

ASSIGNMENT

Course Code CSC402A
Course Name Web Architecture and Application development
Programme B. Tech. in CSE
Department Computer Science and Engineering
Faculty FET

Name of the Student ARYAN JALALI
Reg. No 17ETCS002033
Semester/Year 07/2020
Course Leader/s Mr. Kishore S. M.

Declaration Sheet			
Student Name	ARYAN JALALI		
Reg. No	17ETCS002033		
Programme	B. Tech. in CSE	Semester/Year	07/2020
Course Code	CSC402A		
Course Title	Web Architecture and Application development		
Course Date		to	
Course Leader	Mr. Kishore S. M.		

Declaration

The assignment submitted herewith is a result of my own investigations and that I have conformed to the guidelines against plagiarism as laid out in the Student Handbook. All sections of the text and results, which have been obtained from other sources, are fully referenced. I understand that cheating and plagiarism constitute a breach of University regulations and will be dealt with accordingly.

Signature of the Student		Date	19/01/2021
Submission date stamp (by Examination & Assessment Section)			
Signature of the Course Leader and date	Signature of the Reviewer and date		

Faculty of Engineering and Technology						
Ramaiah University of Applied Sciences						
Department	Computer Science and Engineering	Programme	B. Tech			
Semester/Batch	07/2017					
Course Code	CSC402A	Course Title	Web Architecture and Application development			
Course Leader	Mr. Kishore S. M.					
Assignment						
Register No.		17ETCS002033	Name of the Student	Aryan Jalali		
Sections		Marking Scheme	Marks			
			Max Marks	First Examiner Marks	Moderator	
Part 1	1.1	Implementation of database with justification of relationships	8			
	1.2	Implementation of user registration	8			
	1.3	Implementation of Sport accessories reservation for user	9			
		Part- 1 Max Marks	25			

Course Marks Tabulation				
Component- CET B Assignment	First Examiner	Remarks	Second Examiner	Remarks
1				
2				
Total Marks				
Signature of First Examiner	Signature of Second Examiner			

Contents

Declaration Sheet	ii
Faculty of Engineering and Technology	iii
Ramaiah University of Applied Sciences.....	iii
Department	iii
Computer Science and Engineering	iii
Programme	iii
B. Tech	iii
Semester/Batch	iii
07/2017	iii
Course Code	iii
CSC402A	iii
Course Title.....	iii
Web Architecture and Application development	iii
Course Leader.....	iii
Mr. Kishore S. M.....	iii
Contents	iv
1.1 Implementation of database with justification of relationships	5
1.2 Implementation of user registration	7
1.3 Implementation of Sport accessories reservation for user.....	14

Solution to Question No. 1:

1.1 Implementation of database with justification of relationships

The screenshot shows the 'Table structure' tab for the 'accessories' table. The table has six columns: productId, description, productName, imageUrl, price, and quantity. The productId column is defined as int(11) and is set to AUTO_INCREMENT, making it the primary key. The other columns have various data types like varchar and float, with specific collation settings.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	productId	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	description	varchar(200)	utf8mb4_general_ci		No	None			Change Drop More
3	productName	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
4	imageUrl	varchar(200)	utf8mb4_general_ci		No	None			Change Drop More
5	price	float			No	None			Change Drop More
6	quantity	int(11)			Yes	NULL			Change Drop More

Figure 1.1.1: Structure of Accessories table

Details for Figure 1.1: This table keeps track of all the accessories available.

It has the attributes productId, description, productName, imageUrl, price and quantity.

productId is set to AUTO_INCREMENT and is the primary key of this table. productId is the primary key because it will always be unique and no two products can ever have the same productId.

The screenshot shows the contents of the 'accessories' table. It lists six rows of data, each representing an accessory item with its details like name, description, price, and image URL.

productId	description	productName	imageUrl	price	quantity

productId	description	productName	imageUrl	price	quantity
1	Discovering road cycling in comfort.. Simple, comf...	100 Road Cycling Touring Gloves - Black	https://contents.mediadecathlon.com/p1631814/99a70...	299	5
2	Adult Hikers looking for water bottles. A simple a...	Bottle 0.75L - Blue	https://contents.mediadecathlon.com/p453615/1a6683...	99	9
3	Our team of running enthusiasts designed this watc...	W500 M men running stopwatch reverse screen - Blac...	https://contents.mediadecathlon.com/p1524413/a56b9...	1299	14
4	Designed for leisure cycling on off-road trails an...	MTB ST 20 High Frame BLUE 26 inch	https://contents.mediadecathlon.com/p1831242/83d23...	6999	4
5	Our football design team created the Sunny 300 for...	Sunny 300 Football Size 5 - Orange/Black	https://contents.mediadecathlon.com/p1792686/2f398...	199	8
6	Developed specifically for a junior beginner who i...	KW100 SIZES 3, 4, KASHMIR WILLOW CRICKET BAT DARK ...	https://contents.mediadecathlon.com/p1805307/e6e59...	999	5

Figure 1.1.2: Contents of Accessories table

The screenshot shows the 'Table structure' tab for the 'cart' table. The table has six columns: productName, productId, description, price, imageUrl, and quantity. The productId column is defined as varchar(11), making it the primary key. The other columns have various data types like varchar and float, with specific collation settings.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	productName	varchar(200)	utf8mb4_general_ci		No	None			Change Drop More
2	productId	varchar(11)	utf8mb4_general_ci		No	None			Change Drop More
3	description	varchar(200)	utf8mb4_general_ci		No	None			Change Drop More
4	price	varchar(11)	utf8mb4_general_ci		No	None			Change Drop More
5	imageUrl	varchar(200)	utf8mb4_general_ci		No	None			Change Drop More
6	quantity	varchar(11)	utf8mb4_general_ci		No	None			Change Drop More

Figure 1.1.3: Structure of Cart table

Details for Figure 1.3: This table keeps track of all the accessories added to cart.

It has the attributes productId, description, productName, imageUrl, price and quantity.

This table holds the data that gets added when accessories selected are added to cart.

The screenshot shows the MySQL Workbench interface with the following details:

- Server:** 127.0.0.1
- Database:** accessories
- Table:** users
- Structure View:** Selected
- Columns:**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	email	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
2	name	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
3	age	int(11)			No	None			Change Drop More
4	contact	varchar(20)	utf8mb4_general_ci		No	None			Change Drop More
5	password	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
6	username	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
7	itemsPurchased	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
8	shippingAddress	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More

Figure 1.1.4: Structure of Users table

Details for Figure 1.4: This table keeps track of all users registered.

It has the attributes email, name, age, contact, password, username, itemsPurchased and shippingAddress. "email" attribute is the primary key of this table. "username" attribute is unique.

The screenshot shows the MySQL Workbench interface with the following details:

- Server:** 127.0.0.1
- Database:** accessories
- Table:** users
- Browse View:** Selected
- Row Data:**

email	name	age	contact	password	username	itemsPurchased	shippingAddress
szepetry@test.com	Aryan	22	1234567890	123456	szepetry		

Figure 1.1.5: Contents of Users table

Relationships connecting the databases with justification:

- User **Selects** accessories: Between User and Accessories entities. User selects accessories from a list.
- User **Searches** accessories: Between User and Accessories entities. User searches and selects accessories from the list of all accessories.
- User **Adds** to Cart: Between User and Cart entities. User adds the selected accessories to the cart.
- Cart **Has** Accessories: Between Cart and Accessories entities. Cart handles all the added accessories and holds the items until the user checks out. On checking out, the item quantity for the items bought is decremented by the number of items bought.

1.2 Implementation of user registration

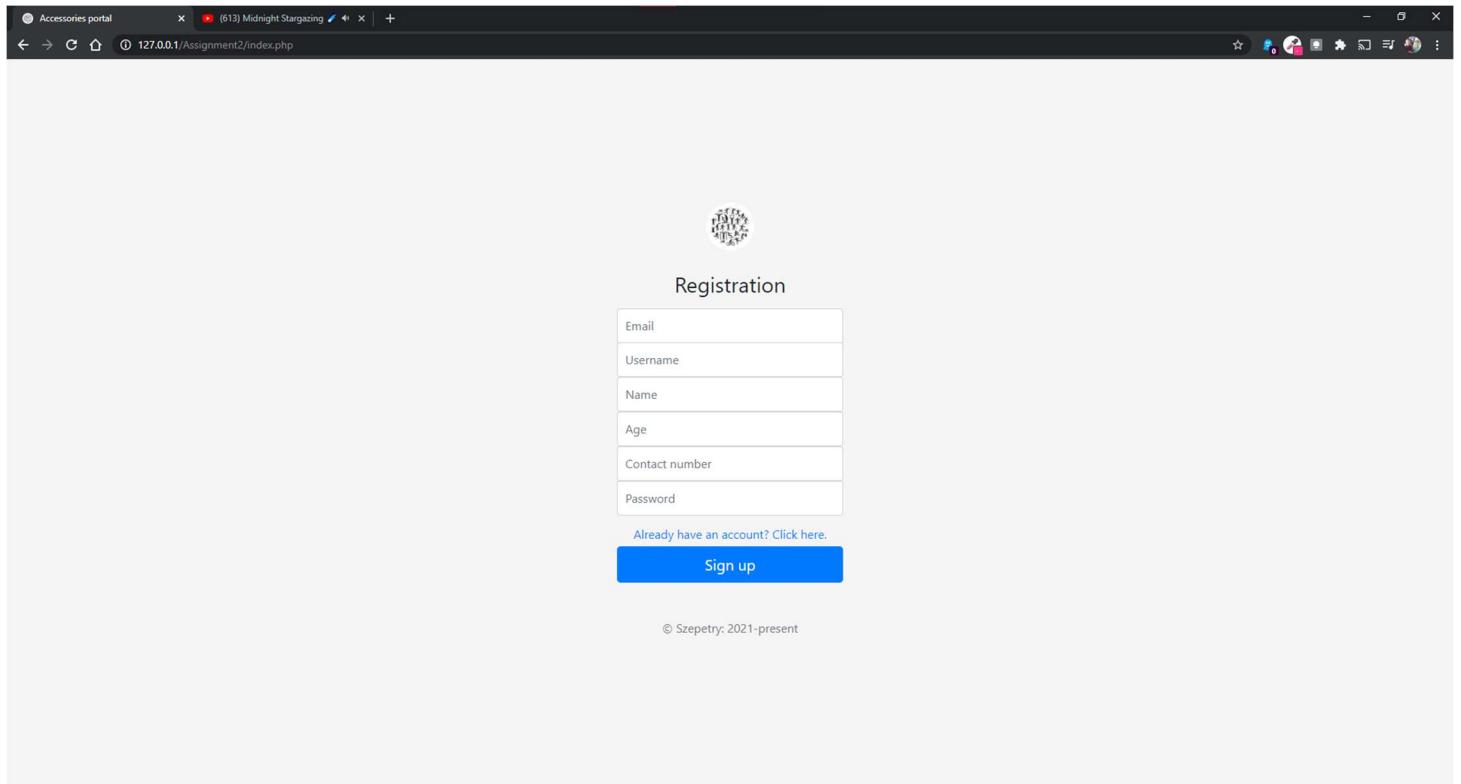
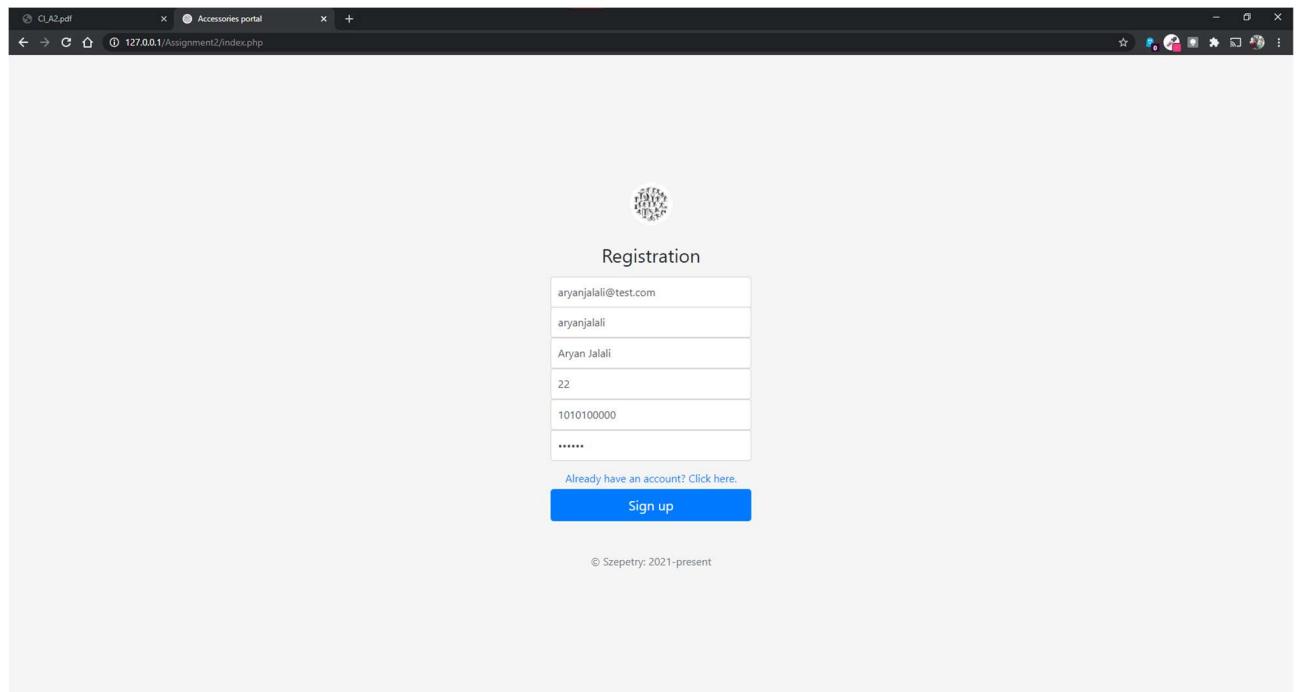


