



VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

DATABASE & MANAGEMENT

J -COMPONENT

REVIEW 3

TEAM MEMBERS:

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ACKNOWLEDGEMENT:

It is our privilege to express our sincerest regards to all who directly or indirectly helped us to complete our project work in DATABASE AND MANAGEMENT SYSTEMS.

we, deeply express our sincere thanks to our faculty **Prof. Santosh Kumar SVN**, for his noble guidance and for providing with sufficient facilities which have contributed to the successful completion of this work.

Last but not the least we express thanks to all our friends for their cooperation and support

ABSTRACT

The coronavirus pandemic, which was detected in China in the month of December, has infected more than 188 countries till date. This pandemic has disrupted the world economy to a great extent. Due to this pandemic, people are cautious about spending time in public spaces. During the nation-wide lockdown, E-commerce sites have proved to be extremely helpful. Almost everyone depends on E-commerce sites to provide them with four their sustenance.

The contagiousness of Covid-19, and its unrelenting increasing spread, has prompted people to explore online purchasing options for essential products and services, from the safety of their homes. As the pandemic situation aggravates, we have come up an Idea to create an E-commerce system management database which will provide a front-end from where people can purchase like masks, sanitizers, disposable coats and face shield and we will provide it at their doorstep. Our project will provide the safest way to ensure social distancing and safe living.

One more benefit of our site is that it will provide the people access to a wider market and it will overcome all the geographical boundaries. With a boom in the technological sectors, it is possible us to provide these items to the area where these essential items are not available in the market.

It also has the potential of benefitting people who have lost their jobs due to this pandemic and don't have any means for daily wage. Unemployment is a major hurdle in India's growth path. The COVID-19 pandemic, and the subsequent lockdown measures instituted, resulted in unprecedented spike in India's unemployment rates, especially during the months May and June. We will not limit our options to large-scale international suppliers but also consider the home-made products. This will give a boost to small-scale business which might help decreasing the unemployment in India to certain extent. It will support the "Make in India" campaign.

INTRODUCTION

E-commerce (Electronic Commerce or EC) is the buying and selling of goods and services on the Internet, especially the World Wide Web

This service provides a virtual cart for each and every individual for holding their items which they have selected for purchase. The item present in this cart can be modified or deleted any time according to the will of the customer. After selecting certain items for purchase, the customer can head to the payment window. This has made shopping for essential items for protection against covid-19 very easy and convenient.

We have created a database system which can check of the items the supplier has in stock and the supplier system will be linked to our Admin database so that whenever an order is placed, the admin can directly inform the supplier. Our system will also give an indication when the stock of a certain item runs low.

We have maintained a different database for the items present in cart and it will be updated in a regular item interval whenever any order is delivered, an order is placed or any order is cancelled.

A database for the products linked to the Admin database is maintained so that whenever an item goes out of stock, the costumers will be notified on a prior basis.

FEATURES OF OUR WEBSITE:

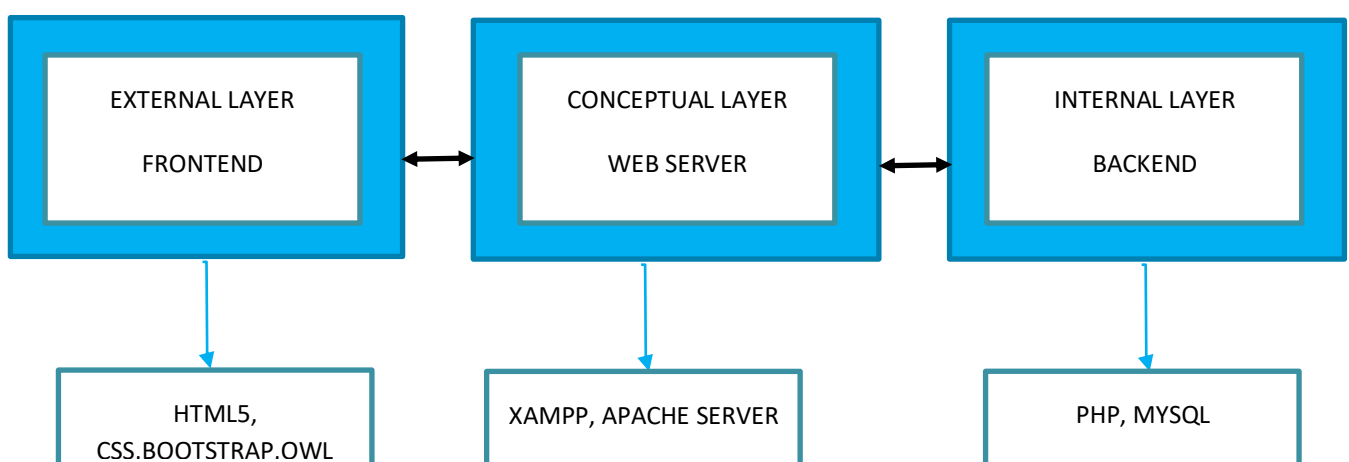
- It provides an easy way for customers to purchase COVID-19 sanitization items.
- Offers a user-friendly website which is easy to use.
- The website offers different screens for adding items to cart or purchasing to make it more organized.
- Navigation bar makes it easy switch between screens.
- Gives news updates related to coronavirus.

