



Sri Lanka Institute of Information Technology

## Online Fashion Store

# DIVISIMA

### Project Report

Application Frameworks Project 2020

Group Name: Team </BackSlash>

Submitted by:

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Date of submission

## Declaration

We declare that the this project report or part of it was not a copy of a document done by any organization, university any other institute or a previous student project group at SLIIT and was not copied from the Internet or other sources.

### Project Details

Project Title	Online Fashion Store
Group Name	Team </BackSlash>

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## **Abstract**

Now a days the life style of the people is different. People feel uncomfortable and time consuming for going crowded markets. So, E-Shopping is a boon as it saves lot of time. Online shopping is a process whereby consumers directly buy goods, services etc. from a seller without an intermediary service over the Internet. This project is an attempt to make such an online shopping store using ReactJS, NodeJS, Express and MongoDB for database having admins, Store managers and customers as its users.

The proposed system will keep a track of online users of the Shopping website, Admin staff, Store managers, and Viewers regarding the present status of various functions. This project has GUI based software that will help in storing, updating and retrieving the information through various user-friendly menu-driven modules.

## **Acknowledgement**

Our thanks and appreciation also go to our colleagues in developing the project and people who have willingly helped us with their abilities.

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# 1. Introduction

The Online Shopping Cart system is an attempt that has been made to minimize the gap between users and their shopping experience.

## 1.1 Product Scope

Our proposed system is the computerized version of the manual shopping store. We have divided the access to this system mainly into two parts as

1. For Online Customers
2. For Admin Panel and Store Manager

And the Admin panel and Store Manager can handle the functions of the Fashion Store with the following main eight functions.

1. Add , Edit update and Delete Products to the System
2. Add , Edit update and Delete product Categories to the System
3. Register Users
4. Manage customers and carts.

While Online Customers can do the following functions,

1. View products in the store
2. Register in the fashion store
3. Buy products
4. Add products to wish list.
5. Give reviews and ratings

The system provides easy and quick access over the data by keeping records of customers properly so that facilities provided by Fashion Store are fully utilized in effective and efficient manner.

Advantages:

1. Storing customer details correctly.
2. Maintain accuracy.
3. Customers can do online shopping
4. The Customers are provided with up to minute information related to the unit availability and their status. From their convenient place
5. The decision process in faster and more consistent.

6. The guest have information at their demand related to any unit status of their own unit shopping status.

## **1.2 Project Report Structure**

The main purpose for preparing this document is to give a general insight into the analysis and requirements of the existing system or situation and for determining the operating characteristics of the system.

The report will further describe about the full design of the system by giving the details of the requirement analysis and how it's above mentioned main functions are interacted and work through the whole system.

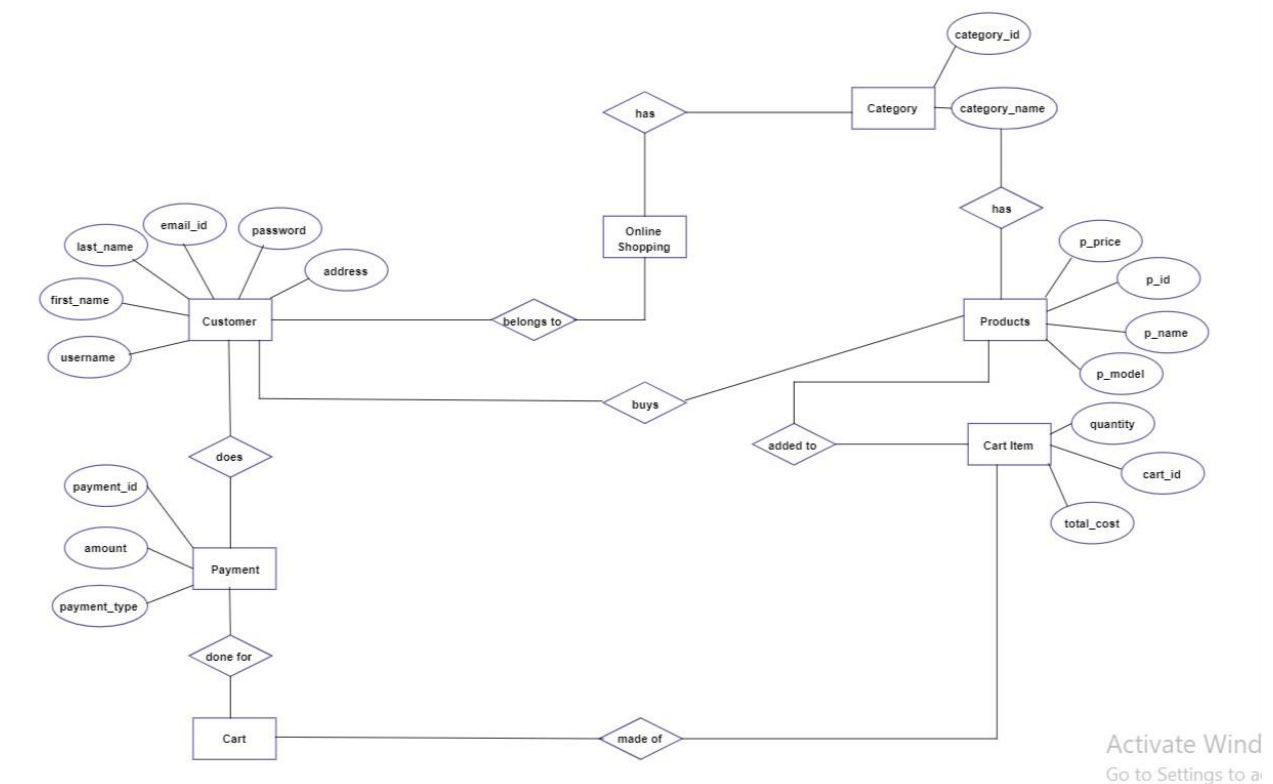
## **2. Methodology**

### **2.1 Requirements and Analysis**

A software product always begins with the customers' needs. These needs initially are either in the mind of the customer. Sometimes it is present in the existing practice where the need is to automate a current manual process. These software requirements which are there in the mind of the users are usually informal and not general.

