## E-COMMERCE SHOPPING CART

*A*

***Major Project Report***

*Submitted*

*In partial fulfillment*

*For the award of the Degree of*

## BACHELOR OF TECHNOLOGY

***In Department of Computer science and Engineering***

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## CERTIFICATE

This is to certify that this project report **“E-Commerce Shopping Cart”** is the confide work of **“Charul Mehta , Jinal Bhardwaj , Surbhi Singh”** who have carried out the project work under my supervision. I approve this project for submission of the Bachelor of Technology in the **Department of Computer Science and Engineering, Techno India NJR Institute of Technology**, affiliated to Rajasthan Technical University, Kota.

##### Mr. Aditya Maheshwari

**Project In charge**

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## ABSTRACT

### Purpose

* 1. ***Introduction***

This Software Requirements Specification provides a complete description of all the functions and specifications of the website E-Commerce Shopping Cart.

The main objective of this application is to make it interactive and its ease of use. It would make searching, viewing and selection of a product easier. It contains a sophisticated search engine for users to search for products specific to their needs.

* 1. ***Scope***

1. Online shopping is rising day by day in India. Because India is the country where computer users are increasing day by day so as the online shopping trends are also increasing. This project covers the online selling of fashion accessories, watches, cameras etc. The project shows the product category and then product details. From the product details, the product can be added to cart and can be bought.

### Document overview

The remainder of this document is 8 chapters, the first providing introduction of the project. It lists all the functions performed by the system. The second chapter consists of software requirements specification. The third chapter provides details about system analysis and design. The fourth chapter gives data dictionary information. The fifth chapter consists of snapshots of the complete project. The sixth chapter gives testing for the project. The seventh chapter tells about the conclusion and future enhancements of the project. The final chapter concerns with the bibliography.

## ACKNOWLEDGEMENT

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**Place: Udaipur Date:28/05/22**



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### List of Symbols

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Html | Hyper text markup language |
| CSS | Cascading Style Sheet |
| PHP | Hypertext Preprocessor / Personal Home page |
| JS | JavaScript |
| BS | bootstrap |
| JQUERY | JavaScript Query |
| JSON | JavaScript Object Notation |



# CHAPTER – I INTRODUCTION



### Introduction

##### Purpose

###### Introduction

Shopping Cart is the process whereby consumers directly buy the products without an intermediary service, over the Internet. It is a form of electronic commerce. An online shop, e-store, internet shop, web shop, online store, or virtual store evokes the physical analogy of buying products in a shopping centre. The process is called Business-to-Consumer (B2C) online shopping.

###### Scope

Online shopping is rising day by day in India. Because India is the country where computer user's are increasing day by day so as the online shopping trends are also increasing. This project covers the online selling of fashion accessories, watches, cameras etc. The project shows the product category and then product details. From the product details, the product can be added to cart and can be bought.

###### Project Overview

The shopping cart project needs to create the shopping cart system to organize the product record and the other information about the customers. How customers can buy products from websites can be recognized from their username and password.

###### Document overview

The remainder of this document is 8 chapters, the first providing introduction of the project. It lists all the functions performed by the system. The second chapter consists of software requirements specification. The third chapter provides details about system analysis and design. The fourth chapter gives data dictionary information. The fifth chapter consists of snapshots of the complete project. The sixth chapter gives testing for the project. The seventh chapter tells



about the conclusion and future enhancements of the project. The final chapter concerns with the bibliography.

This document is meant for describing all the features and procedures that were followed while developing the system.

This document specially mentions the details of the project how it was developed, the primary requirement, as well as various features and functionalities of the project and the procedures followed in achieving these objectives.



##### Overall description

The shopping cart project needs to create the shopping cart system to organize the product record and the other information about the customers. How customers can buy products from websites can be recognized from their username and password.

###### Functional requirements definitions

Functional Requirements are those that refer to the functionality of the system, i.e., what services it will provide to the user. Nonfunctional (supplementary) requirements pertain to other information needed to produce the correct system and are detailed separately.

###### Use cases

Use cases describe the behavior of the system when one of these actors sends one stimulus. A use case diagram can portray the different types of users of a system and the various ways that they interact with the system. This type of diagram is typically used in conjunction with the textual use case.

### 0-Level DFD

A picture containing diagram

Description automatically generated

Figure 1

It is also known as a context diagram. It’s designed to be an abstraction view, showing the system as a single process with its relationship to external entities. It represents the entire system as a single bubble with input and output data indicated by incoming / outgoing arrows.