SPECIFICATIONS:

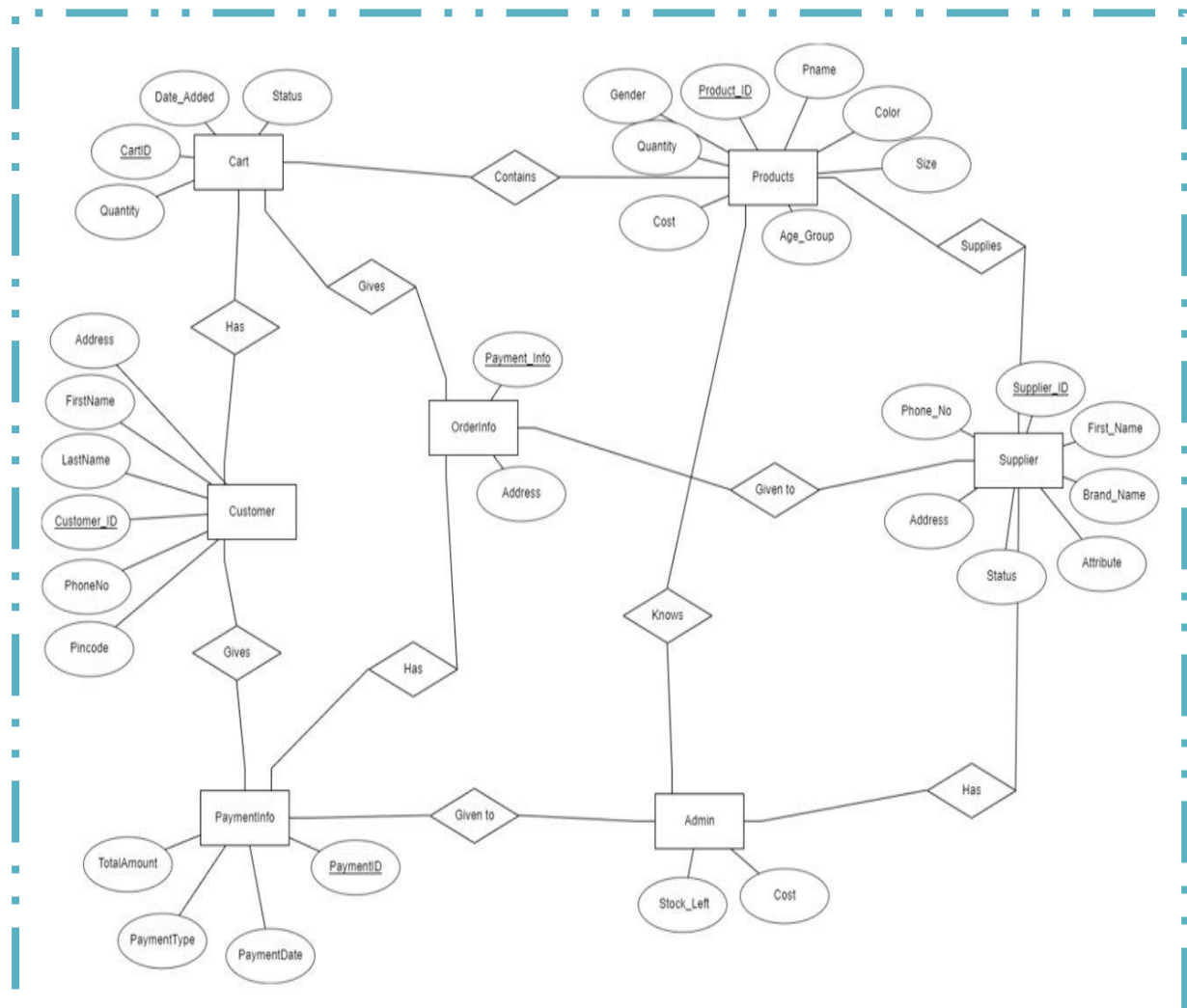
- » HTML 5
- » CSS 3 (SCSS)
- » PHP
- » MYSQL
- » BOOTSTRAP
- » XAMPP
- » OWL CAROUSEL
- » PHPMyAdmin
- » VSCODE/ATOM