Figure 1.2.1: Visiting index.php on chrome.

This page shows the interface for user registration. We enter the email, username, name, age, contact number and the password.



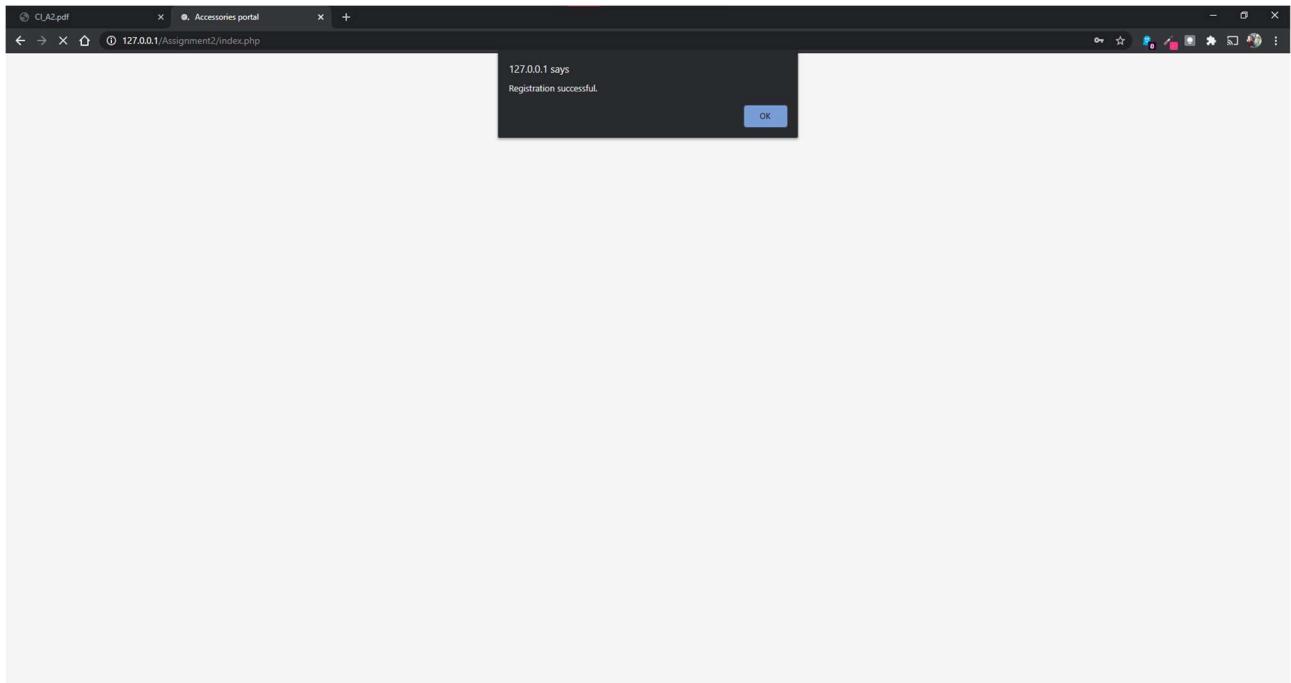


Figure 1.2.2: Using the registration functionality on the website.

If there is no new user with the same email or username and they enter all the details asked, then they would be registered as a user.

```
signin.css x
signin.css > html
1  html,
2  body {
3    height: 100%;
4  }
5
6  body {
7    display: -ms-flexbox;
8    display: flex;
9    -ms-align-items: center;
10   align-items: center;
11   padding-top: 40px;
12   padding-bottom: 40px;
13   background-color: #f5f5f5;
14 }
15
16 .form-signin {
17   width: 100%;
18   max-width: 330px;
19   padding: 15px;
20   margin: auto;
21 }
22 .form-signin .checkbox {
23   font-weight: 400;
24 }
25 .form-signin .form-control {
26   position: relative;
27   box-sizing: border-box;
28   height: auto;
29   padding: 10px;
30   font-size: 16px;
31 }
32 .form-signin .form-control:focus {
33   z-index: 2;
34 }
35 .form-signin input[type="email"] {
36   margin-bottom: -1px;
37   border-bottom-right-radius: 0;
38   border-bottom-left-radius: 0;
39 }
40 .form-signin input[type="password"] {
41   margin-bottom: 10px;
42   border-top-left-radius: 0;
43   border-top-right-radius: 0;
44 }
```

Figure 1.2.3: CSS for both signin.php and index.php

```

index.php

1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Accessories portal</title>
7   <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"
8     integrity="sha384-TX8t2EeRzE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlIDPvg6uqKI2xR2" crossorigin="anonymous">
9
10  <style>
11    .bd-placeholder-img {
12      font-size: 1.125rem;
13      text-anchor: middle;
14      -webkit-user-select: none;
15      -moz-user-select: none;
16      -ms-user-select: none;
17      user-select: none;
18    }
19  </style>
20  <link href="signin.css" rel="stylesheet">
21 </head>
22
23 <body class="text-center">
24   <?php
25     $Name = $Contact = $Password = $Email = $Username = "";
26     if ($_SERVER["REQUEST_METHOD"] == "POST") {
27       $Name = $_POST['name'];
28       $Age = $_POST['age'];
29       $Email = $_POST['email'];
30       $Contact = $_POST['contact'];
31       $Password = $_POST['password'];
32       $Username = $_POST['username'];
33
34       $con = mysqli_connect("localhost", "root", "", "accessories");
35
36
37       $query = "INSERT INTO `users` (email, age, contact, name, password, username) VALUES
38         ('$Email', '$Age', '$Contact', '$Name', '$Password', '$Username')";
39       $result = mysqli_query($con, $query);
40       if ($result) {
41         echo ("<script type=\"text/javascript\">" .
42           "alert('Registration successful.');" .
43           "</script>");
44       } else {
45         echo ("Fail");
46       }
47     }
48   ?>
49
50   <form action="" method="post" class="form-signin">
51     
52     <h1 class="h3 mb-3 font-weight-normal">Registration </h1>
53     <label for="inputEmail" class="sr-only">Email</label>
54     <input type="email" name="email" id="inputEmail" class="form-control" placeholder="Email" required autofocus>
55     <label for="inputUsername" class="sr-only">Username</label>
56     <input type="text" name="username" id="inputUsername" class="form-control" placeholder="Username" required>
57     <label for="inputName" class="sr-only">Name</label>
58     <input type="text" name="name" id="inputName" class="form-control" placeholder="Name" required>
59     <label for="inputAge" class="sr-only">Age</label>
60     <input type="text" name="age" id="inputAge" class="form-control" placeholder="Age" required>
61     <label for="inputContact" class="sr-only">Contact</label>
62     <input type="text" name="contact" id="inputContact" class="form-control" placeholder="Contact number" required>
63     <label for="inputPassword" class="sr-only">Password</label>
64     <input type="password" name="password" id="inputPassword" class="form-control" placeholder="Password" required>
65
66     <div class="p-1">
67       <a href="login.php">Already have an account? Click here.</a>
68     </div>
69     <button class="btn btn-lg btn-primary btn-block" type="submit" name="submit">Sign up</button>
70     <p class="mt-5 mb-3 text-muted">&copy; Szepetry: 2021-present</p>
71   </form>
72 </body>
73 </html>

```

Figure 1.2.4: Implementation of index.php

For the registration functionality, we store the entered information in their respective variables. Then we do an “insert into” query to the MySQL database and insert the given information. If the result is successfully returned, then we display a dialog box saying “Registration successful” else it will just echo “Fail”.