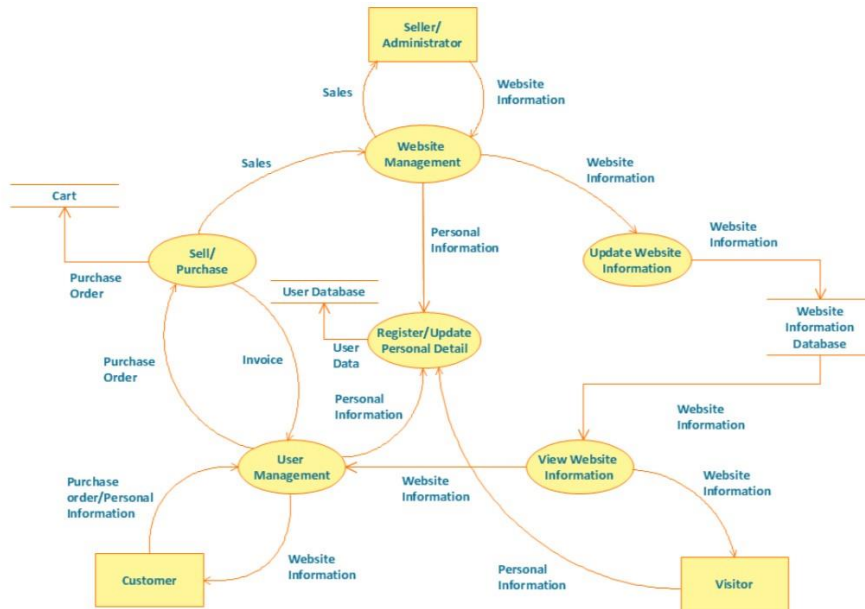
## 2.2 Design

### ER DIAGRAM OF THE SYSTEM



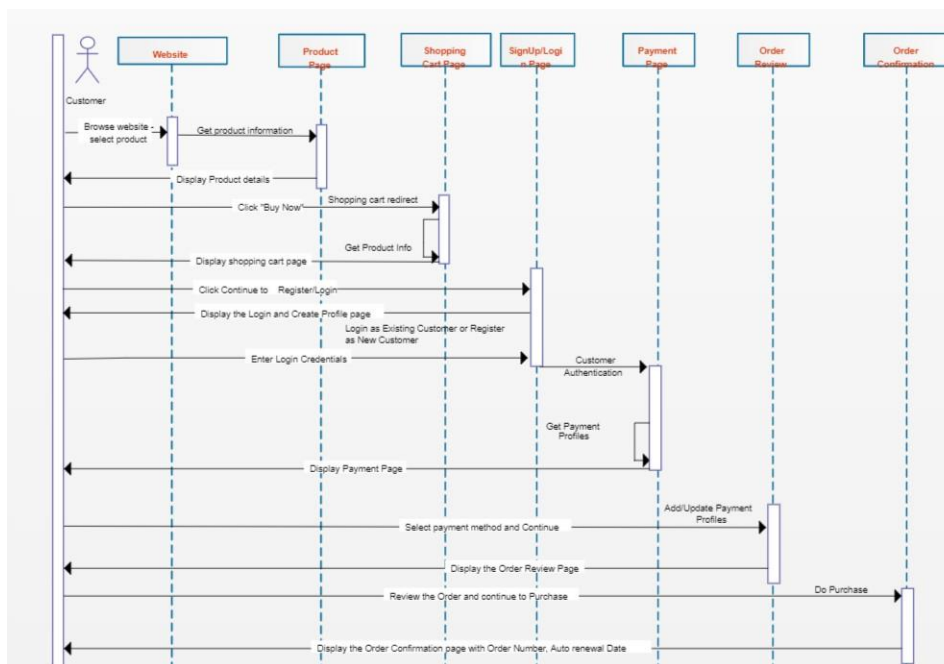
#### 2.2.1

## DATA FLOW DIAGRAM OF THE SYSTEM



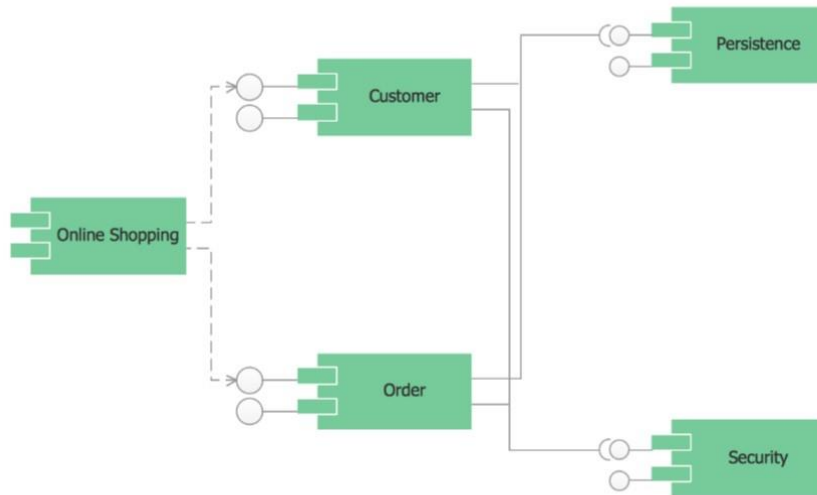
### 2.2.2

## SEQUENCE DIAGRAM OF THE SYSTEM



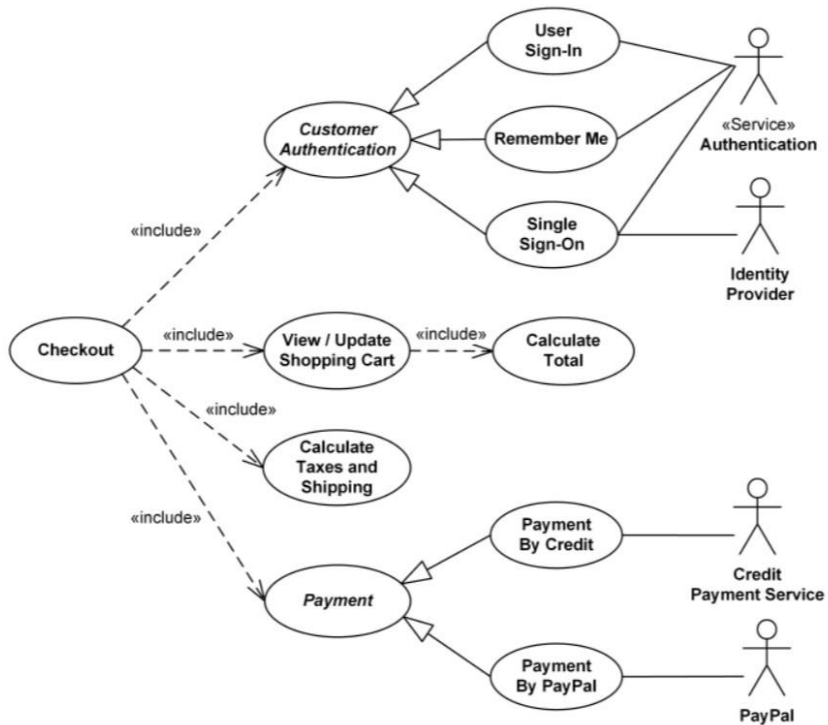
### 2.2.3

## COMPONENT DIAGRAM OF THE SYSTEM



### 2.2.4

## CHECKOUT, AUTHENTICATION USECASE DIAGRAM OF THE SYSTEM



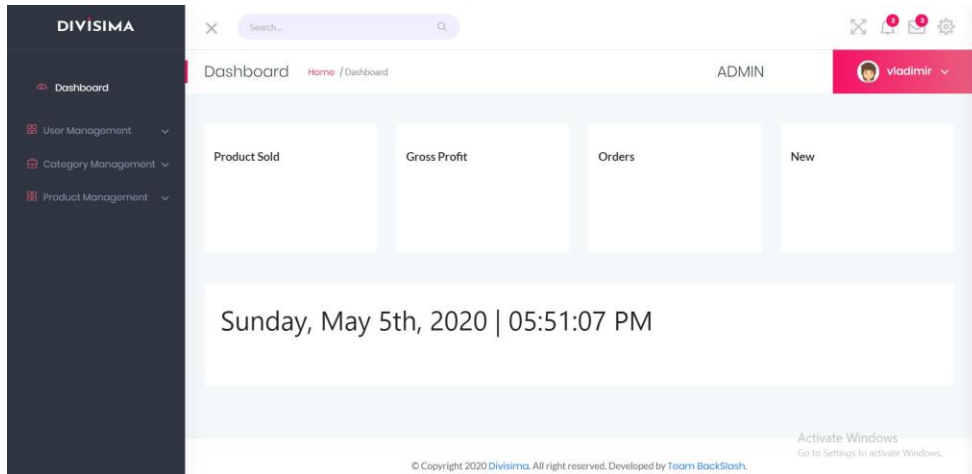
### 2.2.5



### 3.Main functions of the System.

#### 3.1Admin Panel

This is the dashboard Layout which can be accessed by the admins and the store managers of the system.



Admin can Sign in to the system from the following page.

A sign-in form for the Admin Panel. It has a pink header with the text 'SIGN IN' and 'Hello there, Sign in and start managing Admin Panel'. Below this, there are two input fields: 'Username' with the value 'senura' and a red envelope icon, and 'Password' with masked characters '\*\*\*\*\*' and a red lock icon. There is a 'Remember Me' checkbox and a 'Forgot Password?' link. At the bottom, there is a 'SUBMIT' button with a right-pointing arrow.

In this dashboard , User Management, Category management and the Product management can be done as described below.

### 3.1.1 Registering the Admin Details:

In here the admins are registered with their particular details and those details can be viewed through a separate dashboard as well.

The screenshot shows the DIVISIMA dashboard with a sidebar menu on the left containing 'Dashboard', 'User Management' (with sub-items 'Add Manager' and 'Manage Users'), 'Category Management', and 'Product Management'. The main content area is titled 'Dashboard' and 'Homo / Dashboard'. On the right, there's a user profile for 'vladimir'. The central part of the dashboard features a large image of a woman in a white top and sunglasses holding a shopping bag. To the right of the image is a pink box titled 'ADD STORE MANAGER' with the text 'Add Store Manager to Give Access for Manage The Fashion Store'. Below this box is a form with fields for 'Full Name', 'Username', 'Email address', 'Contact Number', 'Password', and 'Confirm Password'. There are also links for 'Activate Windows' and 'Go to Settings to activate Windows'.