USAGE OF DATABASE AND MANAGEMENT SYSTEMS IN OUR PROJECT:

ARCHITECTURAL DIAGRAM:



ER DIAGRAM:



RELATIONAL TABLES:

1.	Customer has cart
2.	Payment_info is given to Admin
3.	Cart gives order_info
4.	Cart contains products
5.	Order_info is given to the supplier
6.	Customer GIVES Payment_Info
7.	Order_Info HAS Payment_Info
8.	Supplier SUPPLIES Products
9.	Admin HAS Supplier info
10.	Admin KNOWS Products

IMPLEMENTATION:

SIGN UP PAGE FOR OUR WEBSITE:

PRECOMMERCE

Sign in to our Website!

Sign in

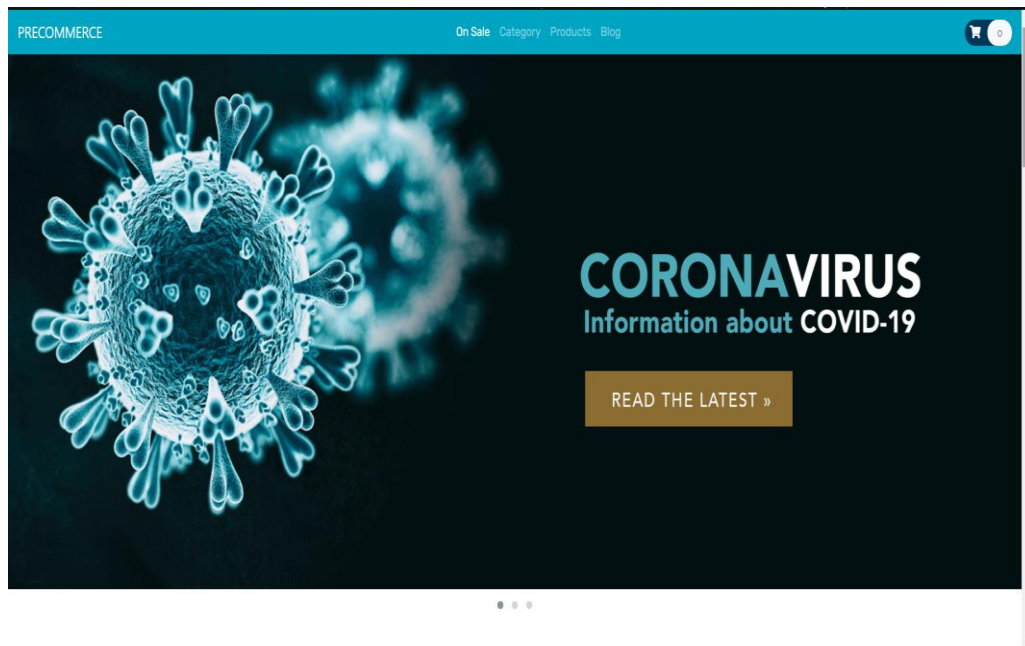
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The sign-up portal for our website is connected to the user table/relation in our database. Once a new user signs up, the name of the user along with a new user ID and date and time of log-in gets added to the user table as shown below.

				user_id	first_name	last_name	register_date
<input type="checkbox"/>		Edit		Copy		Delete	1 Divyangi Singh 2020-09-30 13:07:17
<input type="checkbox"/>		Edit		Copy		Delete	2 Shivang Kohli 2020-10-28 13:07:17

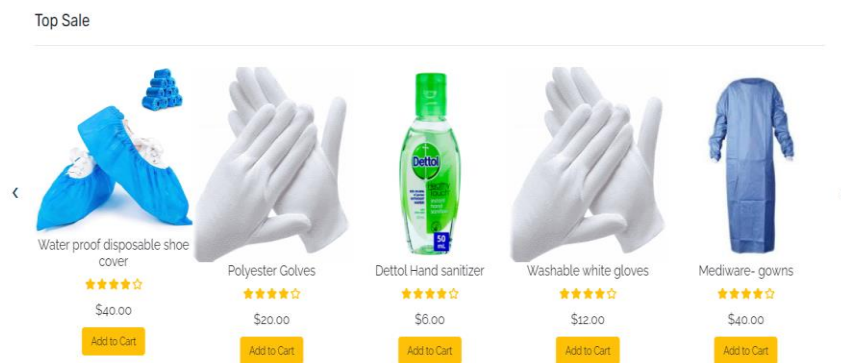
Once the user sign up with his/her credentials, they are directed to our main website where they can buy all the items required for protection against corona-virus.

