CERTIFICATE OF COMPLETION

The certificate is personalized to

Zain raza

Usama

The successfully design & developed on **LAB AUTOMATION**

E-Project of HDSE 1 (3rd Semester)

APTECH Worldwide Computer Education

Shahrah-e-Faisal Center, Karachi.

LAB AUTOMATION

LAB AUTOMATION

Group Members

Design & Developed By

Zain Raza

Usama

Supervision By

Sir Arsalan

ACKNOWLEDGMENT

Acknowledgment is not more formality but a genuine opportunity to thanks all Those people without that active support in this project would not be able to be Possible We are thankful to almighty Allah with his grace and mercy for giving us strength Good sense and confidence to complete the project successfully we presenting on “Lab Automation” in your hands, we have tried over best to take all relevant and important topics in consideration so that this project may become more effective and a batter outlook to come. This project has been developed with the help of “PHP / MYSQL / JS / AJAX” I would like to acknowledge all those who have given moral support and helped me to Make this project a success. I wish to express my gratitude to **SIR ARSALAN** For his valuable guidance and support for the completion of this project.

And finally. I would to offer many thanks to all my colleagues
for their valuable

Suggestions and constructive feedback.

Requirement

LAB AUTOMATION

Introduction : –

The SRS Electrical appliances are the manufacturers of some electrical products like switch gears, fuses, capacitors, resistors, etc…. These products after manufactured they are sent for testing where the product is subjected to some testing conditions, and then after the testing is successful at their laboratories they are sent to CPRI for further testing process, so that they can get it approved from CPRI and then release the product into the market. If the testing fails then the product is sent back for re-manufacturing it and then they are again subjected to tests.

Existing Scenario : –

Initially after the product is manufactured the companies testing department tests the product and maintains the details of the testing done like the type of testing and as well the result of the testing that the product is subjected to. Actually the testing process usually depends on the type of the product to be tested.

Actually the testing records are maintained in papers and they mark how many products are sent for testing and as well how many are tested successfully and as well how any are not. Actually each product that is manufactured is allocated with some product id (10 digit code which includes the product code, the revise of the product, and the manufacturing number) and the records of testing are maintained based on the product id so that it becomes easier to track which product is tested successfully and which has failed the testing, and what all are needed to be done to over come the defaults, so that the products that are failed when subjected to tests can be sent for re-making.

It has become a tedious job as there is no automation in the process and as well it is a time consuming process for maintaining the records of testing and filing it, as it has to be shown to the concerned department, as based on the results of testing they

decide whether to send the product for further testing process or for re-making the product.

Some times misplacing of the records or the products take place or it might even happen like the record of one product is entered for the other, etc….. as in the testing department itself there are various departments which are based on the type of testing, and a product need two or more types of testing. As soon as a testing is finished in one department it is to be sent to the other department that performs the other type of testing.

Proposed Solution : –

In order to avoid the confusion in maintaining the records, misplacement of the records, and to reduce the time consumption in entering and fetching the details they want an application to be built that holds all the information of the testing like the type of testing conducted, result and even they should be able to capture the type of the testing done.

They say that they want the application in modular and sub modular form depending on the type of the testing and as well based on the type of the product. One should be able to access the product based on the product id or testing id. As soon as a testing record is entered the unique test id (12 digit code which includes the product code, the revise of the product, and as well the testing code and the testing roll number) should be generated automatically. They also say that they want an advanced search option through which they can fetch the details at an ease.

They also want the application to hold the detailed remarks where one can enter the testing is done based on which criteria, and what is the output seen for that testing, etc….

► Non-Financial :

- The details of the products and the testing like the product code, product id, testing id, the revise, the testing performed, remarks provided, the result of the testing, etc…. are needed to be maintained in a separate database.
- Product id should be a unique 10 digit code as described by the manufacturing unit and the testing id should be a unique 12 digit code, which should be automatically generated.
- An advanced search option is to be included.
- The application should contain a modular and the sub-modular form based on the type of the product and as well based on the type of the testing.
- One should be able to capture the detailed description of the remarks that include about the testing and what should be the output for that testing and the result of testing performed and as well the remarks if any for that particular product.
- One should be able to check the status of the testing.
- After entering the record, it should even ask for the name of the person (s) who has tested the product.

