**Software Requirement Specification**

**For**

**Bombay Novelty E-Store**

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**1) INTRODUCTION**

* 1. Purpose

The “online shopping system” has been developed to override the problems prevailing in the practicing manual system. This system is designed for the particular need of the client to carry out operations in a smooth and effective manner. Our project has challenges to overcome and managing the information of product, customer, shopping, payment, delivery, services. The purpose of online shopping system is to automate the existing manual system by the help of computerized equipment and full-fledged computer software, fulfilling their requirements so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients.

* 1. Document Conventions

|  |  |
| --- | --- |
| SRS | System Requirement Specification |
| DFD | Data Flow Diagram |
| DB | Database |
| ER | Entity Relationship |
| FAQ | Frequently Asked Questions |

* 1. Intended Audience And Reading Suggestions
  2. Product Scope

The application provides a computerized data storage facility.This system is used to maintain the data about stock, purchase, transactions etc.This system provides better transactions use.We can track our products easily.New system provides security against unauthorized access.Also provides better services to the customers.

* 1. References

Fundamentals of database systems by Ramez.Elmarsi and Shamkant.B.Navathe

**2) Overall Description**

2.1 Product Perspective

Bombay Novelty E-Store website is a outstanding way of bringing sellers and customers on a online platform to make purchase in a secures and efficient manner. This website offers recommendations for discounts and offers on products based on their category.

2.2 Product Functions

* Provide a simple interface and platform to ease process of buying as well as selling of products online.
* Include smooth functionality and efficiency that adds to buyers confidence.
* Appropriate space is dedicated to Offers that fetches adequate attention of users.
* Feature of MBScheme develop inquisitiveness towards users to buy new product.
* Tracking feature of orders and pending deliveries for both buyers and sellers.
* Notifying orders and delivery reports to customers and sellers.

2.3 Users Classes And Charactertics

**Administrator**- person is responsible for monitoring functions and procedures of the platform.Administrator is responsible to provide valid information of the product and purchase.

**Customers**-he or she is a verified user for website who is intended to buy a product from the website. The customer must have valid username and password to make a purchase. The person is updated and fed with the latest offers and discounts.

2.4 Operating Environment

Recommended browsers are Chrome, Firefox and Internet Explorer or higher.

|  |  |
| --- | --- |
| Particulars | Client System |
| Operating System | Windows 7 and others |
| Processor | Intel |
| Hard disk | 500GB |
| RAM | 2GB |
|  |  |

2.5 Design and Implementation Constraints

|  |  |
| --- | --- |
| Client-side programming language | |
| HTML | HTML is a standard markup language for creating web pages and web applications. |
| CSS | Cascading Style Sheets define style rules in a separate CSS file |
| JavaScript | JavaScript is a lightweight, object-oriented, cross-platform scripting language, mainly used within web pages |
| Python | Python is a interpreted, high-level, general-purpose programming language. |

2.6 User Documentation

* Notifications
* Contact Us
* Make a payment
* Submit account details
* Payment security

2.7 Assumptions and Dependencies

* Although our software presents a broad range of options to its users some intricate options could not be covered into it.
* Single language facility can be given presently.
* Presently limited stocks are available.
* Cannot do online transactions.
* Invoice messages like SMS cannot be provided currently.

**3) External Interface Requirements**

3.1 User Interfaces

* Login or Signup page
* Homepage containing products according to customer’s interest
* If the customer selects particular product then the information about that product is displayed in another tab.
* After all the transactions the system makes the selling report as portable document file(pdf) and sent to the customer E-mail address.