- We have provided a nav-bar at the top of our website so that the user can easily switch between different sections of our website. The add to cart icon is also visible on the top and if you click on this button, it redirects you to your cart.



We have also provided banners on the top of our website to make it more presentable and user friendly. The read the latest button redirects you to the bottom of the website where the latest news related to corona virus along with some precaution measures updated by WHO organisation.

- The next section is the top sale section which shows the items which are currently present in our stock and which are the top sale products for our website.



With all the items, an add to cart button is present which directly adds the item to their cart. Each user has a unique card.

Special Brand

All Brand
ArtToFrame
Dettol
Fabrika
Lakshya
Lifebouy
MADA
Trishya

Dettol Hand sanitizer

★★★★☆

\$6.00

Add to Cart

Polyester Mask

★★★★☆

\$8.00

Add to Cart

cotton gloves

★★★★☆

\$10.00

Add to Cart

Medware- gowns

★★★★☆

\$40.00

Add to Cart

Cotton Disposable Anti Pollution Mask

★★★★☆

\$12.00

Add to Cart

Water proof disposable shoe cover

★★★★☆

\$40.00

Add to Cart

Cotton Mask

★★★★☆

\$7.00

Add to Cart

Adjustable Protective Face Shield

★★★★☆

\$32.00

Add to Cart

Lifebouy Hand sanitizer

★★★★☆

\$8.00

Add to Cart

Disposable gowns

★★★★☆

\$40.00

Add to Cart

Washable white gloves

★★★★☆

\$12.00

Add to Cart

Polyester Gloves

★★★★☆

\$20.00

Add to Cart

Reusable Face shield

★★★★☆

\$32.00

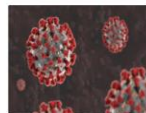
Add to Cart

- We even have a special brand section which has been made keeping in mind the fact that most of the buyers are brand-specific. As it can be seen, we can arrange the items according to it's brand by just clicking the brand names present on upper-right corner. We have not limited our sales to large-scale companies or MNC's. Some of the home-made brands are also there.



STAY UPDATED!

Covid Precaution methods



Lorem ipsum dolor sit amet consectetur
 adipiscing elit. Vestibulum non iaculis
 cupiditate temporibus luctus. Vestibulum
 ac accumsan.

[Check out](#)

Latest covid news



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[Check out](#)

Latest covid news



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 adipiscing elit. Vestibulum non iaculis
 cupiditate temporibus luctus. Vestibulum
 ac accumsan.

[Check out](#)

PRECOMMERCE

We're here at your service! For queries
 contact: 9999999999

For queries

Email: * [Send](#)

Information

About Us
 Delivery Information
 Privacy Policy
 Terms & Conditions

Account

My Account
 Order History
 Wish List
 Newsletters

- The bottom most section of our website has many features as well. We have banners displaying that our company does free delivery. After that we have the read the latest news section. And finally at the end of the page, the black coloured section has a query section through which the user can sent any query to the mail we have registered in the backend.

WORKING OF THE WEBSITE:

The all the items present in our stock are stored in product table.

	item_id	item_brand	item_name	item_price	item_image	item_register
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Fabrika	Cotton Mask	7.00	/assets/products/1.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Lakshya	Polyester Mask	8.00	/assets/products/2.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	Dettol	Dettol Hand sanitizer	6.00	/assets/products/3.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	Lifebouy	Lifebouy Hand sanitizer	8.00	/assets/products/4.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Trishya	Cotton Disposable Anti Pollution Mask	12.00	/assets/products/5.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	Trishya	Washable white gloves	12.00	/assets/products/6.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	7	Fabrika	cotton gloves	10.00	/assets/products/7.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	8	Lakshya	Polyester Golves	20.00	/assets/products/8.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	9	MADA	Reusable Face sheild	32.00	/assets/products/9.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	MADA	Adjustable Protective Face Shield	32.00	/assets/products/10.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	11	ArtToFrame	Mediware- gowns	40.00	/assets/products/11.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12	ArtToFrame	Disposable gowns	40.00	/assets/products/12.png	2020-03-28 11:08:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13	ArtToFrame	Water proof disposable shoe cover	40.00	/assets/products/13.png	2020-03-28 11:08:57


The images are stored in the main database of the system.

The item_id is unique for each item even if it is the same item of the same company but has been registered separately.

When you add an item to the cart, it gets added to your unique cart and the price of the subtotal will increase.