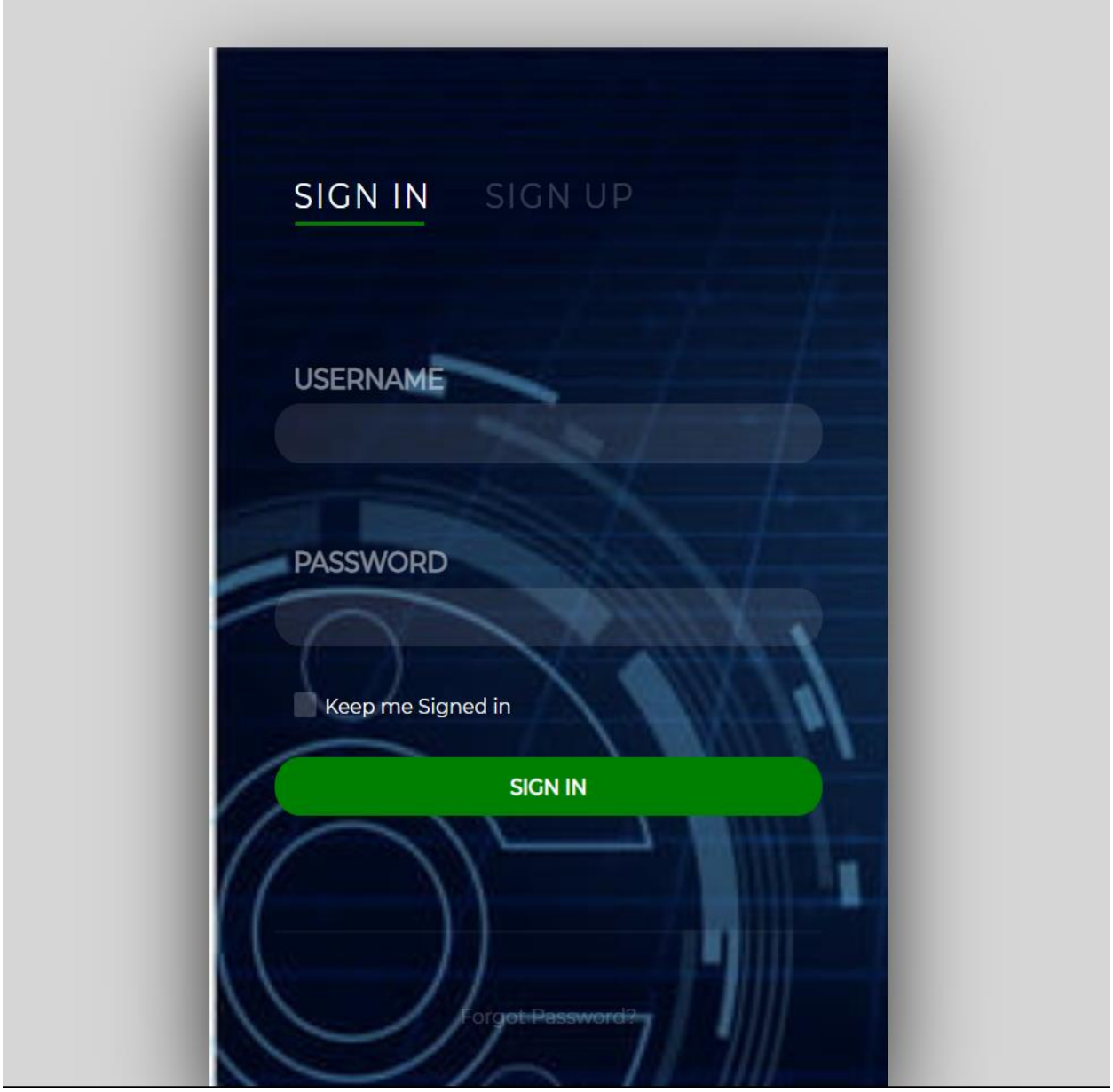
► Financial :

After the product is subjected for testing and if it fails it is to be sent for re-making else it will be sent for further testing procedures that are held by the CPRI and get it approved from them so as to release the product in to the market.