### 1-Level DFD

Diagram

Description automatically generated

Figure 2

In 1-level DFD, the context diagram is decomposed into multiple bubbles / processes. In this level, we highlight the main functions of the system and break down the high-level process of 0-level DFD into subprocesses.

### 2-level DFD

**Diagram

Description automatically generated**

Figure 3

2-level DFD goes one step deeper into parts of 1-level DFD. It can be used to plan or record the specific/necessary detail about the system’s functioning.



#### Flowchart

### User Mode

Diagram

Description automatically generated

Figure 4

A flowchart is a graphical representation of steps. It originated from computer science as a tool for representing algorithms and programming logic but had extended to use in all other kinds of processes. Nowadays, flowcharts play an extremely important role in displaying information and assisting reasoning. They help us visualize complex processes or make explicit the structure of problems and tasks. A flowchart can also be used to define a process or project to be implemented.

Flowchart for user Mode:

* A user can see the website and can search for the items on their own.
* If a user wants to buy an item or add to cart an item, the user must be logged in first.
* After logging into it a user can confirm and proceed for order or else if the user wants, he/she keep that into the cart.

### Admin Mode

Diagram

Description automatically generated

Figure 5

Web admins manage and maintain websites, taking into account functionality, appearance, content, and performance. Web admins typically work in front of a computer, but they must be accessible at all times in case problems occur.



# CHAPTER – II

***SOFTWARE REQUIREMENT SPECIFICATION***



## Website Design

1. User Interface:
   * This is the view of the website which is visible to the customers to shop.
   * This interface is basically a GUI (Graphical User Interface).
   * Pages included with this are:
     + Home: It includes various different electronic categories.
     + About Us: This will include information about the website.
     + Contact Us: This page will have the information regarding order or product related queries i.e. Email, Password, and message.
     + Products: This will show the products available in the store specifying different categories, here we can see the products of choice with their price by

selecting the category. The product selected can be added to the cart and can be directly purchased.

* + - Cart: A user can add the selected things to the cart for further process.
    - Signup/Login: The person can register or login himself for a shopping website.

The software design is based on two user characteristics: -

* + Customer – The customer can see the products, add them to the cart, and can buy them by registering on the site.
  + Administrator – It handles the working of the software. It can add or delete the products, accept or decline the order, can view sales, number of products, users. In this project, all the main functions are performed from the Admin side.



**USER MODE**

## Home/Index Page

Graphical user interface, website

Description automatically generated

Start with the Index Page which is our Home Page-:

* + - On top of it, there is a Navigation bar also called a Header.
    - In the Navigation bar, there are hyperlinks like Lifestyle Store, Categories, Signup, Logout, Contact us, and Setting.

**Lifestyle Store:** It is the name of our website “Lifestyle Store”, It is a Home page hyperlink used to navigate from anywhere to direct the Home page, also called an index page.

**Categories:** In the Category hyperlink, we use a drop-down, which shows the types of products like Men’s, Women’s, and Kids products.

**SignUp:** It is a registration page hyperlink, from here user can redirect to the registration page

**Login:** It is a login page hyperlink, from here an existing user of the Lifestyle store can login with their credentials and access the account.

**Contact Us:** Their contact page includes all the standard information — name, location, email, and so forth. The page feels plain, but it fits with the rest of their site and overall branding, letting the user know who the brand is and what they can expect.

## Home/Index Page

## Graphical user interface, website Description automatically generated



At bottom of the Index page, there are cards of the latest Trends like Cameras, Watches, and Shirts. When we click on the card it is redirected to its Product’s page.

## Graphical user interface Description automatically generated Sign Up page

In the Sign Up page we used a simple signup form inside which we kept the background color simple and used a gif.

* + - There are multiple fields inside the signup for like: Name, Email, Password, Contact no, City and Address field to take the user credentials in our database.
    - When a user fills all the fields and presses on the Submit button, then the user will move to the Product page and user credentials stored in the Admin panel in the database.



## Login Page

Graphical user interface, website

Description automatically generated

In the login up page we are using a simple Login form which is directly linked with the Product page.

* + - Inside the Login form there are two fields Email and Password.
    - If a user is already registered in this website then he can fill both fields and click on the Login Button.
    - If login details are matched with the database then the user can move on to the Product page.
    - If a new user comes on the website then first register his/her account.



## Categories page

Graphical user interface, website

Description automatically generated

There are various cards shown in this category page for Example: cameras, watches, shirts and more given above.