On Sale
Category
Products
Blog


Shopping Cart



Dettol Hand sanitizer
by Dettol
★★★★☆ 20,534 ratings

1
Delete
Save for Later


\$6.00



Polyester Mask
by Lakshya
★★★★☆ 20,534 ratings

1
Delete
Save for Later

\$8.00



Disposable gowns
by ArtToFrame
★★★★☆ 20,534 ratings

1
Delete
Save for Later

\$40.00










Your order is eligible for FREE Delivery

Subtotal (3 item): \$54.00

Proceed to Buy

After clicking on the cart icon, you are directed to the page shown above.

As an item is added to the cart, the cart table gets updated as well.

				cart_id	user_id	item_id
<input type="checkbox"/>		Edit		Copy		Delete
				12	1	3
<input type="checkbox"/>		Edit		Copy		Delete
				13	1	2
<input type="checkbox"/>		Edit		Copy		Delete
				14	1	12


The cart_id generated for each item is unique and the user_id and item_id are the foreign keys for both the user and product table.

We have provided the option to remove an item from the cart .


This will automatically decrease the subtotal of the amount the user has to pay.

PRECOMMERCE

On SaleCategoryProductsBlog

 2

Shopping Cart



Polyester Mask

by Lakshya


★★★★☆ 20,534 ratings

1

▼

DeleteSave for Later

\$8.00



Disposable gowns

by ArtToFrame

★★★★☆ 20,534 ratings

1

▼

DeleteSave for Later







\$40.00

✓ Your order is eligible for FREE Delivery

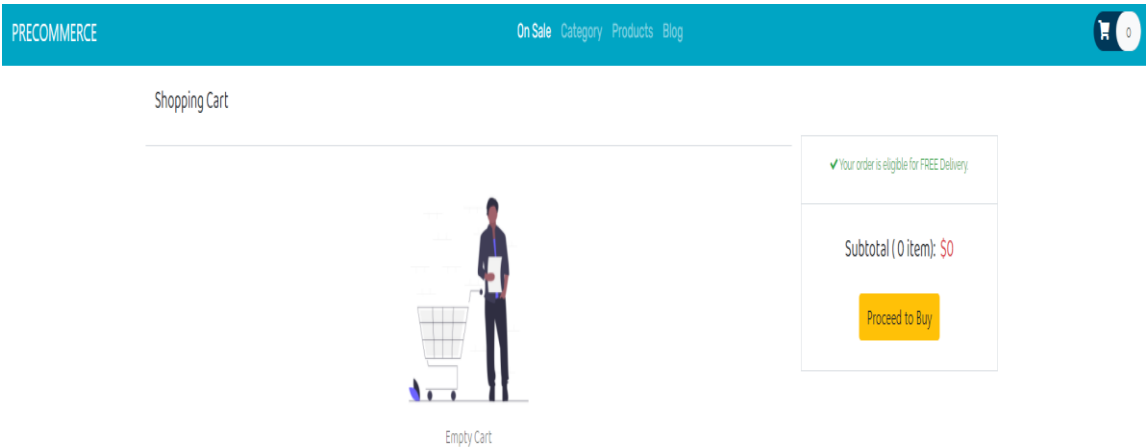
Subtotal (2 item): \$48.00

Proceed to Buy

The cart table will be updated as well.

				cart_id	user_id	item_id
<input type="checkbox"/>		Edit		Copy		Delete
				13	1	2
<input type="checkbox"/>		Edit		Copy		Delete
				14	1	12

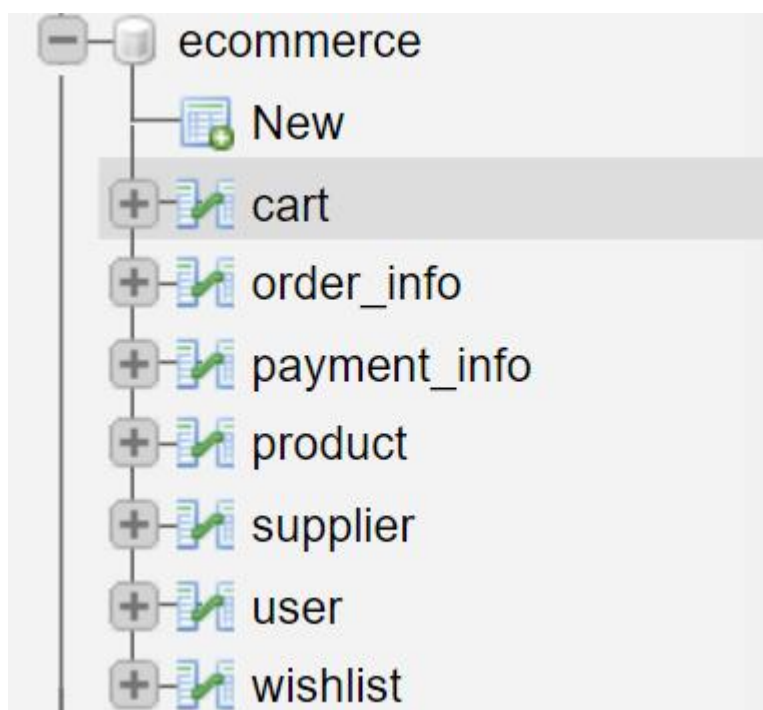
The entire cart can also become empty as shown below.