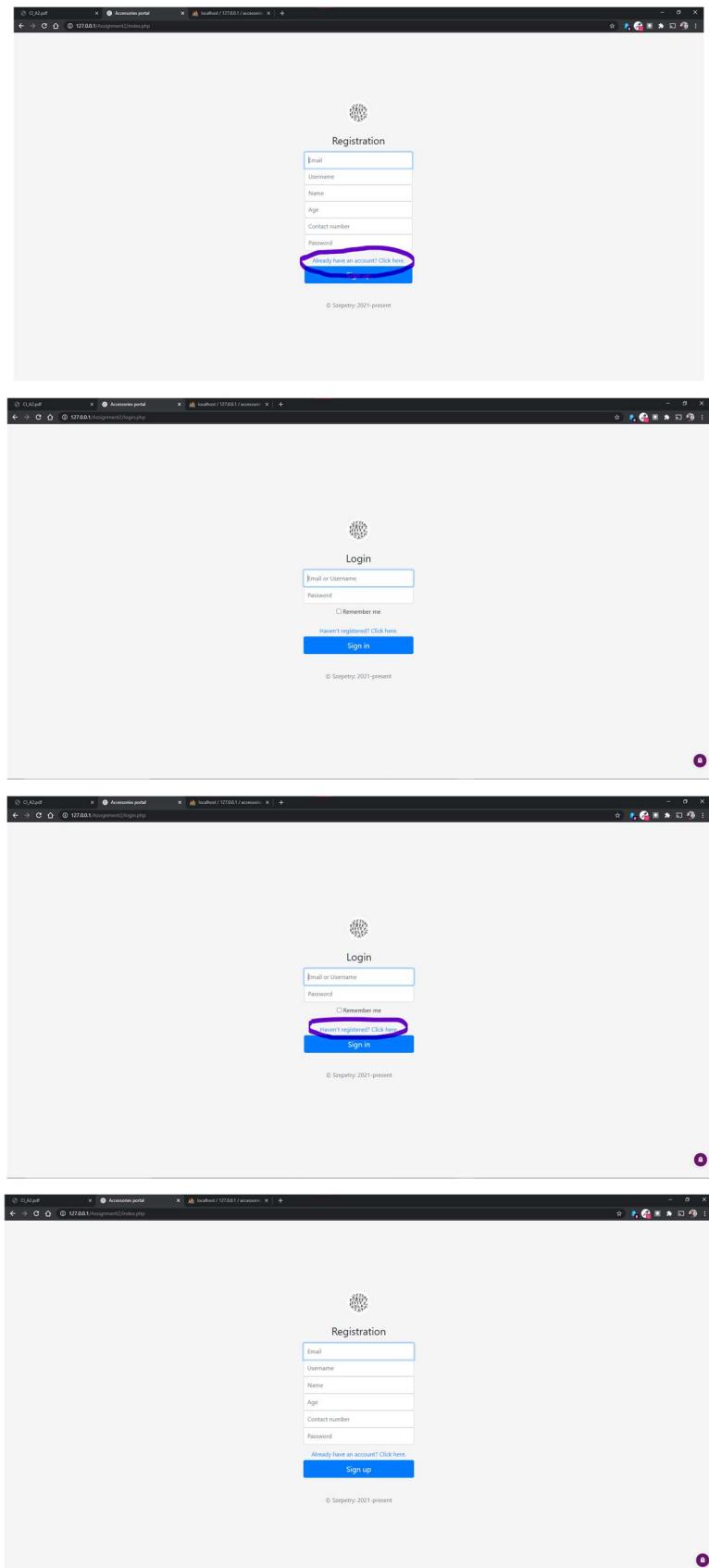
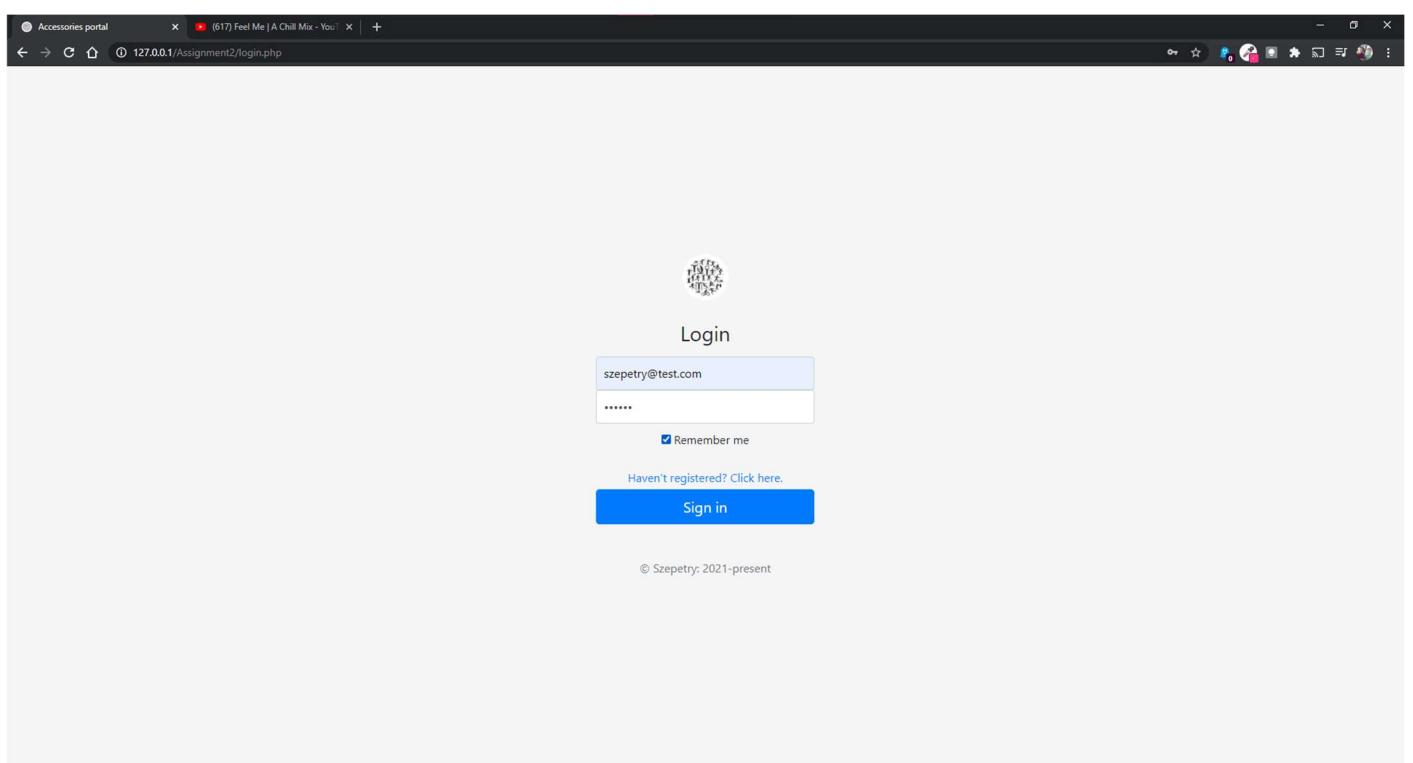
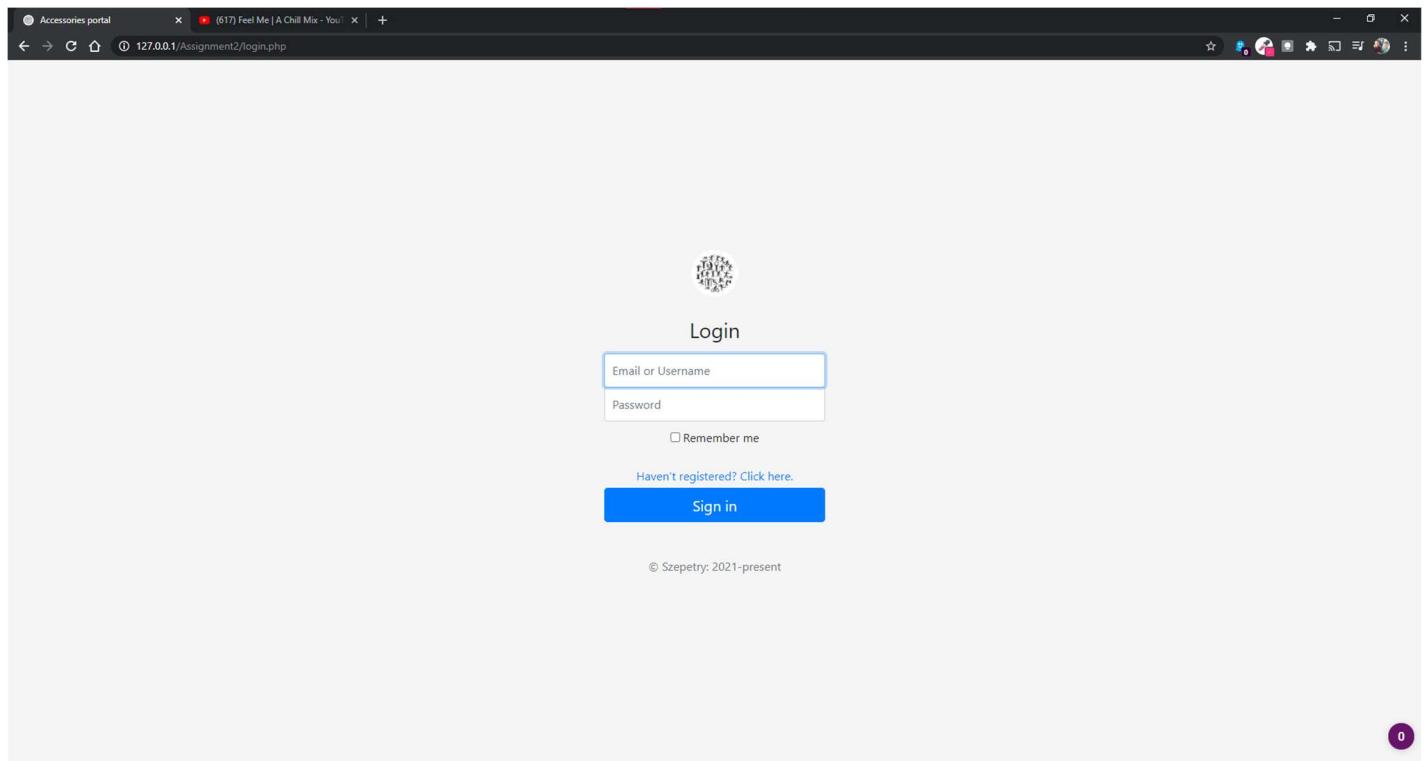


Figure 1.2.5: Using “Already have an account? Click here” and “Haven’t registered? Click here” functionalities to change pages.