The screenshot shows the DIVISIMA dashboard with the same sidebar menu. The main content area is titled 'Dashboard' and 'Homo / Dashboard'. On the right, there's a user profile for 'vladimir'. The central part of the dashboard features a large image of a woman in a white top and sunglasses holding a shopping bag. To the right of the image is a pink box titled 'ADD STORE MANAGER' with the text 'Add Store Manager to Give Access for Manage The Fashion Store'. Below this box is a form with fields for 'Full Name', 'Username', 'Email address', 'Contact Number', 'Password', and 'Confirm Password'. There are also links for 'Activate Windows' and 'Go to Settings to activate Windows'.

INDEX	USER NAME	FULL NAME	ROLE	EMAIL	CONTACT NO.	EDIT	DELETE
1	senura	Senura Diwantha	store manager	senura.d@gmail.com	0779822332	<a href="#">Edit</a>	<a href="#">Delete</a>
2	hiruni	hi	store manager	abc@abc.com	12345578890	<a href="#">Edit</a>	<a href="#">Delete</a>
3	vladimir	Viraj T.K	Admin	viraj.pop3@yahoo.com	0779321995	<a href="#">Edit</a>	<a href="#">Delete</a>
4	Kavi97	Kavindi Gunasinghe	store manager	uldkavindi@gmail.com	0773058210	<a href="#">Edit</a>	<a href="#">Delete</a>

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Activate Windows  
Go to Settings to activate Windows.

Those above details can be managed by updating and deleting those details. They are stored in a database in the system.

The screenshot shows the MongoDB Compass interface. On the left sidebar, the database 'FashionStoreDB' is expanded, and the 'adminusers' collection is selected. The main panel displays the 'FashionStoreDB.adminusers' collection with 4 documents. The documents are shown in a list view, each containing the following fields:

- `_id`: ObjectId("5ebf7fe7e8cbedb8c6819ca")
- `fullName`: "Senura Diwantha"
- `userName`: "senura"
- `password`: "senura"
- `role`: "store manager"
- `email`: "senura.d@gmail.com"
- `contactNo`: "0779822332"
- `registeredDate`: 2020-05-16T05:53:43.211+00:00
- `__v`: 0

The second document has the following fields:

- `_id`: ObjectId("5ec8c1c3c25814e4054d27e")
- `role`: "store manager"
- `fullName`: "hi"
- `userName`: "hiruni"
- `password`: "hi"
- `email`: "abc@abc.com"
- `contactNo`: "12345578898"
- `registeredDate`: 2020-05-23T07:05:00.511+00:00
- `__v`: 0

The third document has the following fields:

- `_id`: ObjectId("5ec9af249220cf31680c2bb3")
- `role`: "Admin"
- `fullName`: "Viraj T.K"
- `userName`: "vladimir"
- `password`: "123"
- `email`: "viraj.pop3@yahoo.com"
- `contactNo`: "0779321995"
- `registeredDate`: 2020-05-23T23:17:56.160+00:00
- `__v`: 0

The interface also shows a 'FILTER' button, 'ADD DATA' button, and a 'DISPLAYING DOCUMENTS 1 - 4 OF 4' status. The bottom right corner has a watermark: 'Activate Windows Go to Settings to activate'.

### 3.1.2 Manage Product Categories of the System

Admin Panel can ADD, UPDATE, DELETE and VIEW the product categories in the system

DIVISIMA

Dashboard

User Management

Category Management

Product Management

Search...

Dashboard

ADMIN

vladimir

Add New Category

Main Category

Sub Category Name

Description

Confirmation

Submit

Clear

Activate Windows  
Go to Settings to activate Windows.

DIVISIMA

Dashboard

User Management

Category Management

Product Management

Search...

Dashboard

ADMIN

vladimir

Manage Categories

INDEX	MAIN CATEGORY	SUB CATEGORY	DESCRIPTION	EDIT	DELETE
1	Men Wear	T-Shirt test	test T-Shirt Category Update	<a href="#">Edit</a>	<a href="#">Delete</a>
2	Footwear	Slippers	Test Slippers Category	<a href="#">Edit</a>	<a href="#">Delete</a>
3	Bags and Purses	School Bags	test School Bags Category	<a href="#">Edit</a>	<a href="#">Delete</a>
4	Men Wear	Shirt	Test Shirt category	<a href="#">Edit</a>	<a href="#">Delete</a>
5	Jewellery	Ring	Test Ring category	<a href="#">Edit</a>	<a href="#">Delete</a>
6	Woman Wear	T-Shirt	test T-Shirt for Women	<a href="#">Edit</a>	<a href="#">Delete</a>
7	Kids Wear	Top Wear	Test Top Wear category	<a href="#">Edit</a>	<a href="#">Delete</a>
8	Men Wear	lk	lk	<a href="#">Edit</a>	<a href="#">Delete</a>

Activate Windows  
Go to Settings to activate Windows.

Those product category details are stored in a separate database as follows.