<pic of homepage interface>

<pic of customer login interface>

3.2 Hardware Interfaces

Since the application must run over the internet ,all the hardware shall require to connect internet will be hardware interface for the system. As for example-Modem, WAN-LAN, Ethernet cross cable. The system require database to store any transactions of the system like MySql, system also require DNS(domain name server) for naming on the internet. At the last user need web browser for interact with the system.

|  |  |
| --- | --- |
| Web Server Deployment And Technologies | |
| MySQL | MySQL database for storage of data |

3.3 Software Interfaces

Following are the software used for the application.

|  |  |
| --- | --- |
| Software used | Description |
| Operating system | We have chosen Windows operating system for its best support and user-friendliness. |
| Database | To save the customer records, product records we have chosen MySQL database |
| Python | To implement the project we have chosen Python as web programming. |

3.4 Communication Interfaces

The E-store system shall use the HTTPS protocol for communication over the internet and for the intranet communication through TCP/IP protocol suite.

**4) System Features**

The online shopping system manages the information of product, customer, order, payment, delivery and services. The following are some system features:

a) Registration/Login

Description:-

If a user wants to buy a product then he/she must be registered.

Only the registered user can login.

1) If the user logins with the invalid username and password

Stimulus/Response sequences:-

“Invalid password” or “Invalid username”

Functional requirements:-

User should login to the system by entering valid user id and password.

2)Order

Description:-

Through logining in,the customer can view and order the desired product.

Stimulus/Response sequences:-

“1 product ordered”

Functional requirements:-

If the customer needs to buy a product then the customer should login. Later he/she can view and order the product.

3) Payment

Description:-

For customers, there are many type of secure billing will be prepaid as credit or debit card and postpaid as after the shipping

Stimulus/Response sequence:-

“Thank you for the order”

Functional requirements:-

Customer orders the product and later moves to the payment details.

4) Administrator

Description:-

Administrator manages all the activities present in the system.

Functional requirements :-

Admin holds the information about product and customers of the system.

5)Notifications

Description:-

Customer buys a product, pays the payment and receive the notifications

Stimulus/Response sequence:-

“Message has been sent”

Functional requirements:-

Product is been bought by the customer by the process of order and payment. Inorder to assure the transactions notification is provided.

**5) Other Non-functional Requirements**

5.1 Performance Requirements

The steps involved to perform the implementation of the application is listed below:

a)ER diagram

The E-R Diagram constitutes a technique for representing the logical structure of a database in a pictorial manner. This analysis is then used to organize data as a relation, normalizing relation and finally obtaining a relation database.

* **ENTITIES:**Which specify distinct real-world items in an application
* **PROPERTIES/ATTRIBUTES:** Which specify properties of an entity and relationships
* **RELATIONSHIPS:** Which connect entities and represent meaningful dependencies between them.

**<ER diagram>**

b)Normalization

The basic objective of normalization is to reduce redundancy which means that information is to be stored only once. Storing information several times leads to wastage of storage space and increase in the total size of the data stored.

If a database is not properly designed it can give rise to modification anomalies. Modification anomalies arise when data is added to, changed or deleted from a database table. Similarly, in traditional databases as well as improperly designed relational databases, data redundancy can be a problem. These can be eliminated by normalizing a database.

Normalization is the process of breaking down a table into smaller tables. So that each table deals with a single theme. There are three different kinds of modifications of anomalies and formulated the first, second and third normal forms (3NF) is considered sufficient for most practical purposes. It should be considered only after a thorough analysis and complete understanding of its implications.

5.2 Safety Requirements

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

5.3 Security Requirements

The system use SSL (secured socket layer) in all transactions that include any confidential customer information.

The system should not leave any cookies on the customer’s computer containing the user’s password.

The system’s back-end servers shall only be accessible to authenticated administrator.

Sensitive data will be encrypted before being sent over insecure connections like the internet.

5.4 Software Quality Attribute

**Availability**

If the internet service gets disrupted while sending information to the server, the information can be send again for verification.

**Security**

The main security concern is for users account hence proper login mechanism should be used to avoid hacking. The registration is way to spam check for increasing the security. Hence, security is provided from unwanted use of recognition software.

**Usability**

As the system is easy to handle and navigates in the most expected way with no delays. In that case the system program reacts accordingly and transverses quickly between its states.