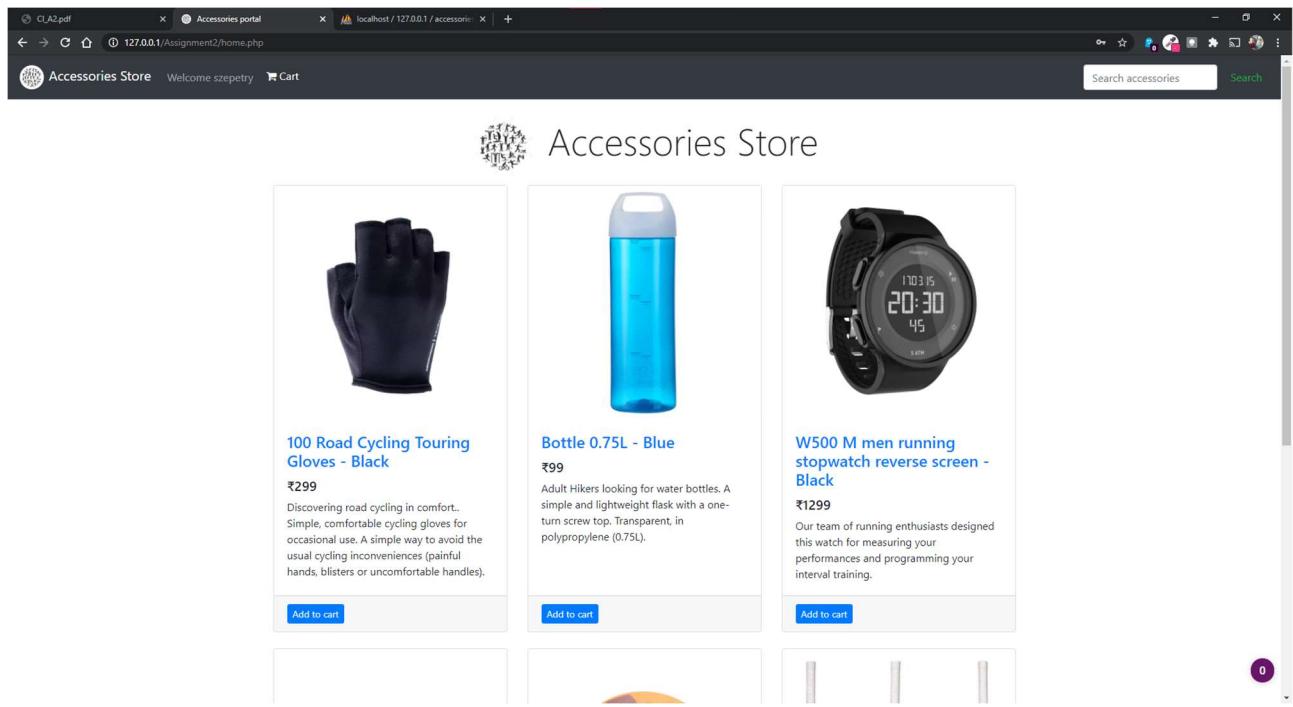


Figure 1.2.6: Visiting login.php on chrome to login to the application.

A user can enter both username or email and their password for the same account to login to the Accessories store. The username or email for a user is searched for in the database and then we check if that user's password in database matches the password entered here. If yes, then the user is authenticated and moved to Accessories store homepage else they have to reenter the credentials.

```

index.php login.php ●
login.php > html > head > link
1   <!DOCTYPE html>
2   <html lang="en">
3
4   <head>
5     <meta charset="UTF-8">
6     <title>Accessories portal</title>
7     <style>
8       .bd-placeholder-img {
9         font-size: 1.125rem;
10        text-anchor: middle;
11        -webkit-user-select: none;
12        -moz-user-select: none;
13        -ms-user-select: none;
14        user-select: none;
15      }
16    </style>
17    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"
18      integrity="sha384-TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jfIDPvg6uqKI2xXr2" crossorigin="anonymous">
19    <link href="signin.css" rel="stylesheet">
20  </head>
21
22  <body class="text-center">
23    <?php
24      $password = $email = $username = "";
25      if (isset($_POST['username']) || isset($_POST['email'])) {
26        $username = $_POST['username'];
27        $email = $_POST['email'];
28
29        $password = $_POST['password'];
30
31        $con = mysqli_connect("localhost", "root", "", "accessories");
32
33        if (mysqli_connect_errno()) {
34          echo "Failed to connect to MySQL: " . mysqli_connect_error();
35        }
36
37        $query = "SELECT * FROM users WHERE (username='$username' or email='$email') and password='$password'";
38        $result = mysqli_query($con, $query);
39
40        if ($result) {
41          if (mysqli_num_rows($result) > 0) {
42            session_start();
43            $_SESSION['username'] = $username;
44            $_SESSION['email'] = $email;
45
46            header("Location: home.php");
47          } else {
48            echo ("Invalid credentials");
49          }
50        } else {
51          echo ("Invalid credentials");
52        }
53      }
54    ?>
55
56
57    <form role="form" id="templateno-preferences-form" name="login" action="" method="post" class="form-signin">
58      
59      <h1 class="h3 mb-3 font-weight-normal">Login </h1>
60      <label for="inputEmail" class="sr-only">Email</label>
61      <input type="text" name="email" id="inputEmail" class="form-control" placeholder="Email or Username" required autofocus>
62      <label for="inputPassword" class="sr-only">Password</label>
63      <input type="password" name="password" id="inputPassword" class="form-control" placeholder="Password" required>
64      <div class="checkbox mb-3">
65        <label>
66          <input type="checkbox" value="remember-me"> Remember me
67        </label>
68      </div>
69      <!--<a href="#">Haven't registered? Click here.</a>-->
70      <div class="p-1">
71        <a href="index.php">Haven't registered? Click here.</a>
72      </div>
73      <button class="btn btn-lg btn-primary btn-block" type="submit" name="submit">Sign up</button>
74      <!--<button type="submit" name="submit" value="Register" >Update</button>-->
75      <p class="mt-5 mb-3 text-muted">&copy; Szepetry: 2021-present</p>
76
77    </form>
78
79  </body>
80  </html>

```

Figure 1.2.7: Implementation of login.php

For the login functionality, we store the entered information in their respective variables. We then select the row where (username or email) and password are same. If such a case is found, we return that row and log the user in with that information. We pass the new page as a header to authenticate to the new page and take the session variables along.

1.3 Implementation of Sport accessories reservation for user

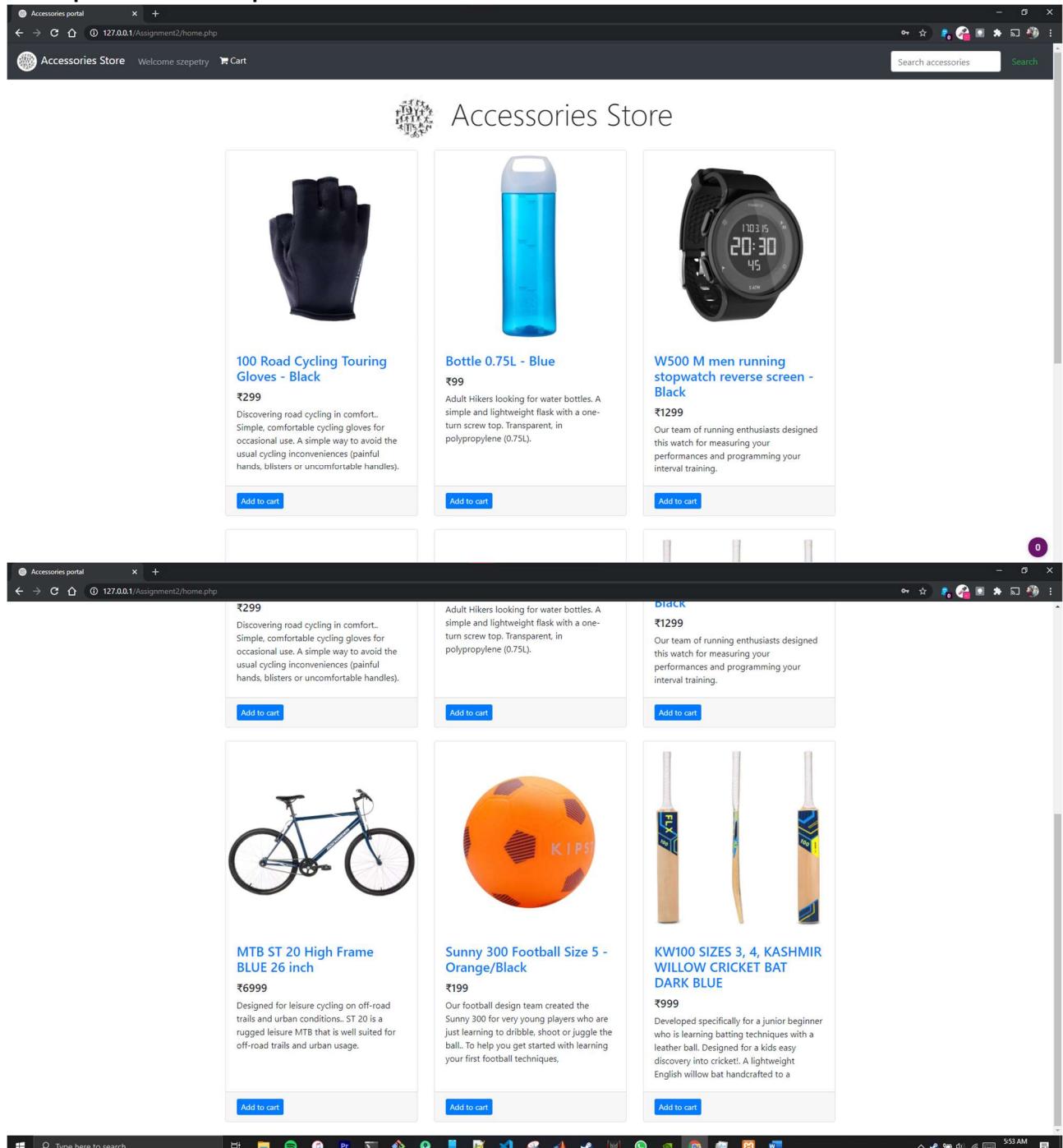


Figure 1.3.1: Visiting home.php.

We can here see the whole home.php view with all the items on screen. Each card gets a Add to cart button to add that item to cart.

Accessories Store

Search accessories **Search**

Accessories Store



100 Road Cycling Touring Gloves - Black
₹299

Discovering road cycling in comfort.. Simple, comfortable cycling gloves for occasional use. A simple way to avoid the usual cycling inconveniences (painful hands, blisters or uncomfortable handles).

Add to cart



Bottle 0.75L - Blue
₹99

Adult Hikers looking for water bottles. A simple and lightweight flask with a one-turn screw top. Transparent, in polypropylene (0.75L).

Add to cart



W500 M men running stopwatch reverse screen - Black
₹1299

Our team of running enthusiasts designed this watch for measuring your performances and programming your interval training.