FashionStoreDB.productcategories

DOCUMENTS	7	TOTAL SIZE	875B	AVG. SIZE	125B	INDEXES	1	TOTAL SIZE	36.0KB	AVG. SIZE	36.0KB
-----------	---	------------	------	-----------	------	---------	---	------------	--------	-----------	--------

Documents Aggregations Explain Plan Indexes

Displaying documents 1 - 7 of 7

```
{
  "_id": ObjectId("5ec50512c5407402c5e634c3"),
  "subCategory": "T-Shirt",
  "mainCategory": "Men Wear",
  "description": "test T-Shirt Category Update",
  "__v": 0
}
```

```
{
  "_id": ObjectId("5ec50535c5407402c5e634c4"),
  "subCategory": "Slippers",
  "mainCategory": "Footwear",
  "description": "Test Slippers Category",
  "__v": 0
}
```

```
{
  "_id": ObjectId("5ec505c9c5407402c5e634c5"),
  "subCategory": "School Bags",
  "mainCategory": "Bags and Purses",
  "description": "test School Bags Category",
  "__v": 0
}
```

```
{
  "_id": ObjectId("5ec50723c5407402c5e634c6"),
  "subCategory": "Shirt",
  "mainCategory": "Men Wear",
  "description": "Test Shirt category",
  "__v": 0
}
```

```
{
  "_id": ObjectId("5ec508e9c5407402c5e634c8"),
  "subCategory": "Ring",
  "mainCategory": "Jewellery"
}
```

Activate Windows  
Go to Settings to activate

### 3.1.3 Manage Products of the System

Admin Panel can ADD, UPDATE, DELETE and VIEW the products in the system.

DIVISIMA

Dashboard

User Management

Category Management

Product Management

Add Product

Product List

Add New Product

Main Category

Product Type

Product Name


This category should be related to the main category.

Description

Price

Discount

Brand



Upload

Activate Windows  
Go to Settings to activate Windows.

DIVISIMA

Dashboard

User Management

Category Management

Product Management

Add Product

Product List

Manage Products

ID	MAIN CATEGORY	PRODUCT TYPE	PRODUCT NAME	DESCRIPTION	PRICE	DISCOUNT	BRAND	COLOUR	PREVIEW	ACTION
1	Bags and Purses	School Bags	Cute Cat Baby Girls Backpack	Soft plush kids school backpack bags for child school.	LKR.1500	2%	MH	White		 
2	Woman Wear	T-Shirt	Abstract Art Geometry T Shirt	Women Gothic Punk Vintage Korean Style Short Sleeve Cotton Plus Size Streetwear Tee Shirt Femme	LKR.1225	0%	StreetArt	Black		 
3	Men Wear	Shirt	Legible Casual Social Formal Shirt	Men long Sleeve Shirt Business Slim Office Shirt male Cotton Mens Dress Shirts	LKR.1467	5%	New Trends	White		 
4	Kids Wear	Top Wear	Mario Bros Mashup T Shirt Top	2020 Kawaii child boys t shirts fashion Harajuku kids clothes hip hop Streetwear boys clothes Tops	LKR.1070.03	0%	Kidz World	Black		 
5	Footwear	Slippers	CAMEL Summer Casual Footwear	Comfortable Soft Fashion Men sandals Hiking Garden Beach Man Shoes Light Waterproof Breathable	LKR.5237	3%	CAMEL	Blue		 
6	Jewellery	Ring	CUTEECO 2020 New Pod Wedding Ring	Women Rose Gold Color Stacked Simple Finger Ring Fashion Jewelry Gifts Anillos Mujer	LKR.10513	5%	CUTEECO	Rose Gold		 

Activate Windows  
Go to Settings to activate Windows.

Those product category details are stored in a separate database as follows

FashionStoreDB.products

DOCUMENTS 6

TOTAL SIZE 1.9KB

AVG. SIZE 320B

INDEXES 1

TOTAL SIZE 36.0KB

AVG. SIZE 36.0KB

Documents

Aggregations

Explain Plan

Indexes

FILTER

OPTIONS

FIND

RESET

...

ADD DATA

VIEW

Displaying documents 1 - 6 of 6

REFRESH

```
_id: ObjectId("Sec6bdfbbde3da1b1074ca3e")
discount: 2
discountPrice: 1470
productName: "Cute Cat Baby Girls Backpack "
brand: "MH"
description: "Soft plush kids school backpack bags for child school. "
price: 1500
mainCategory: "Bags and Purses"
productType: "School Bags"
color: "White"
__v: 0
```

