4. Seller need to be familiar and trustworthy to its targeted customer.

5. Original product and product specification in the website should be exactly same.

6. The offer and product in online should be special than what is in physical shop.

7. Free shipping facility.

8. Most common banks/ payment systems should be available to pay the bill.

In summary of the interview, we can say that we was really benefitted from this interview

session. It gave me confidence about those functional requirements that we discovered

in observation phase and understood them more clearly and the business insight that we

got will help me to plan for the business also.

Brainstorming

Finally we collected all the requirements from the observation phase and Interviews. we

compared the collected requirements with my expected application and how they can

fit into the Deshi Store web shop, how these requirements can enhance the value of

the Deshi Store web shop. In the next user requirements section, we have defined and

written down the requirements.

Requirements specification

There are two most common techniques to specify or express the user requirements

are ‘User Story’ and ‘Use Case’.

‘Use Case’ modeling requires very details description of the interaction between system

and actors, and picture of data processing and step by step interactions. Every Use case

has triggers and goals and it illustrates all the possible scenarios or path from trigger to

goal. It uses some unstructured text to fit into the required specification template. Use

case also covers bigger scope than the user story does. (Rouse, 2007.)

In contrast, ‘User Story’ is very short descriptions of the functionalities and used in

agile software development. User story is written from user’s perspective. It is very

useful for project planning to make faster decisions and easy to modify with the rapidly

changing requirements. (Cohn, 2004.)

19I have selected User Story method to describe the requirements. As we am the developer

and owner of the application, it is not worth to spend time for making complex use

case modeling for the requirements. The requirements:

As a Customer,

As a Customer, we want to browse the clothes.

As a Customer, we want to see clothe details.

As a Customer, we want to see the clothes with big view (zoom).

As a Customer, we want to watch the HD video of the clothes.

As a Customer, we want to add the clothes to the shopping cart.

As a Customer, we want to add the clothes to the wish list.

As a Customer, we want to create my User account.

As a Customer, we want to check out.

As a Customer, we want to see the total bill.

As a Customer, we want to pay the bill by online banking (bank transfer) system.

As a Customer, we want to send the bank payment receipt through system.

As a Customer, we want to get notification after sending payment receipt.

As a Customer, we want to get email notification after payment has been accepted.

As a Customer, we want to check order status.

As a Customer, we want to cancel order.

As a Customer, we want to see order history.

As a Customer, we want to make the payment.

As a Customer, we want to get confirmation letter of sales order to my email.

As a Customer, we want to check sales order status.

As a Customer, we want to see the other customers view/ comments on the products.

As Inventory manager,

As Inventory manager, we want to upload the pictures of the products.

As Inventory manager, we want to write price, description and other details for that

product.

As Inventory manager, we want to be notified if the new sales order has been created.

As Inventory manager, we want to see when a new delivery order has been sent to me.

20As Inventory manager, we want to update the delivery status of the order.

As a Sales Manager,

As a Sales Manager, we want to check if there is any customer’s order.

As a Sales Manager, we want to check the Bank account against the payment information

sent by customer.

As a Sales Manager, we want to update order status.

As a Sales Manager, we want to send delivery information to inventory manager.