Add to cart

Accessories Store

Search accessories **Search**



100 Road Cycling Touring Gloves - Black
₹299

Total: ₹398

Checkout



Bottle 0.75L - Blue
₹99

Adult Hikers looking for water bottles. A simple and lightweight flask with a one-turn screw top. Transparent, in polypropylene (0.75L).

Add to cart



W500 M men running stopwatch reverse screen - Black
₹1299

Our team of running enthusiasts designed this watch for measuring your performances and programming your interval training.

Add to cart

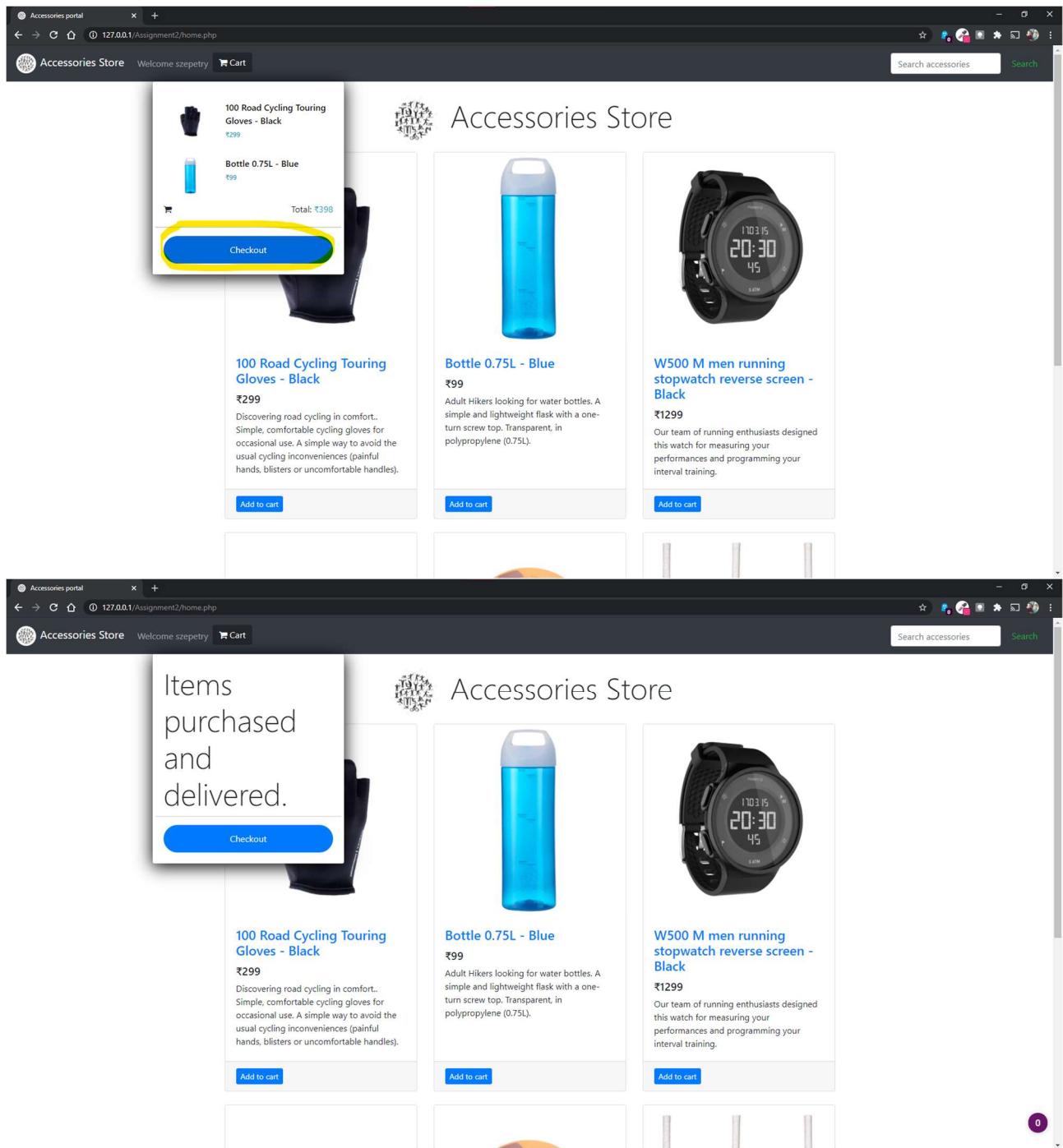


Figure 1.3.2: Steps for buying accessories from Accessories Store.

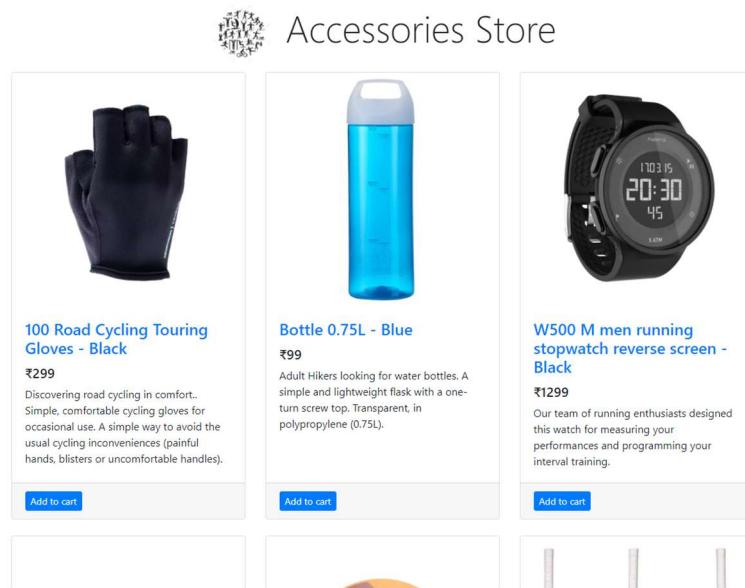
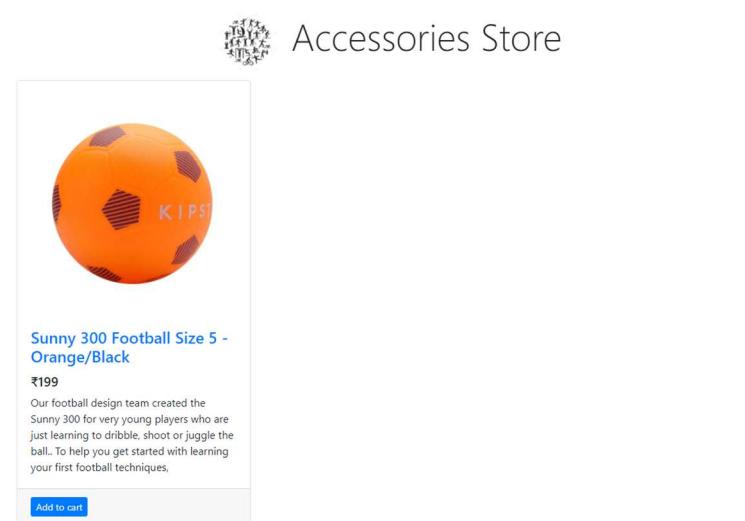
We can here see how the items are selected, added to cart and then purchased by checking out. We can any item we like, in any order or even multiples of them.