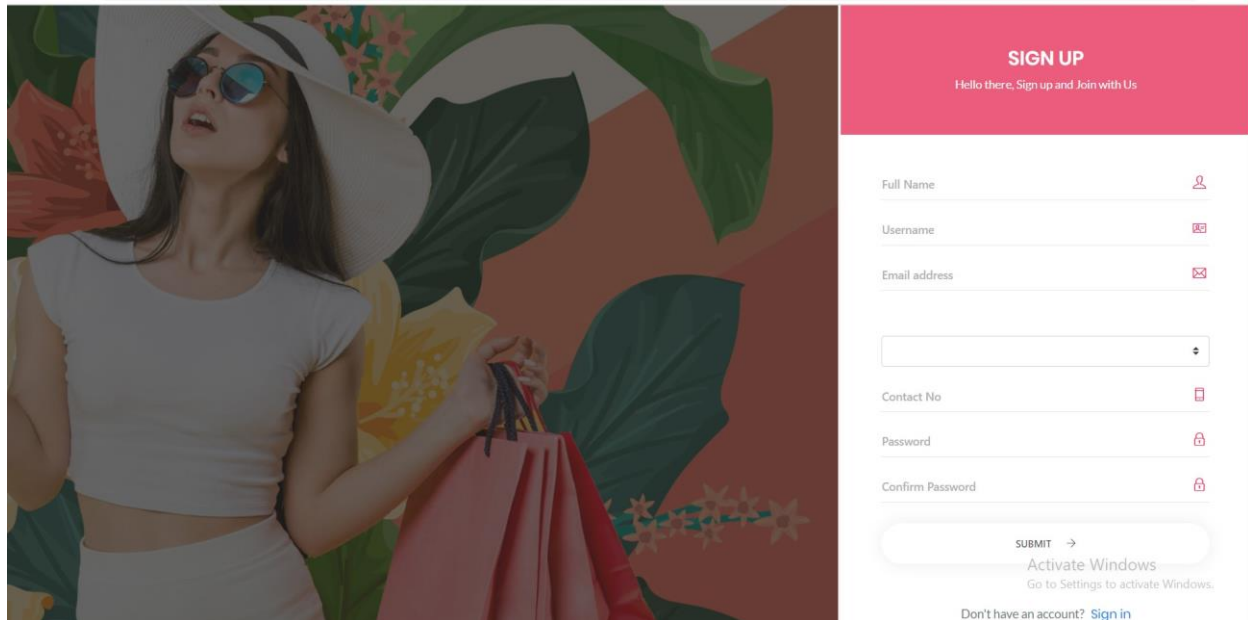
```
_id: ObjectId("Sec6bfe4bde3da1b1074ca42")
discount: 0
discountPrice: 1225
productName: "Abstract Art Geometry T Shirt"
brand: "StreetArt"
description: "Women Gothic Punk Vintage Korean Style Short Sleeve Cotton Plus Size S..."
price: 1225
mainCategory: "Woman Wear"
productType: "T-Shirt"
color: "Black"
__v: 0
```

```
_id: ObjectId("Sec6c0aabde3da1b1074ca43")
discount: 5
discountPrice: 1393.65
productName: "Legible Casual Social Formal Shirt"
brand: "New Trends"
description: "Men long Sleeve Shirt Business Slim Office Shirt male Cotton Mens Dres..."
price: 1467
```


Activate Window  
Go to Settings to activate this application


### 3.2CUSTOMER MANAGEMENT


In here customer can view the products currently in store and they can register themselves first in order to purchase products. This can be done as follows.





**SIGN UP**  
Hello there, Sign up and Join with Us


Full Name 

Username 

Email address 

Contact No 

Password 

Confirm Password 

→  
Activate Windows  
Go to Settings to activate Windows.  
Don't have an account? [Sign in](#)

And these registered users details are stored in a separate database as follows.

FashionStoreDB.users

DOCUMENTS	1	TOTAL SIZE	169B	AVG. SIZE	169B	INDEXES	2	TOTAL SIZE	40.0KB	AVG. SIZE	20.0KB
-----------	---	------------	------	-----------	------	---------	---	------------	--------	-----------	--------

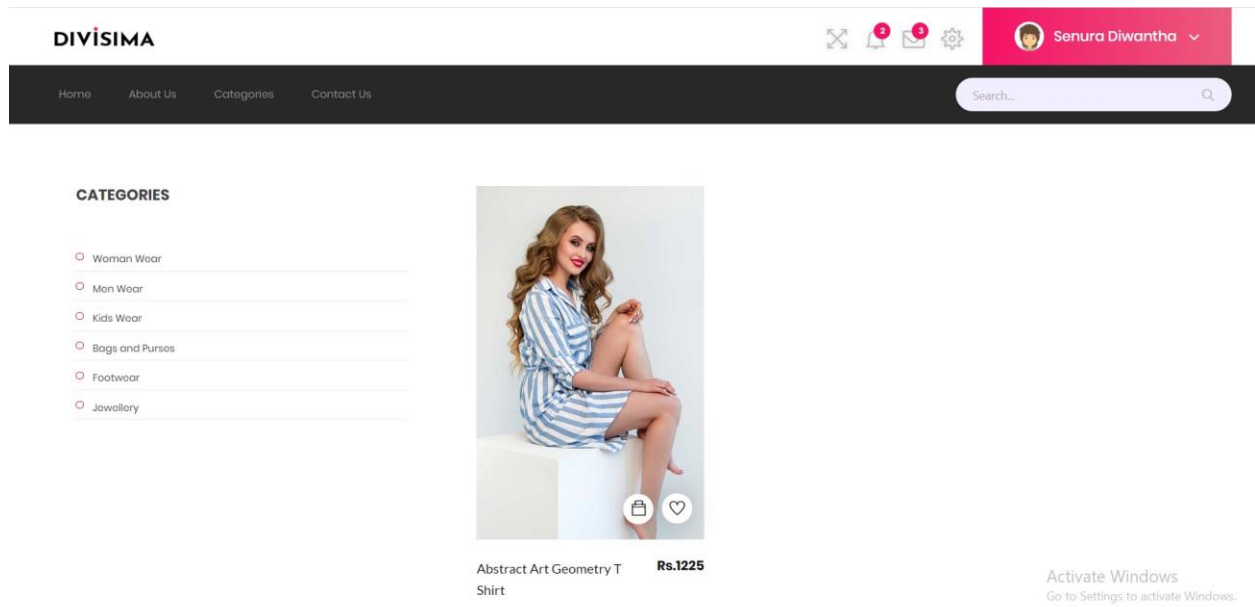
Documents Aggregations Explain Plan Indexes