As you can see the number of items next to the cart icon on the top right corner also keeps on changing as the cart items are updated.

The proceed to buy button leads you to payment portal and another table `payment_info` has been declared to take care of the payment information.

All the relations/tables in our database is listed below. (Note the customer table is the user table).



The supplier table includes all the brand names along with brand id.

The Wishlist table consists of all the items which the user has saved for later.

The save for later option is available next to the delete option on the cart webpage.

MODULES WITH SAMPLE CODE:

FRONTEND:

HEADER.PHP (THE HEAD PART OF THE WEBSTIE)

```
• <!DOCTYPE html>
• <html lang="en">
• <head>
•     <meta charset="UTF-8">
•     <meta name="viewport" content="width=device-width, initial-
scale=1.0">
•     <title>PRECOMMERCE</title>
•
•     <!-- Bootstrap CDN -->
•     <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/boo
tstrap/4.4.1/css/bootstrap.min.css" integrity="sha384-
Vkoo8x4CGs03+Hhvx8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh" cross
origin="anonymous">
•
•     <!-- Owl-carousel CDN -->
•     <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs
/OwlCarousel2/2.3.4/assets/owl.carousel.min.css" integrity="sha256-
UhQQ4fxEeABh4JrcmAJ1+16id/1dn10EVCFOxDef9Lw=" crossorigin="anonymous" /
>
•     <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs
/OwlCarousel2/2.3.4/assets/owl.theme.default.min.css" integrity="sha256-
kksNxjDRxd/5+jGurZUJd1sdR2v+ClrCl3svESBaJqw=" crossorigin="anonymous" /
>
•
•     <!-- font awesome icons -->
•     <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs
/font-awesome/5.13.0/css/all.min.css" integrity="sha256-
h20CPZ0QyXlBuAw7A+KluUYx/3pK+c71YEpqLTlxjYQ=" crossorigin="anonymous" /
>
•
•     <!-- Custom CSS file -->
•     <link rel="stylesheet" href="style.css">
•
•     <?php
•     // require functions.php file
•     require ('functions.php');
•     ?>
•
• </head>
```

```

• <body>
•
• <!-- start #header -->
•
• <!-- Primary Navigation -->
• <nav class="navbar navbar-expand-lg navbar-dark color-second-bg">
• <a class="navbar-brand" href="#">PRECOMMERCE</a>
• <button class="navbar-toggler" type="button" data-
toggle="collapse" data-target="#navbarNav" aria-
controls="navbarNav" aria-expanded="false" aria-
label="Toggle navigation">
• <span class="navbar-toggler-icon"></span>
• </button>
• <div class="collapse navbar-collapse" id="navbarNav">
• <ul class="navbar-nav m-auto font-rubik">
• <li class="nav-item active">
• <a class="nav-link" href="#">On Sale</a>
• </li>
• <li class="nav-item">
• <a class="nav-link" href="#">Category</a>
• </li>
• <li class="nav-item">
• <a class="nav-link" href="#">Products </a>
• </li>
• <li class="nav-item">
• <a class="nav-link" href="#">Blog</a>
• </li>
• </ul>
• <form action="#" class="font-size-14 font-rale">
• <a href="cart.php" class="py-2 rounded-pill color-
primary-bg">
• <span class="font-size-16 px-2 text-
white"><i class="fas fa-shopping-cart"></i></span>
• <span class="px-3 py-2 rounded-pill text-dark bg-
light"><?php echo count($product->getData('cart')); ?></span>
• </a>
• </form>
• </div>
• </nav>
• <!-- !Primary Navigation -->
•
• </header>
• <!-- !start #header -->
•
• <!-- start #main-site -->
• <main id="main-site">

```

```

<?php
    ob_start();
    // include header.php file
    include ('header.php');
?>

<?php

    /* include banner area */
    include ('Template/_banner-area.php');
    /* include banner area */

    /* include top sale section */
    include ('Template/_top-sale.php');
    /* include top sale section */

    /* include special price section */
    include ('Template/_special-price.php');
    /* include special price section */

    /* include banner ads */
    include ('Template/_banner-ads.php');
    /* include banner ads */

    /* include blog area */
    include ('Template/_blogs.php');
    /* include blog area */

?>

<?php
// include footer.php file
include ('footer.php');
?>