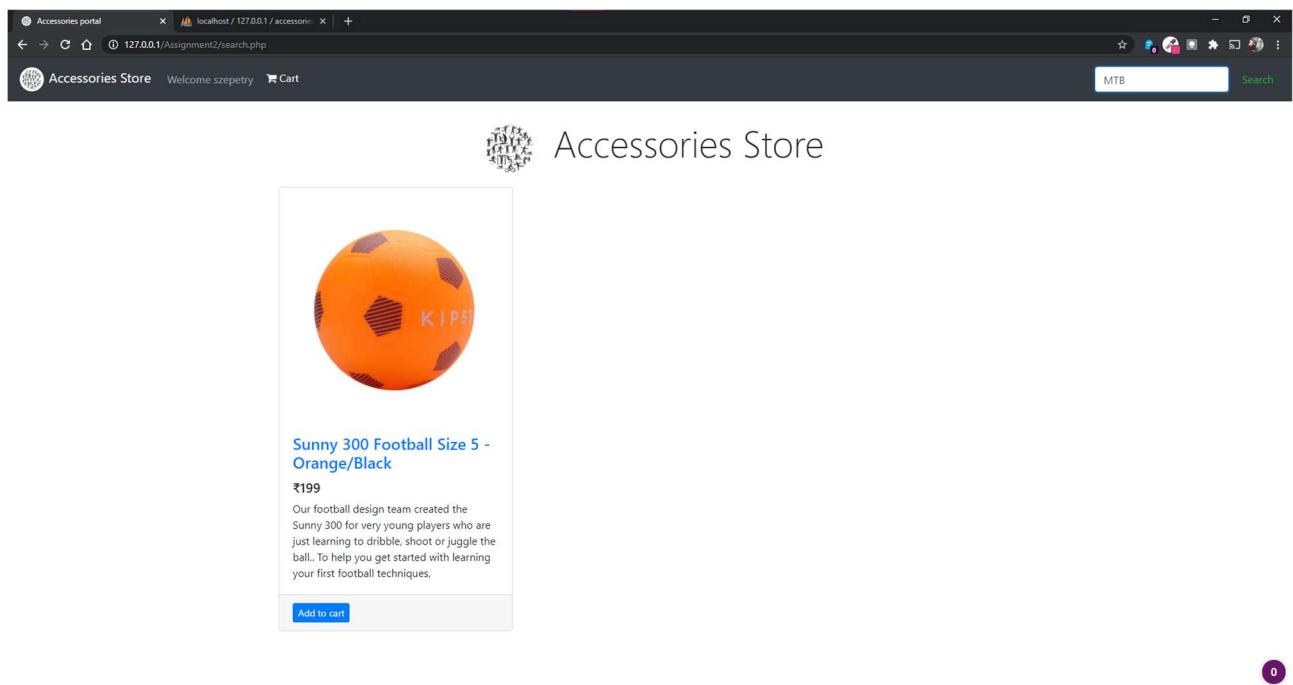
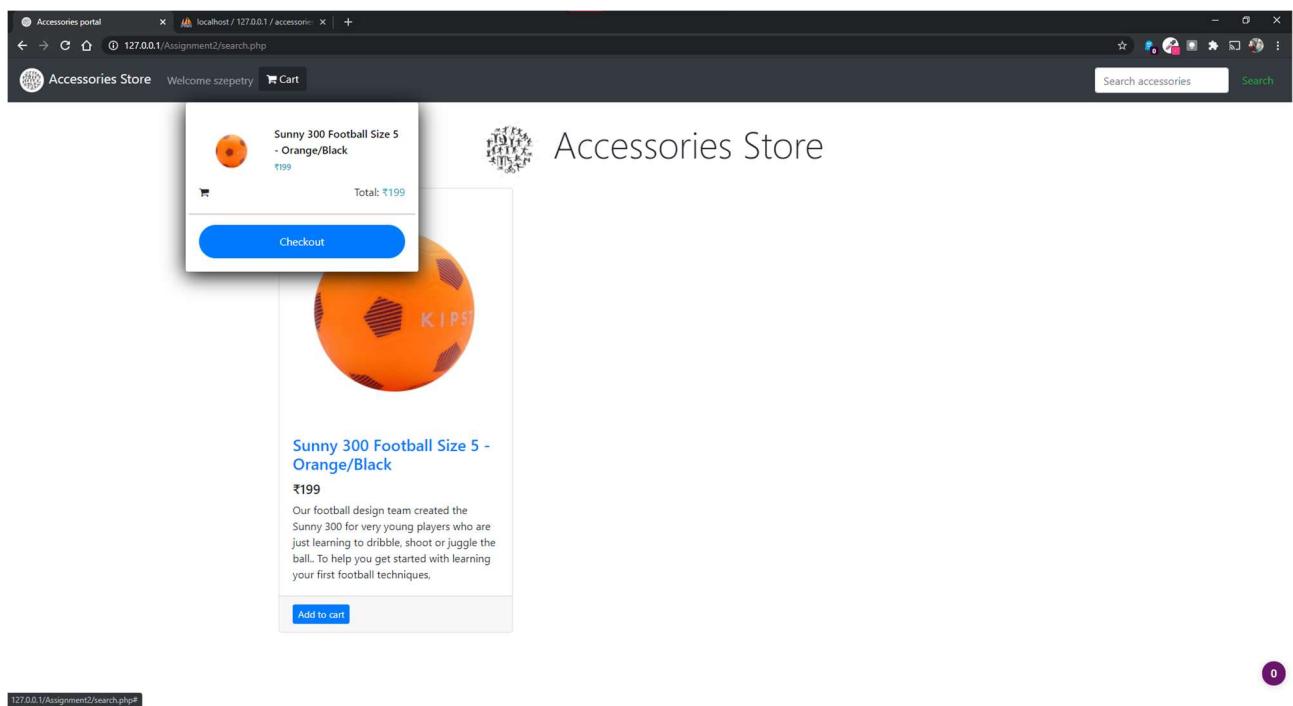
| | <input type="checkbox"/> | productId | description | productName | imageUrl | price | quantity |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------|---|---|---|-------|----------|
| <input type="checkbox"/> | 1 | Discovering road cycling in comfort.. Simple, comf... | 100 Road Cycling Touring Gloves - Black | https://contents.mediadecathlon.com/p1631814/99a70... | 299 | 3 |
| <input type="checkbox"/> | 2 | Adult Hikers looking for water bottles. A simple a... | Bottle 0.75L - Blue | https://contents.mediadecathlon.com/p453615/1a6683... | 99 | 7 |
| <input type="checkbox"/> | 3 | Our team of running enthusiasts designed this watc... | W500 M men running stopwatch reverse screen - Blac... | https://contents.mediadecathlon.com/p1524413/a56b9... | 1299 | 14 |
| <input type="checkbox"/> | 4 | Designed for leisure cycling on off-road trails an... | MTB ST 20 High Frame BLUE 26 inch | https://contents.mediadecathlon.com/p1831242/83d23... | 6999 | 4 |
| <input type="checkbox"/> | 5 | Our football design team created the Sunny 300 for... | Sunny 300 Football Size 5 - Orange/Black | https://contents.mediadecathlon.com/p1792686/2f398... | 199 | 8 |
| <input type="checkbox"/> | 6 | Developed specifically for a junior beginner who i... | KW100 SIZES 3, 4, KASHMIR WILLOW CRICKET BAT DARK ... | https://contents.mediadecathlon.com/p1805307/e6e59... | 999 | 5 |

Figure 1.3.3: Accessories quantity before checkout

| | <input type="checkbox"/> | productId | description | productName | imageUrl | price | quantity |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------|---|---|---|-------|----------|
| <input type="checkbox"/> | 1 | Discovering road cycling in comfort.. Simple, comf... | 100 Road Cycling Touring Gloves - Black | https://contents.mediadecathlon.com/p1631814/99a70... | 299 | 2 |
| <input type="checkbox"/> | 2 | Adult Hikers looking for water bottles. A simple a... | Bottle 0.75L - Blue | https://contents.mediadecathlon.com/p453615/1a6683... | 99 | 6 |
| <input type="checkbox"/> | 3 | Our team of running enthusiasts designed this watc... | W500 M men running stopwatch reverse screen - Blac... | https://contents.mediadecathlon.com/p1524413/a56b9... | 1299 | 14 |
| <input type="checkbox"/> | 4 | Designed for leisure cycling on off-road trails an... | MTB ST 20 High Frame BLUE 26 inch | https://contents.mediadecathlon.com/p1831242/83d23... | 6999 | 4 |
| <input type="checkbox"/> | 5 | Our football design team created the Sunny 300 for... | Sunny 300 Football Size 5 - Orange/Black | https://contents.mediadecathlon.com/p1792686/2f398... | 199 | 8 |
| <input type="checkbox"/> | 6 | Developed specifically for a junior beginner who i... | KW100 SIZES 3, 4, KASHMIR WILLOW CRICKET BAT DARK ... | https://contents.mediadecathlon.com/p1805307/e6e59... | 999 | 5 |

Figure 1.3.4: Accessories quantity after checkout



Accessories portal | localhost / 127.0.0.1 / accessories | +

127.0.0.1/Assignment2/search.php

Accessories Store Welcome szepety Cart Search accessories Search

Accessories Store



**MTB ST 20 High Frame
BLUE 26 inch**

₹6999

Designed for leisure cycling on off-road trails and urban conditions.. ST 20 is a rugged leisure MTB that is well suited for off-road trails and urban usage.

Add to cart

0

Accessories portal | localhost / 127.0.0.1 / accessories | +

127.0.0.1/Assignment2/search.php

Accessories Store Welcome szepety Cart Search accessories Search



Accessories Store



Sunny 300 Football Size 5 - Orange/Black ₹199

**MTB ST 20 High Frame
BLUE 26 inch**

₹6999

Total: ₹7198

Checkout

**MTB ST 20 High Frame
BLUE 26 inch**

₹6999

Designed for leisure cycling on off-road trails and urban conditions.. ST 20 is a rugged leisure MTB that is well suited for off-road trails and urban usage.

Add to cart

0

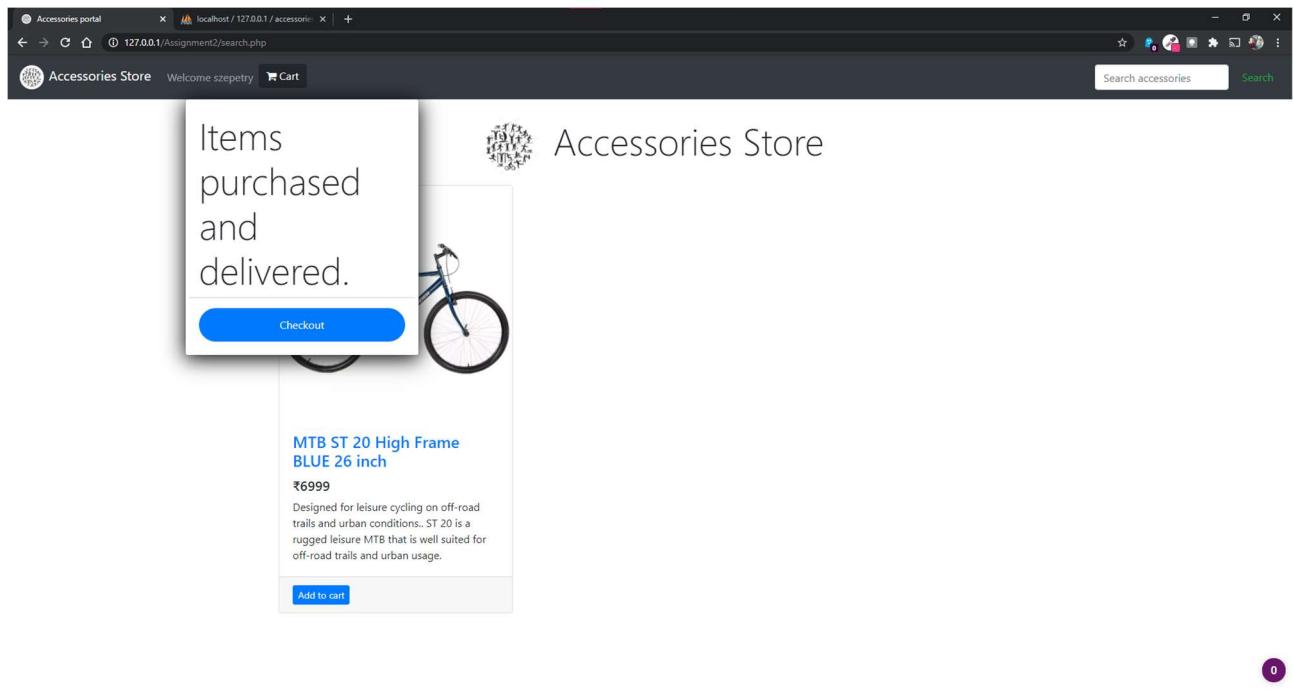


Figure 1.3.5: Steps for searching accessories, adding to cart after searching and then checking out.