Displaying documents 1 - 1 of 1

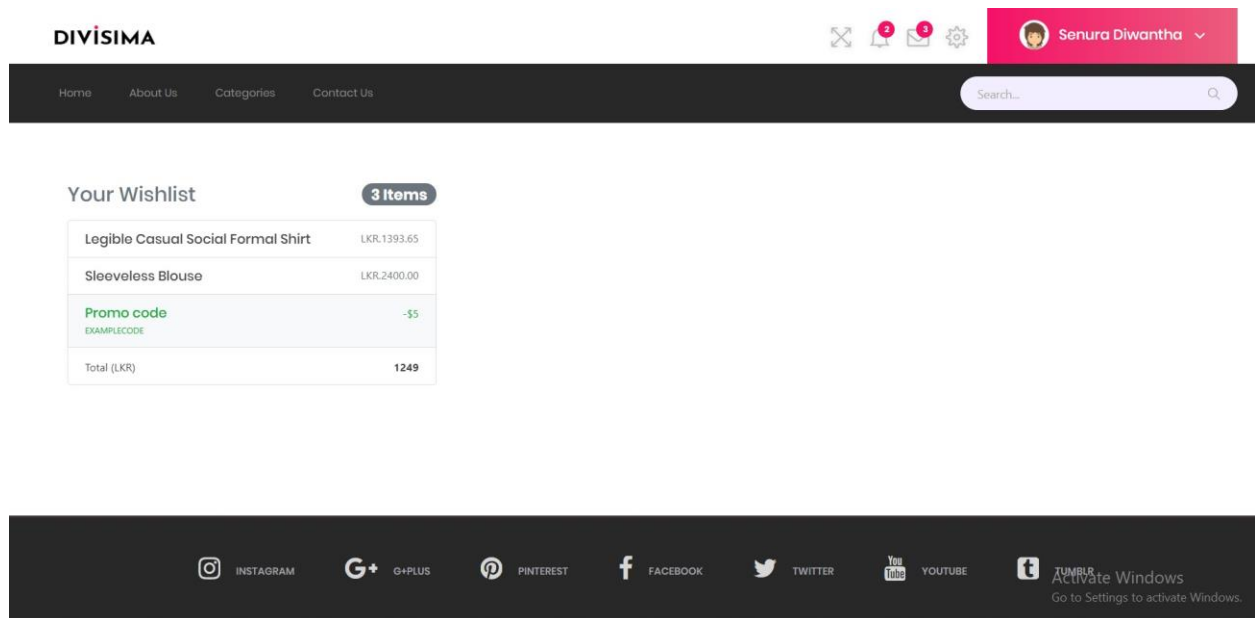
```
{
  "_id": ObjectId("5eca3cd0e7e8724fe0215bc1"),
  "name": "hello",
  "email": "mail2sachie@gmail.com",
  "password": "$2a$10$F2xeBAMjwFEg18F41BQRM0VUvu/SM9yOIPhnzrlbNGUFeDltFFzee",
  "date": 2020-05-24T09:22:24.275+00:00,
  "__v": 0
}
```

They can choose whatever the category they want from the category list. And this is the page where they can view the products in the store.





If the customer wish to buy the product later, they can add it to the wish list by clicking the heart shaped icon and they **can view, delete and update** the **wish list** as follows.



Details of the **wish list** is stored in a separate database.

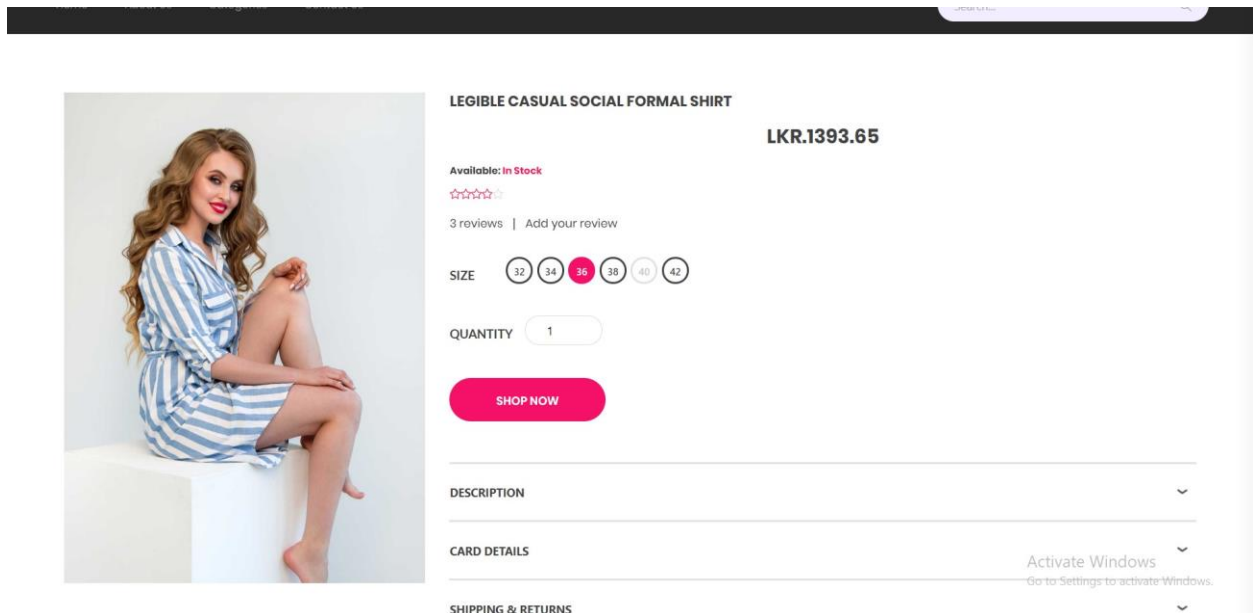
ADD DATA

VIEW

Displaying documents 1 - 2 of 2

```
{
  "_id": "ObjectId(\"5eca1776aee527157481986d\")",
  "firstName": "Kavindi",
  "lastName": "Gunasinghe",
  "username": "kavi@97",
  "address": "manavila, walahanduwa, galle ",
  "address2": "Glale",
  "zip": "12345",
  "state": "Kaluthara",
  "cc_name": "Kavindi Gunasinghe",
  "cc_number": 123456789,
  "cc_cv": "6666666666666666",
  "_v": 0
}
```

```
{
  "_id": "ObjectId(\"5eca1aa7c569cc1a4839376e\")",
  "firstName": "ww",
  "lastName": "Weerasinghe",
  "username": "www",
  "address": "ww",
  "address2": "ww",
  "zip": "www",
  "state": "Colombo",
  "cc_name": "ww",
  "cc_number": 222,
  "cc_cv": "2222",
  "productName": "",
  "_v": 0
}
```