* A user can select the categories and can view products related to the selected

Category.



## Product Page

Graphical user interface, website

Description automatically generated

Graphical user interface, website

Description automatically generated



* + - In the Product page we have used a jumbotron for the styling heading of our product page.
    - We used different cards for the products along with the Add to cart button.
    - When the user chooses an item and clicks on the add to cart button then that particular item moves on the cart page.

## Added to Cart page

## A screenshot of a computer Description automatically generated

The items which a user adds to cart are shown here. if he wants he can remove it or delete the item.



## Confirm order page

## Graphical user interface, text Description automatically generated

If you click on the confirm button your order will be confirmed.

**Admin Mode**

## Product page for Admin

## Graphical user interface, website Description automatically generated

## Graphical user interface, website Description automatically generated

* + - It is the product page for admin where admin can Add a product, Update a product.
    - Admin can Add a product by click on Add Product button on top right side.
    - By clicking on Update Product Admin can update the product Name, Price, Description

## Graphical user interface Description automatically generatedUpdate Product

* + - It is the Update Product page when Admin click on update product button from product page, All details of existing product comes here from backend and further admin can update the details of product
    - Admin can change the image of the product by clicking on choose file.
    - After all the updates, finally click on Add product.



## Add new Product

A screenshot of a computer

Description automatically generated

* + - It is the add new product page, from here Admin can add Item in the product page
    - All the product data will be stored in database and further retrieve from database
    - Admin can write the name, price and image of the product and further click on the Add product button.



# Database

A **database** is a data structure that stores organized information. For **example**, a company **database** may include tables for products, employees, and financial records. Each of these tables would have different fields that are relevant to the information stored in the table

## Items

Graphical user interface, application

Description automatically generated

In above, the add\_product page is given through which we can add products and the data is stored in the item section from which we can dynamically see the products in the website. And if the admin wants something to delete, the admin can delete it from the database only.



## Users

Graphical user interface, application

Description automatically generated

If a new user walks in and if they want to buy something they have to register themself and their data would be stored in the users database. So when they visit next time they don’t have to register themself they would log in and their data would be fetched from the database.

* + - Here the group\_id 1 is indicating admin and group\_id 2 is representing users.

## 

## Graphical user interface, application Description automatically generated Users\_items

Items which they have confirmed or items which are added to cart from website there entries will be seen in the user\_items database.

## Users\_groups

## Graphical user interface, text, application Description automatically generated

User and Admin Id is listed here

* + - Admin has been given Id of 1.
    - User has been given Id of 2.
    - When a user registers themselves by default their Id is given 2



* 1. **Hardware Specification Client Side:**
* Internet Explorer: 6.0
* Processor: Pentium IV 2.0 and above.
* RAM : 512 MB
* Hard Disk : 80GB

##### Server Side:

* Processor: Pentium IV 2.0 and above.
* RAM : 1 GB
* Disk space : 4GB

##### Software Specification Client Side:

* .NET Framework
* Web Browser
* Windows XP/Vista/Windows 7

##### Web Server:

* .NET Framework
* Windows XP/Vista/windows 7

##### Data Base Server:

* SQL Server



##### Hardware and Software Requirements in detail Hardware Requirements:

* Processor: Pentium IV 2.0 and above.
* Internet Explorer: 6.0
* RAM : 512 MB
* Hard Disk : 80GB
* Disk space : 4GB

##### Software Requirements:

* Microsoft Visual Studio 2010
  + Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It can be used to develop console and graphical user interfaceapplications along with Windows Forms applications, web sites, web applications, and web services in both native code together with managed code for all platforms supported by Microsoft Windows, Windows Mobile, Windows CE, .NET Framework, .NET Compact Framework and Microsoft Silverlight.
  + .NET Framework 3.5
  + Visual C#
* Web Browser Internet Explorer 6.0 and above
* Windows XP Service pack 3/Vista/Windows 7



# CHAPTER – VIII BIBLIOGRAPHY



### Bibliography

* List of useful Websites
  + - * [www.msdn.microsoft.com](http://www.msdn.microsoft.com/)
      * [www.w3schools.com](http://www.w3schools.com/)
      * [www.webdevelopersnotes.com](http://www.webdevelopersnotes.com/)
* List of useful Books
  + - * ASP.NET 2.0 Website Programming : Problem design solution by Marco Bellinaso
      * OReilly(E-Book) : Programming in .NET
      * PL/SQL Programming : Evan Bayross