We can here see how items can be searched for using the Search accessories textbox on top right on home.php . Once they are searched, we are taken to search.php, the page that displays the searched items. The item was then added to cart from this page. The same search can also be used on the same search page as well. The new item is also added and then we show all the cart items. After we were done with shopping, we checkout.

```
style.css > .dropdown .dropdown-menu
1  .main-section{
2    background-color: #F8F8F8;
3    margin-top:60px;
4  }
5  .dropdown{
6    float:right;
7    padding-right: 30px;
8  }
9  .btn{
10   border:0px;
11   margin:0px 0px;
12   box-shadow:none !important;
13 }
14 .dropdown .dropdown-menu{
15   padding:20px;
16   top:50px !important;
17   width:350px !important;
18   left:-110px !important;
19   box-shadow:0px 5px 30px black;
20 }
21 .total-header-section{
22   border-bottom:1px solid #d2d2d2;
23 }
24 .total-section p{
25   margin-bottom:20px;
26 }
27 .cart-detail{
28   padding:15px 0px;
29 }
30 .cart-detail-img img{
31   width:100%;
32   height:100%;
33   padding-left:15px;
34 }
35 .cart-detail-product p{
36   margin:0px;
37   color:#0000;
38   font-weight:500;
39 }
40 .cart-detail .price{
41   font-size:12px;
42   margin-right:10px;
43   font-weight:500;
44 }
45 .cart-detail .count{
46   color:#C2C2DC;
47 }
48 .checkout{
49   border-top:1px solid #d2d2d2;
50   padding-top: 15px;
51 }
52 .checkout .btn-primary{
53   border-radius:50px;
54   height:50px;
55 }
56 .dropdown-menu:before{
57   content: " ";
58   position:absolute;
59   /* top:-20px; */
60   right:50px;
61   border:10px solid transparent;
62   border-bottom-color:#fff;
63 }
```

Figure 1.3.6: CSS for home.php and search.php

```

1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
5      <meta charset="UTF-8">
6      <title>Accessories portal</title>
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <style>
9          /* body {
10             padding-top: 56px;
11         } */
12
13         .layout {
14             background: lightcoral;
15             border: 2px solid black;
16         }
17
18         .topPadding {
19             padding-top: 20px;
20         }
21
22         .center {
23             text-align: center;
24             /* float: ; */
25             /* vertical-align: middle; */
26             /* align-items: center; */
27             /* display: flex; */
28             margin-left: auto;
29             margin-right: auto;
30             /* border: 3px solid green; */
31         }
32     </style>
33     <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"
34     integrity="sha384-TXtZ2EcRE3eJhU7zmQxVncDAy5uIKz4rEkgIXeMedMjIhfIDPvg6uK12xX2" crossorigin="anonymous">
35     <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/font-awesome/4.7.0/css/font-awesome.min.css" />
36     <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
37     <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"></script>
38     <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>
39     <link rel="stylesheet" type="text/css" href="style.css" />
40
41 </head>
42
43
44 <body>
45     <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
46         <a class="navbar-brand" href="home.php"> Accessories Store</a>
47         <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent"
48             aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
49             <span class="navbar-toggler-icon"></span>
50         </button>
51
52         <div class="collapse navbar-collapse" id="navbarSupportedContent">
53             <ul class="navbar-nav mr-auto">
54                 <li class="nav-item">
55                     <a class="nav-link"><?php
56                         session_start();
57
58                         $email = $_SESSION['email'];
59                         printExplode("@", "Welcome " . $email[0]); ?>
60                     </a>
61                 </li>
62
63                 <li class="nav-item">
64                     <div class="dropdown">
65                         <button type="button" class="btn btn-dark" data-toggle="dropdown">
66                             <i class="fa fa-shopping-cart" aria-hidden="true"></i> Cart
67                             <!-- <span class="badge badge-pill badge-light">3</span> -->
68                         </button>
69                         <div class="dropdown-menu">
70                             <?php
71                             if (isset($_POST['search'])) {
72                                 // session_start();
73
74                                 $_SESSION['search'] = $_POST['search'];
75                                 header("Location: search.php");
76                             }
77
78                             if (!isset($_POST['checkout'])) {
79                                 $con = mysqli_connect("localhost", "root", "", "accessories");
80
81                                 if (mysqli_connect_errno()) {
82                                     echo "Failed to connect to MySQL: " . mysqli_connect_error();
83
84                                 $query = "select * from cart";
85                                 $r = mysqli_query($con, $query);
86
87                                 $_SESSION['price'] = 0;
88
89                                 $price = 0;
90                                 if ($mysql_num_rows($r) > 0) {
91                                     while ($rw = mysqli_fetch_assoc($r)) {
92                                         echo '<div class="row cart-detail">';
93                                         <div class="col-lg-4 col-sm-4 col-4 cart-detail-img">
94                                             
95                                         </div>
96                                         <div class="col-lg-8 col-sm-8 col-8 cart-detail-product">
97                                             <p>' . $rw["productName"] . '</p>
98                                             <span class="price text-info">₹' . $rw["price"] . '</span>
99                                         </div>
100                                         </div>';
101                                         $SESSION['price'] += (int)$rw["price"];
102                                         $price = $SESSION['price'];
103                                     }
104                                     echo '<div class="row total-header-section">';
105                                     <div class="col-lg-6 col-sm-6 col-6">
106                                         <i class="fa fa-shopping-cart" aria-hidden="true"></i>
107
108                                     </div>
109                                     <div class="col-lg-6 col-sm-6 col-6 total-section text-right">
110                                         <p>Total: <span class="text-info">₹' . $price . '</span></p>
111                                     </div>
112                                 </div>';
113                             }
114                         </?php>
115                     </div>
116                 </li>
117             </ul>
118         </div>
119     </nav>
120
121     <div class="topPadding" style="background-color: #f9f9f9; padding: 20px; border-radius: 10px; margin-bottom: 20px">
122         <div class="center">
123             <h2>Cart</h2>
124             <table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.9em">
125                 <thead>
126                     <tr>
127                         <th>Product Name</th>
128                         <th>Image</th>
129                         <th>Price</th>
130                         <th>Quantity</th>
131                         <th>Sub Total</th>
132                     </tr>
133                 </thead>
134                 <tbody>
135                     <tr>
136                         <td>Headphones</td>
137                         <td></td>
138                         <td>₹1200</td>
139                         <td>1</td>
140                         <td>₹1200</td>
141                     </tr>
142                     <tr>
143                         <td>Smartphone</td>
144                         <td></td>
145                         <td>₹2500</td>
146                         <td>1</td>
147                         <td>₹2500</td>
148                     </tr>
149                     <tr>
150                         <td>Earbuds</td>
151                         <td></td>
152                         <td>₹800</td>
153                         <td>1</td>
154                         <td>₹800</td>
155                     </tr>
156                     <tr>
157                         <td colspan="5" style="text-align: right; padding-right: 20px; font-weight: bold; font-size: 1.1em">Grand Total:</td>
158                     </tr>
159                     <tr>
160                         <td colspan="5" style="text-align: right; padding-right: 20px; font-weight: bold; font-size: 1.1em">₹3500</td>
161                     </tr>
162                 </tbody>
163             </table>
164             <div style="text-align: right; margin-top: 10px; font-size: 0.9em">
165                 <a href="index.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Continue Shopping</a>
166             </div>
167         </div>
168     </div>
169
170     <div class="center" style="margin-top: 20px; font-size: 0.9em">
171         <div style="text-align: center; margin-bottom: 10px">
172             <a href="index.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Home</a>
173             <span style="margin: 0 10px">|</span>
174             <a href="about.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">About Us</a>
175             <span style="margin: 0 10px">|</span>
176             <a href="contact.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Contact Us</a>
177         </div>
178         <div style="text-align: center; margin-bottom: 10px">
179             <a href="index.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Home</a>
180             <span style="margin: 0 10px">|</span>
181             <a href="cart.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Cart</a>
182             <span style="margin: 0 10px">|</span>
183             <a href="profile.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Profile</a>
184         </div>
185         <div style="text-align: center; margin-bottom: 10px">
186             <a href="index.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Home</a>
187             <span style="margin: 0 10px">|</span>
188             <a href="login.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Login</a>
189             <span style="margin: 0 10px">|</span>
190             <a href="register.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Register</a>
191         </div>
192         <div style="text-align: center; margin-bottom: 10px">
193             <a href="index.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Home</a>
194             <span style="margin: 0 10px">|</span>
195             <a href="search.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Search</a>
196             <span style="margin: 0 10px">|</span>
197             <a href="checkout.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Checkout</a>
198         </div>
199         <div style="text-align: center; margin-bottom: 10px">
200             <a href="index.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Home</a>
201             <span style="margin: 0 10px">|</span>
202             <a href="orderstatus.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Order Status</a>
203             <span style="margin: 0 10px">|</span>
204             <a href="returnstatus.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Return Status</a>
205         </div>
206         <div style="text-align: center; margin-bottom: 10px">
207             <a href="index.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Home</a>
208             <span style="margin: 0 10px">|</span>
209             <a href="privacy.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Privacy Policy</a>
210             <span style="margin: 0 10px">|</span>
211             <a href="terms.php" style="color: inherit; text-decoration: none; font-weight: bold; font-size: 1.1em">Terms of Service</a>
212         </div>
213     </div>
214
215 
```

```

113 } else {
114     echo "Empty cart";
115 }
116 } else {
117     echo "<h3 class='display-4'>Items purchased and delivered.</h3>";
118     $con = mysqli_connect("localhost", "root", "", "accessories");
119
120     if (mysqli_connect_errno()) {
121         echo "Failed to connect to MySQL: " . mysqli_connect_errno();
122     }
123
124     $query = "select * from cart";
125     $r = mysqli_query($con, $query);
126
127     // $resUpdate = "UPDATE `accessories` SET `quantity`=[value-6] WHERE 1";
128
129     if (mysqli_num_rows($r) > 0) {
130         while ($rw1 = mysqli_fetch_assoc($r)) {
131             $quantity = (int)$rw1['quantity'];
132             $productId = (int)$rw1['productId'];
133             // print($quantity);
134             if ($quantity > 0) {
135                 $quantity = $quantity - 1;
136                 // print($quantity);
137                 mysqli_query($con, "UPDATE `accessories` SET `quantity`= $quantity where productId = $productId");
138             } else {
139                 echo "error";
140             }
141         }
142     }
143
144     // $resUp = mysqli_query($con, "select * from accessories");
145
146
147     $r = mysqli_query($con, "delete from cart");
148
149
150     if ($r) {
151         //
152     } else {
153         echo "Error while checking out.";
154     }
155 }
156 } ?>
157
158 <form method="post">
159     <div class="row">
160         <div class="col-lg-12 col-sm-12 col-12 text-center checkout">
161             <button class="btn btn-primary btn-block" type="submit" name="checkout">Checkout</button>
162         </div>
163     </div>
164 </div>
165 </div>
166 </li>
167
168
169 </ul>
170 <form class="form-inline my-2 my-lg-0" method="post" role="form" id="templateno-preferences-form">
171     <input class="form-control mr-sm-2" type="text" placeholder="Search accessories" aria-label="Search" name="search" id="search">
172     <button class="btn btn-outline-success my-2 my-sm-0" type="submit" name="searchQ" value="Search">Search</button>
173 </form>
174
175
176
177
178 </div>
179 </nav>
180
181 <h1 class="display-4 center topPadding"> Accessories Store</h1>
182
183 <form method="post">
184     <div class="container">
185         <div class="row">
186             <?php
187                 $con = mysqli_connect("localhost", "root", "", "accessories");
188
189                 if (mysqli_connect_errno()) {
190                     echo "Failed to connect to MySQL: " . mysqli_connect_errno();
191                 }
192
193                 $query = "select * from accessories";
194                 $result = mysqli_query($con, $query);
195
196                 if (mysqli_num_rows($result) > 0) {
197                     while ($row = mysqli_fetch_assoc($result)) {
198
199                         if (isset($_POST[$row["productId"]])) {
200
201                             $con = mysqli_connect("localhost", "root", "", "accessories");
202
203                             if (mysqli_connect_errno()) {
204                                 echo "Failed to connect to MySQL: " . mysqli_connect_errno();
205                             }
206
207                             $insert_query = "INSERT INTO `cart` (productName,productId,description,price,imageUrl,quantity) VALUES
208                                 ('{$row['productName']}','{$row['productId']}','{$row['description']}','{$row['price']}',
209                                 '{$row['imageUrl']}','{$row['quantity']}')";
210
211                             $res = mysqli_query($con, $insert_query);
212
213                             if ($res) {
214                                 // print("<script>alert('success');</script>");
215                             } else {
216                                 echo ("Error: " . $res);
217                             }
218                         }
219                     }
220                 }
221             <div class="col-lg-4 col-md-6 mb-4">
222                 <div class="card h-100">
223                     <a href="#">
224                         <img
225                             class="card-img-top"
226

```

```

225     src= ' . $row["imageUrl"] . '
226     alt="";
227   />/>
228   <div class="card-body">
229     <h4 class="card-title">
230       <a href="#" . strval($row["productName"]) . '</a>
231     </h4>
232     <h5>$' . $row["price"] . '</h5>
233     <p class="card-text">
234       ' . $row["description"] . '
235     </p>
236   </div>
237   <div class="card-footer">
238     <input type="submit" class="btn btn-primary btn-sm" name=' . $row["productId"] . ' value="Add to cart"/>
239   </div>
240   </div>
241 }
242 } else {
243   echo "error";
244 } ?>
245 </div>
246 </div>
247 </form>
248 </body>
249 </html>

```

Figure 1.3.7: Implementation for home.php

Here we can see the implementation for displaying the user's name on top with a welcome, displaying all the items on the page and being able to select them, pressing logo to go to home.php, searching for accessories and, viewing and checking out of the cart.