```

FOOTER.PHP (THE BOTTOM PART OF THE WEBSITE)

```

• </main>
• <!-- !start #main-site -->
•
• <!-- start #footer -->
• <footer id="footer" class="bg-dark text-white py-5">
•     <div class="container">

```

```

•      <div class="row">
•          <div class="col-lg-3 col-12">
•              <h4 class="font-rubik font-size-20">PRECOMMERCE</h4>
•              <p class="font-size-14 font-rale text-white-
50">We here at your service! For queries contact : 5656565656</p>
•          </div>
•          <div class="col-lg-4 col-12">
•              <h4 class="font-rubik font-size-20">For queries</h4>
•              <form class="form-row">
•                  <div class="col">
•                      <input type="text" class="form-
control" placeholder="Email *">
•                  </div>
•                  <div class="col">
•                      <button type="submit" class="btn btn-
primary mb-2">Send</button>
•                  </div>
•              </form>
•          </div>
•          <div class="col-lg-2 col-12">
•              <h4 class="font-rubik font-size-20">Information</h4>
•              <div class="d-flex flex-column flex-wrap">
•                  <a href="#" class="font-rale font-size-14 text-
white-50 pb-1">About Us</a>
•                  <a href="#" class="font-rale font-size-14 text-
white-50 pb-1">Delivery Information</a>
•                  <a href="#" class="font-rale font-size-14 text-
white-50 pb-1">Privacy Policy</a>
•                  <a href="#" class="font-rale font-size-14 text-
white-50 pb-1">Terms & Conditions</a>
•              </div>
•          </div>
•          <div class="col-lg-2 col-12">
•              <h4 class="font-rubik font-size-20">Account</h4>
•              <div class="d-flex flex-column flex-wrap">
•                  <a href="#" class="font-rale font-size-14 text-
white-50 pb-1">My Account</a>
•                  <a href="#" class="font-rale font-size-14 text-
white-50 pb-1">Order History</a>
•                  <a href="#" class="font-rale font-size-14 text-
white-50 pb-1">Wish List</a>
•                  <a href="#" class="font-rale font-size-14 text-
white-50 pb-1">Newsletters</a>
•              </div>
•          </div>
•      </div>
•  </footer>

```

- `<div class="copyright text-center bg-dark text-white py-2">`
- `<p class="font-rale font-size-14">© Copyrights 2020. Desing By Team Royals</p>`
- `</div>`
- `<!-- !start #footer -->`
- `<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.0/jquery.min.js" integrity="sha256-xNzN2a4ltkB44Mc/Jz3pT4iU1cmeR0FkXs4pru/JxaQ=" crossorigin="anonymous"></script>`
- `<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.min.js" integrity="sha384-Q6E9RHvbIyZFJoft+2mJbHaEWldlvI9IOYy5n3zV9zzTtmI3UksdQRVvoxMfooAo" crossorigin="anonymous"></script>`
- `<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/js/bootstrap.min.js" integrity="sha384-wfSDF2E50Y2D1uUdj03uMBJnjuUD4Ih7YwaYd1iqfktj0Uod8GCExl3Og8ifwB6" crossorigin="anonymous"></script>`
- `<!-- Owl Carousel Js file -->`
- `<script src="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.3.4/owl.carousel.min.js" integrity="sha256-pTxD+DSzIwmwH0qTFN+DB+nHj04iAsbgyFq5K5bcE0=" crossorigin="anonymous"></script>`
- `<!-- isotope plugin cdn -->`
- `<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery.isotope/3.0.6/isotope.pkgd.min.js" integrity="sha256-CBrpuqrMhXwcLLUd5tvQ4euBHCdh7wGldfNz8vbu/iI=" crossorigin="anonymous"></script>`
- `<!-- Custom Javascript -->`
- `<script src="index.js"></script>`
- `</body>`
- `</html>`

BACKEND:

DBCONTROLLER.PHP (CALLING THE REQUIRED DATABASE)

```
<?php

class DBController
{
```

```

// Database Connection Properties
protected $host = 'localhost';
protected $user = 'root';
protected $password = 'YOUR_PASSWORD';
protected $database = "ecommerce";

// connection property
public $con = null;

// call constructor
public function __construct()
{
    $this->con = mysqli_connect($this->host, $this->user, $this->password, $this->database);
    if ($this->con->connect_error){
        echo "Fail " . $this->con->connect_error;
    }
}

public function __destruct()
{
    $this->closeConnection();
}

// for mysqli closing connection
protected function closeConnection(){
    if ($this->con != null ){
        $this->con->close();
        $this->con = null;
    }
}
}