If the customer wishes to buy this product they can **add this to their cart** by clicking on the Shop Now button. This gives them the details of their cart in the right side of the page and they can **check out** by giving the payment details as well to the same page.

Home

About Us

Categories

Contact Us

Search...

Senura Diwantha

Billing address

First name

Last name

@

Username

Email (Optional)

you@example.com

Address

Address 2 (Optional)

Apartment or suite

Country

State

Zip

2

Legible Casual Social Formal Shirt

LKR,1393.65.00

Legible Casual Social Formal Shirt

LKR,1467.00

Promo code

EXAMPLECODE

-\$5

Total (LKR)

2860.65.00

Activate Windows

Go to Settings to activate Windows.

These Cart details are stored in a separate Database as well.

The screenshot shows the MongoDB Compass interface for the 'FashionStoreDB.carts' collection. The left sidebar displays the database structure, including the 'FashionStoreDB' database and its collections: 'adminusers', 'carts', 'productcategories', 'products', 'reviewsandratings', 'users', 'admin', 'config', 'local', and 'test'. The 'carts' collection is selected. The main panel shows two documents from the 'carts' collection. The first document is for a user named 'Kavindi Gunasinghe' with a cart containing one item. The second document is for a user named 'vnu' with a cart containing one item. The interface includes tabs for Documents, Aggregations, Explain Plan, and Indexes, along with search and filter options.

**FashionStoreDB.carts**

DOCUMENTS 2 TOTAL SIZE 498B AVG. SIZE 249B INDEXES 1 TOTAL SIZE 36.0KB AVG. SIZE 36.0KB

Documents Aggregations Explain Plan Indexes

FILTER OPTIONS FIND RESET ...

ADD DATA VIEW

Displaying documents 1 - 2 of 2 REFRESH

```
{
  "_id": ObjectId("5ec1776aee527157481986d"),
  "firstName": "Kavindi",
  "lastName": "Gunasinghe",
  "username": "kavig97",
  "address": "manavila, walahanduwa, galle",
  "address2": "Galle",
  "zip": "12345",
  "state": "Kaluthara",
  "cc_name": "Kavindi Gunasinghe",
  "cc_number": 123456789,
  "cc_cvv": "66666666666666",
  "__v": 0
}
```

```
{
  "_id": ObjectId("5ec1aa7c569cc1a4839376e"),
  "firstName": "vnu",
  "lastName": "Weerasinghe",
  "username": "vnu",
  "address": "vnu",
  "address2": "vnu",
  "zip": "vnu",
  "state": "Colombo",
  "cc_name": "vnu",
  "cc_number": 222,
  "cc_cvv": "2222",
  "productName": "",
  "__v": 0
}
```

Activate Window

The customer can give Reviews and ratings on the products as well. This is done by the following page of the system.

**Your Review & Rating** ×

Name

Your Name

Review

Rate Us

★ ★ ★ ★ ★

Close Save Changes

This reviews and ratings details are stored in a separate database as well.

FashionStoreDB.reviewsandratings

DOCUMENTS	3	TOTAL SIZE	385B	AVG. SIZE	128B
INDEXES	1	TOTAL SIZE	36.0KB	AVG. SIZE	36.0KB

Documents Aggregations Explain Plan Indexes

Displaying documents 1 - 3 of 3

```
{
  "_id": ObjectId("5ec84a64fa6e3714440db9"),
  "itemID": "5ec6bfe4bde3da1b1074ca42",
  "clientName": "Senura",
  "review": "Good Quality",
  "rating": 5,
  "__v": 0
}
```

```
{
  "_id": ObjectId("5ec84cabfa6e3714440dba"),
  "itemID": "5ec6bfe4bde3da1b1074ca42",
  "clientName": "Viraj",
  "review": "Nice Outfit",
  "rating": 5,
  "__v": 0
}
```

```
{
  "_id": ObjectId("5eca2bf4caceda38084b189c"),
  "itemID": "5ec6bfe4bde3da1b1074ca42",
  "clientName": "Nethma",
  "review": "Product Quality",
  "rating": 2,
  "__v": 0
}
```

## **4. Implementation**

For the development of this system, we used MERN stack as we used ReactJS, Nodejs and Express and Databases were created using MonogoDB. We also used HTML, CSS, JavaScript, JQuery technologies.

## **5. Conclusion**

The entire project has been developed and deployed as per the requirements stated , it is found to be bug free as per the testing standards that are implemented. Any specification untraced errors will be concentrated in the coming versions, which are planned to be developed in near future. The system at present does not take care of the money payment methods, as the consolidated constructs need SSL standards and are critically to be initiated in the first face, the application of the credit card transactions is applied as a developmental phase in the coming days. The system needs more elaborative technicality for its inception and evolution.