The cart implementation is done in the check for `$_POST['checkout']`. We select all the cart items and then display them in the dropdown for cart by injecting html for the same through PHP. We also calculate the total price of items in cart and display it. This total price is maintained by using session variables. When checkout of these items is triggered, the items are removed from the cart table in database and the quantity in accessories table is decreased by the number of items purchased in cart.

The search implementation is done in the check for `$_POST['search']`. When a search is triggered, we are taken to the search.php page and the searched query is also transferred there.

For displaying the items on home.php, we just retrieve the accessories data from accessories table and display the information as html on the page. All the items also have an add to cart button that when clicked inserts that particular row from accessories to the cart table.

```

search.php > html > body > form > div.container > div.row
1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
5      <meta charset="UTF-8">
6      <title>Accessories portal</title>
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <style>
9          /* body {
10             padding-top: 56px;
11         } */
12
13         .layout {
14             background: lightcoral;
15             border: 2px solid black;
16         }
17
18         .topPadding {
19             padding-top: 20px;
20         }
21
22         .center {
23             text-align: center;
24             /* float: ; */
25             /* vertical-align: middle; */
26             /* align-items: center; */
27             /* display: flex; */
28             margin-left: auto;
29             margin-right: auto;
30             /* border: 3px solid green; */
31         }
32     </style>
33     <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"
34     integrity="sha384-TXtZzJ2fQVCLyYlDlE0I1vJw2uwwZlJ0QjZmOJiDp6JlfIDPvg6uQkI2xc2" crossorigin="anonymous">
35     <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/font-awesome/4.7.0/css/font-awesome.min.css" />
36     <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
37     <script src="https://cdn.jsdelivr.net/npm/popper.js@1.12.9/umd/popper.min.js"></script>
38     <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>
39     <link rel="stylesheet" type="text/css" href="style.css" />
40
41 </head>
42
43 <body>
44     <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
45         <a class="navbar-brand" href="home.php"> Accessories Store</a>
46         <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent"
47             aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
48             <span class="navbar-toggler-icon"></span>
49         </button>
50
51         <div class="collapse navbar-collapse" id="navbarSupportedContent">
52             <ul class="navbar-nav mr-auto">
53                 <li class="nav-item">
54                     <a class="nav-link" href="#">Welcome <?php
55                         session_start();
56                         $email = $_SESSION['email'];
57                         print(explode("@", $email)[0]);
58                         >> <span class="sr-only">(current)</span></a>
59                 </li>
60
61                 <li class="nav-item">
62                     <div class="dropdown">
63                         <button type="button" class="btn btn-dark" data-toggle="dropdown">
64                             <i class="fa fa-shopping-cart" aria-hidden="true"></i> Cart
65                             <!-- <span class="badge badge-pill badge-light">3</span> -->
66                         </button>
67                         <div class="dropdown-menu">
68                             <?php
69                             if (isset($_POST['search'])) {
70                                 $search = $_POST['search'];
71
72                                 $_SESSION['search'] = $search;
73                                 header("Location: search.php");
74                             }
75                         </?>
76
77                         if (!isset($_POST['checkout'])) {
78                             $con = mysqli_connect("localhost", "root", "", "accessories");
79
80                             if (mysqli_connect_errno()) {
81                                 echo "Failed to connect to MySQL: " . mysqli_connect_error();
82                             }
83
84                             $query = "select * from cart";
85                             $r = mysqli_query($con, $query);
86
87                             $_SESSION['price'] = 0;
88
89                             $price = 0;
90                             if (mysqli_num_rows($r) > 0) {
91                                 while ($rw = mysqli_fetch_assoc($r)) {
92                                     echo '<div class="row cart-detail">';
93                                     <div class="col-lg-4 col-sm-4 col-4 cart-detail-img">
94                                         <img src="" . $rw["imageUrl"] . "" />
95                                     </div>
96                                     <div class="col-lg-8 col-sm-8 col-8 cart-detail-product">
97                                         <p>' . $rw["productName"] . '</p>
98                                         <span class="price text-info">₹' . $rw["price"] . '</span>
99                                     </div>
100                                     <div>
101                                         $_SESSION['price'] += (int)$rw['price'];
102                                     </div>
103                                     echo '<div class="row total-header-section">';
104                                     <div class="col-lg-6 col-sm-6 col-6">
105                                         <i class="fa fa-shopping-cart" aria-hidden="true"></i>
106                                     </div>
107                                     <div class="col-lg-6 col-sm-6 col-6 total-section text-right">
108                                         <p>Total: <span class="text-info">₹' . $_SESSION['price'] . '</span></p>
109                                     </div>
110                                 </div>';
111                             }
112                         }
113                     </div>;

```

```

113     } else {
114         echo "Empty cart";
115     }
116 } else {
117     echo "<h3 class='display-4'>Items purchased and delivered.</h3>";
118     $con = mysqli_connect("localhost", "root", "", "accessories");
119
120     if (mysqli_connect_errno()) {
121         echo "Failed to connect to MySQL: " . mysqli_connect_errno();
122     }
123
124     $r = mysqli_query($con, "delete from cart");
125
126     if ($r) {
127         // ...
128     } else {
129         echo "Error while checking out.";
130     }
131 }
132 ?>
133
134 <form method="post">
135     <div class="row">
136         <div class="col-lg-12 col-sm-12 col-12 text-center checkout">
137             <button class="btn btn-primary btn-block" type="submit" name="checkout">Checkout</button>
138         </div>
139     </div>
140 </div>
141 </div>
142 </li>
143
144 </ul>
145 <form class="form-inline my-2 my-lg-0" method="post" role="form" id="templateno-preferences-form">
146     <input class="form-control mr-sm-2" type="text" placeholder="Search accessories" aria-label="Search" name="search" id="search">
147     <button class="btn btn-outline-success my-2 my-sm-0" type="submit" name="searchQ" value="Search">Search</button>
148 </form>
149
150
151
152 </div>
153 </nav>
154
155
156 <h1 class="display-4 center topPadding"> Accessories Store</h1>
157
158 <form method="post">
159     <div class="container">
160         <div class="row">
161             <php
162                 $con = mysqli_connect("localhost", "root", "", "accessories");
163
164                 if (mysqli_connect_errno()) {
165                     echo "Failed to connect to MySQL: " . mysqli_connect_errno();
166                 }
167
168                 $search = $_SESSION['search'];
169
170                 $query = "select * from accessories WHERE productName LIKE '%$search%'";
171                 $result = mysqli_query($con, $query);
172
173                 if (mysqli_num_rows($result) > 0) {
174                     while ($row = mysqli_fetch_assoc($result)) {
175
176                         if (isset($_POST[$row['productId']])) {
177
178                             $con = mysqli_connect("localhost", "root", "", "accessories");
179
180                             if (mysqli_connect_errno()) {
181                                 echo "Failed to connect to MySQL: " . mysqli_connect_errno();
182                             }
183
184                             $insert_query = "INSERT INTO `cart` (productName, productId, description, price, imageUrl, quantity)
185                             VALUES ('{$row['productName']}','{$row['productId']}','{$row['description']}','{$row['price']}',
186                             '{$row['imageUrl']}','{$row['quantity']}')";
187
188                             $res = mysqli_query($con, $insert_query);
189
190                             if ($res) {
191                                 // print("<script>alert('success')</script>");
192                             } else {
193                                 echo ("Error: " . $res);
194                             }
195                         }
196
197                         echo '<div class="col-lg-4 col-md-6 mb-4">
198                             <div class="card h-100">
199                               <a href="#">
200                                 <img
201                                     class="card-img-top"
202                                     src=' . $row['imageUrl'] . '
203                                     alt="">
204                               </a>
205                               <div class="card-body">
206                                 <h4 class="card-title">
207                                   <a href="#"> . $row["productName"] . '</a>
208                                 </h4>
209                                 <h5>' . $row["price"] . '</h5>
210                                 <p class="card-text">
211                                   ' . $row["description"] . '
212                                 </p>
213                               </div>
214                               <div class="card-footer">
215                                 <input type="submit" class="btn btn-primary btn-sm" name=' . $row["productId"] . ' value="Add to cart"/>
216                               </div>
217                           </div>;
218                         }
219                     } else {
220                         echo "error";
221                     }
222
223                 ?>
224             </div>

```

```
225 |     </div>
226 |   </form>
227 |
228 |
229 |
230 |   </body>
231 |
232 | </html>
```

Figure 1.3.8: Implementation for search.php

Here we can see the implementation for displaying the user's name on top with a welcome, displaying all the items on the page and being able to select them, pressing logo to go to home.php, searching for accessories and, viewing and checking out of the cart.

The cart implementation is done in the check for `$_POST['checkout']`. We select all the cart items and then display them in the dropdown for cart by injecting html for the same through PHP. We also calculate the total price of items in cart and display it. This total price is maintained by using session variables. When checkout of these items is triggered, the items are removed from the cart table in database and the quantity in accessories table is decreased by the number of items purchased in cart.

The search implementation is done in the check for `$_POST['search']`. When a search is triggered, we are taken to the search.php page and the searched query is also transferred there.

For displaying the items on search.php, we just retrieve the accessories data from accessories table for the searched query and display the information as html on the page. The search query is made in database using the MySQL LIKE operator to search for a specific item. All the items also have an add to cart button that when clicked inserts that particular row from accessories to the cart table.