```

CART.PHP (LINKING OF CART TO THE DATABASE)

```

<?php

// php cart class
class Cart
{
    public $db = null;

    public function __construct(DBController $db)
    {
        if (!isset($db->con)) return null;
        $this->db = $db;
    }
}

```



```

}

// insert into cart table
public function insertIntoCart($params = null, $table = "cart"){
    if ($this->db->con != null){
        if ($params != null){
            // "Insert into cart(user_id) values (0)"
            // get table columns
            $columns = implode(',', array_keys($params));

            $values = implode(' , ' , array_values($params));

            // create sql query
            $query_string = sprintf("INSERT INTO %s(%s) VALUES(%s)", $table, $columns, $values);

            // execute query
            $result = $this->db->con->query($query_string);
            return $result;
        }
    }
}

// to get user_id and item_id and insert into cart table
public function addToCart($userid, $itemid){
    if (isset($userid) && isset($itemid)){
        $params = array(
            "user_id" => $userid,
            "item_id" => $itemid
        );

        // insert data into cart
        $result = $this->insertIntoCart($params);
        if ($result){
            // Reload Page
            header("Location: " . $_SERVER['PHP_SELF']);
        }
    }
}

// delete cart item using cart item id
public function deleteCart($item_id = null, $table = 'cart'){
    if($item_id != null){
        $result = $this->db->con->query("DELETE FROM {$table} WHERE item_id={$item_id}");
        if($result){
            header("Location:" . $_SERVER['PHP_SELF']);
        }
    }
}

```

```

        return $result;
    }
}

// calculate sub total
public function getSum($arr){
    if(isset($arr)){
        $sum = 0;
        foreach ($arr as $item){
            $sum += floatval($item[0]);
        }
        return sprintf('%.2f' , $sum);
    }
}

// get item_id of shopping cart list
public function getCartId($cartArray = null, $key = "item_id"){
    if ($cartArray != null){
        $cart_id = array_map(function ($value) use($key){
            return $value[$key];
        }, $cartArray);
        return $cart_id;
    }
}

// Save for later
public function saveForLater($item_id = null, $saveTable = "wishlist", $fromTable = "cart"){
    if ($item_id != null){
        $query = "INSERT INTO {$saveTable} SELECT * FROM {$fromTable} WHERE item_id={$item_id}";
        $query .= "DELETE FROM {$fromTable} WHERE item_id={$item_id}";

        // execute multiple query
        $result = $this->db->con->multi_query($query);

        if($result){
            header("Location : " . $_SERVER['PHP_SELF']);
        }
        return $result;
    }
}
}

```

```

• <?php
•
• // Use to fetch product data
• class Product
• {
•     public $db = null;
•
•     public function __construct(DBController $db)
•     {
•         if (!isset($db->con)) return null;
•         $this->db = $db;
•     }
•
•     // fetch product data using getData Method
•     public function getData($table = 'product'){
•         $result = $this->db->con->query("SELECT * FROM {$table}");
•
•         $resultArray = array();
•
•         // fetch product data one by one
•         while ($item = mysqli_fetch_array($result, MYSQLI_ASSOC)){
•             $resultArray[] = $item;
•         }
•
•         return $resultArray;
•     }
•
•     // get product using item id
•     public function getProduct($item_id = null, $table= 'product'){
•         if (isset($item_id)){
•             $result = $this->db->con->
• >query("SELECT * FROM {$table} WHERE item_id={$item_id}");
•
•             $resultArray = array();
•
•             // fetch product data one by one
•             while ($item = mysqli_fetch_array($result, MYSQLI_ASSOC)){
•                 $resultArray[] = $item;
•             }
•
•             return $resultArray;
•         }
•     }
• }
•
• }

```

ADVANTAGES OF THE PROPOSED SYSTEM:

- 1.Simple design making it convenient for customers
- 2.Admin has control of products on site
- 3.Products based on precautions against COVID
- 4.Latest news and regulations on the pandemic
- 5.Feedback system
- 6.Records of all suppliers easy to access.
7. Relational database ensures regular updating.
8. Less complex database system.

CONCLUSION:

We have been successfully able to provide a user-friendly ecommerce website for purchase of items for protection against COVID 19. The website provides various features like sign-up, add-to-cart, review of the items in cart and deletion and save for later options for the items in the cart. The website has successfully been linked to the database system in which the details of all the items present on the website along with supplier info, payment info and cart info for each user. The website has great scope in the market as it provides job opportunities to small scale businesses and also deliver items at the door-step ensuring social distancing.

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