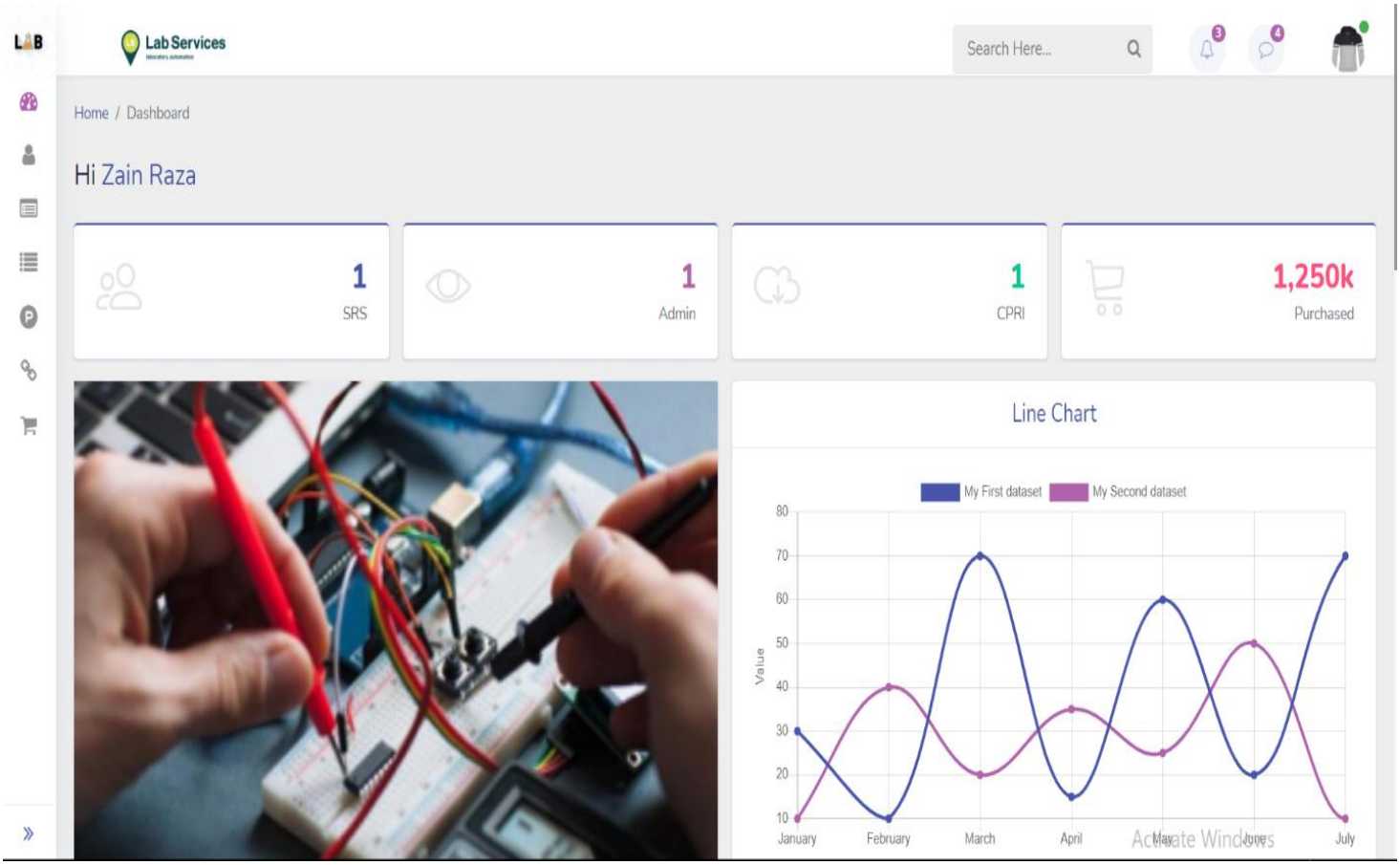
Functional Requirements : –

- The details are needed to be captured based on the type of the testing and as well based on the product.
- The status of the testing and as well the detailed remarks is also needed to be captured.
- An advanced search option is needed to be included so that one can fetch the details of the testing at an ease.

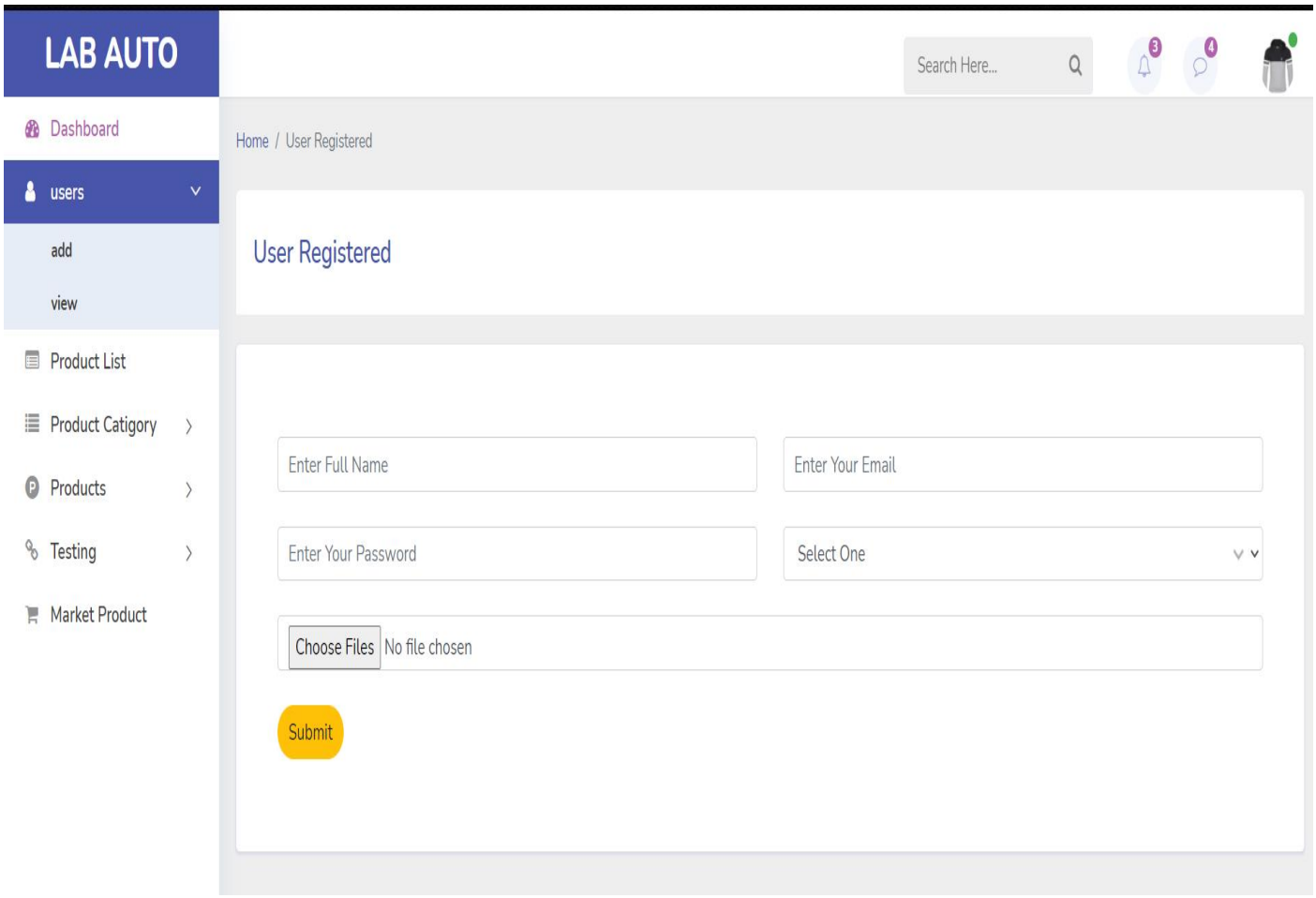
LOGIN PANNEL:



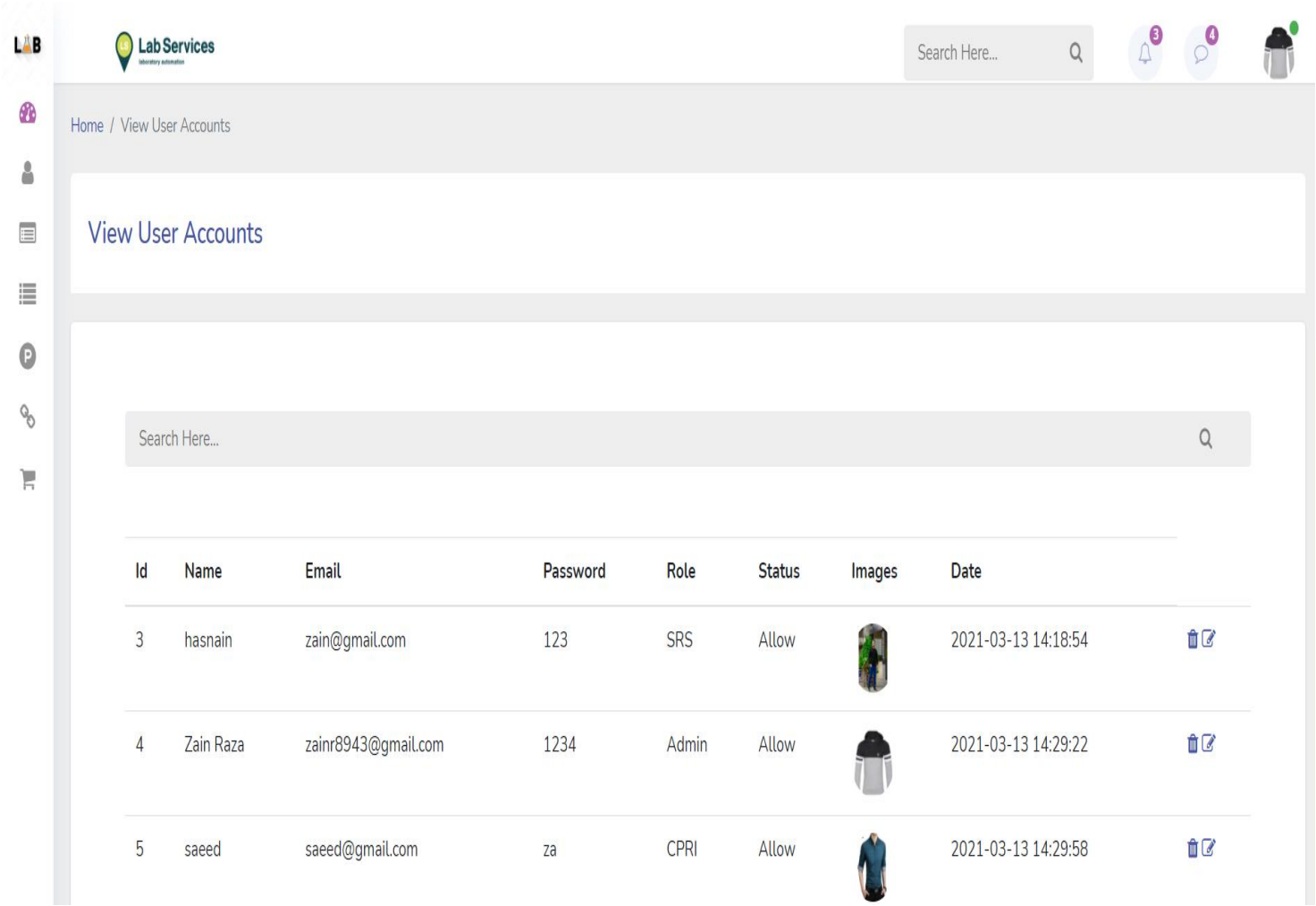
MAIN PAGE:


LAB
Lab Services
Search Here...
Home / Dashboard
Hi Zain Raza
1
SRS
1
Admin
1
CPRI
1,250k
Purchased
Line Chart
My First dataset
My Second dataset
Value
80
70
60
50
40
30
20
10
January
February
March
April
May
June
July
Activate Windows

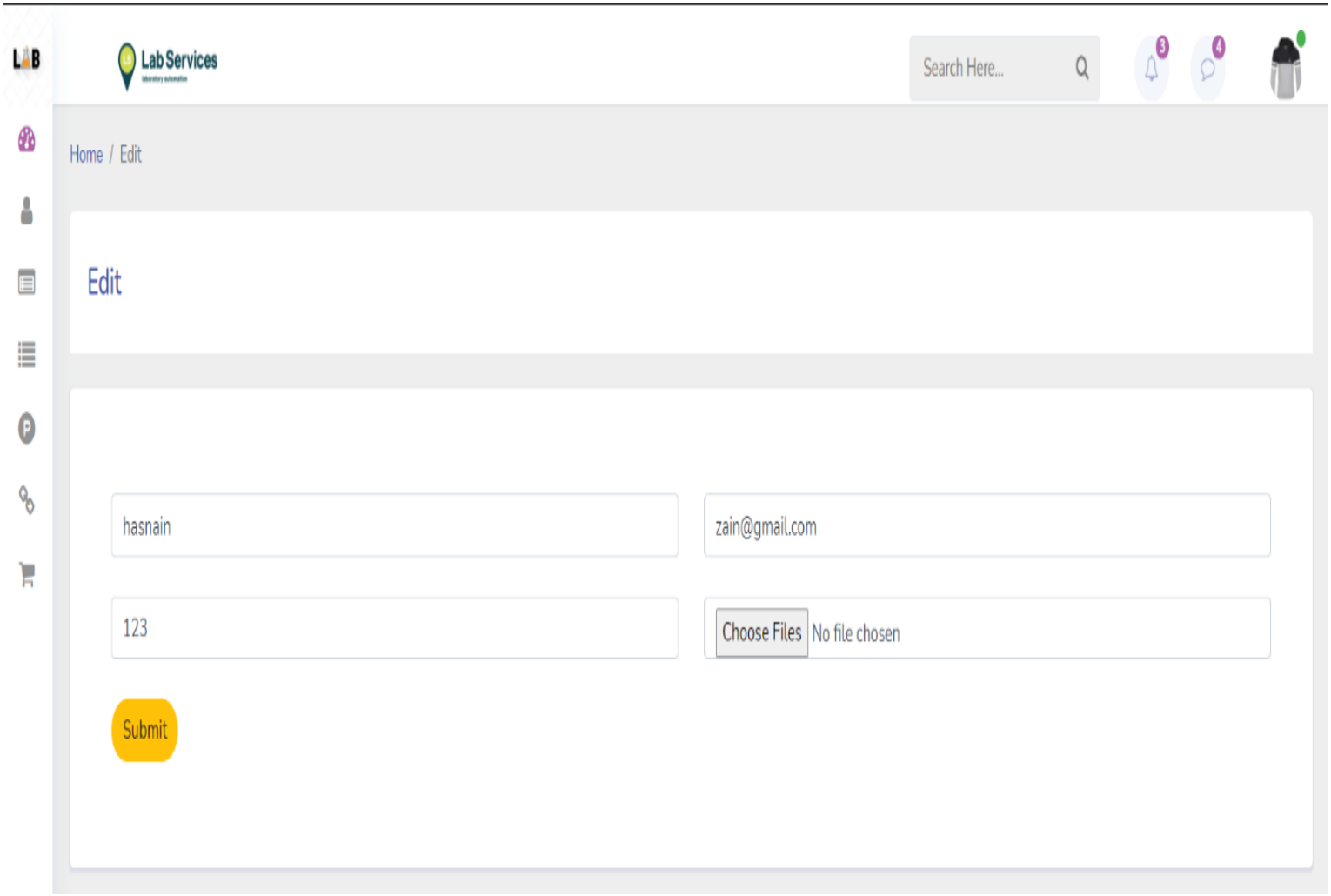
USER REGISTERED:



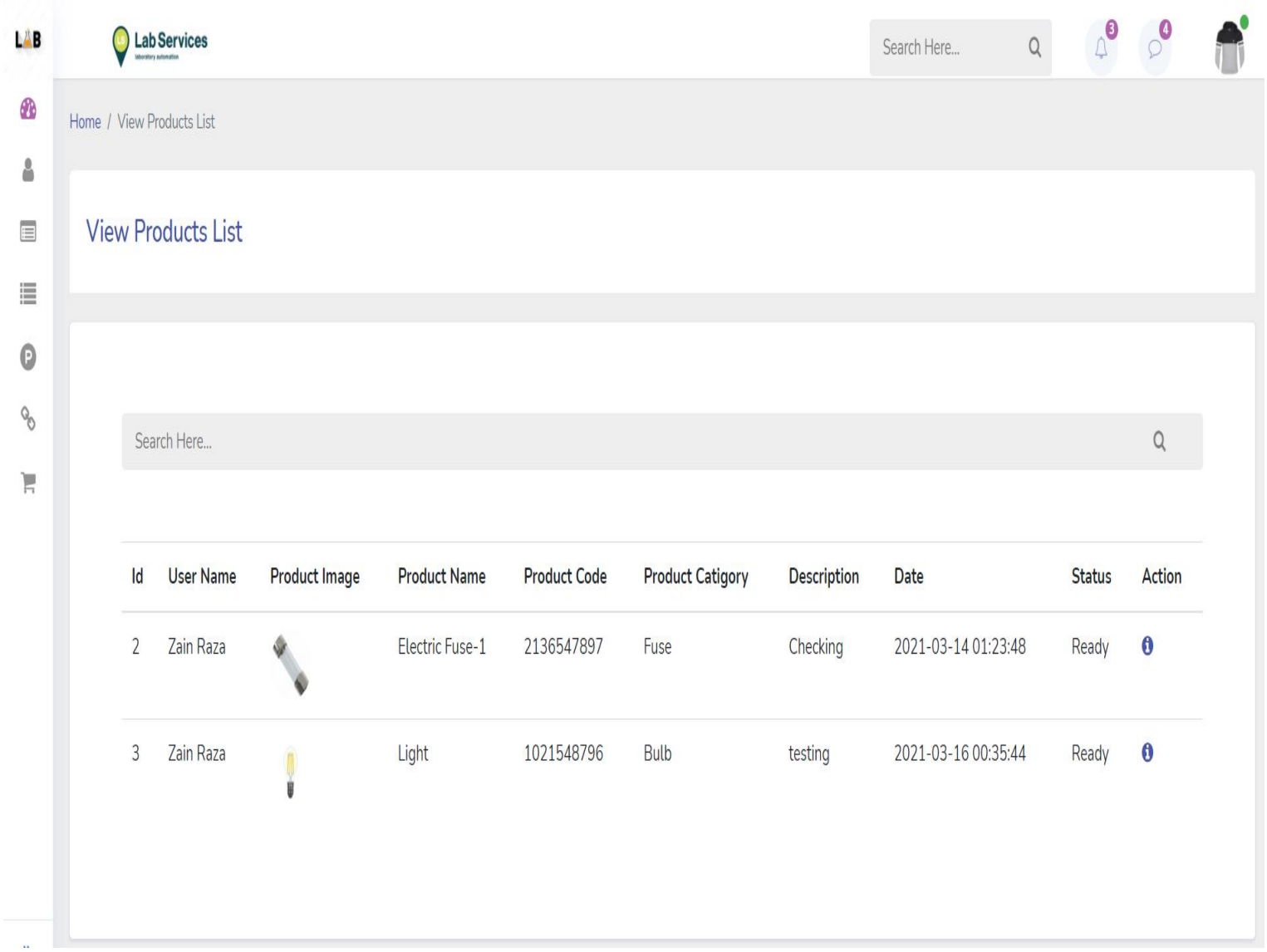
VIEW USER ACCOUNT:



EDIT:

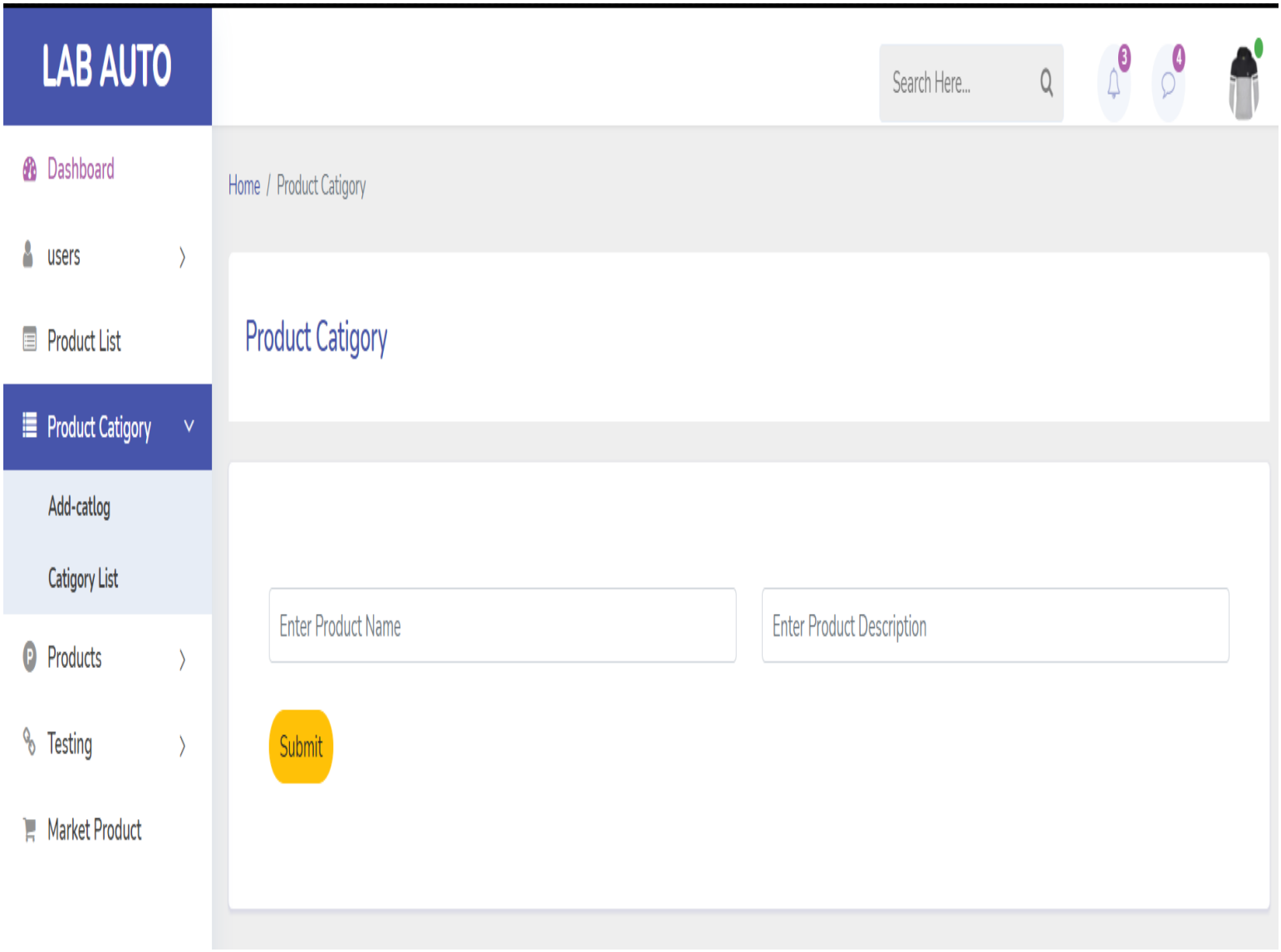

LAB
Lab Services
Search Here...
Home / Edit
Edit
hasnain
zain@gmail.com
123
Choose Files
No file chosen
Submit

VIEW PRODUCT LIST:

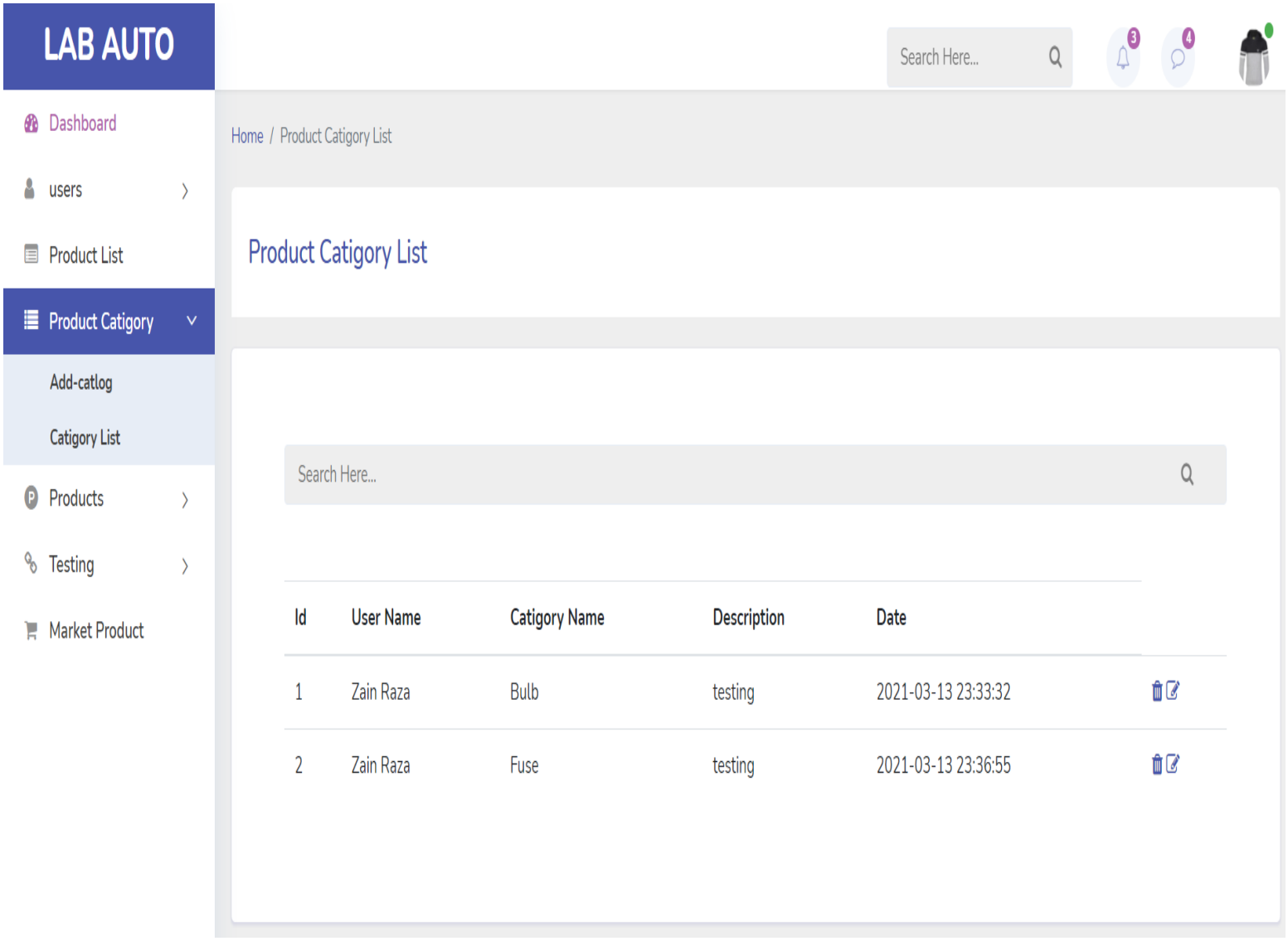


LAB AUTOMATION

PRODUCT CATIGORY:

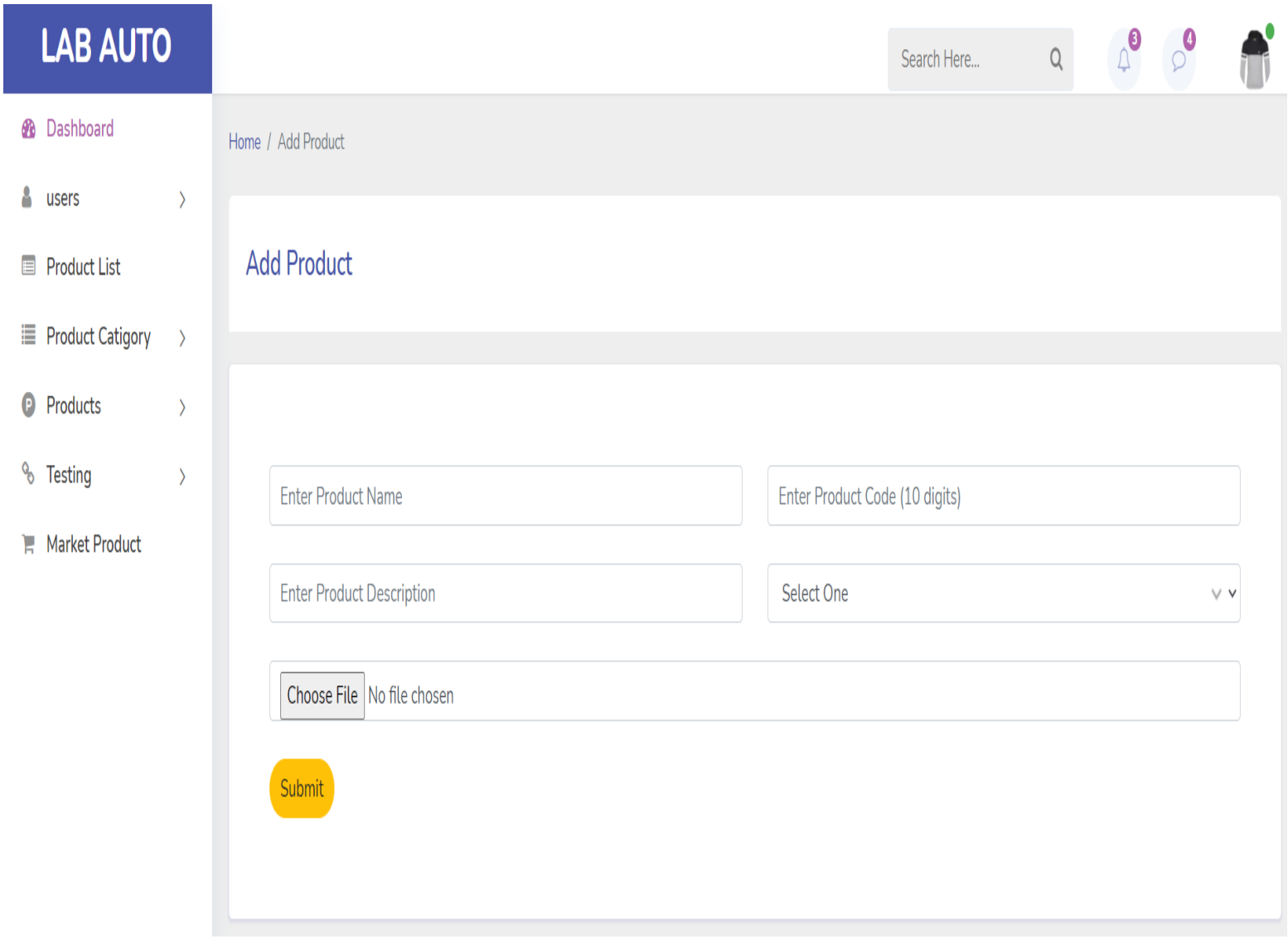


PRODUCT CATIGORY LIST:

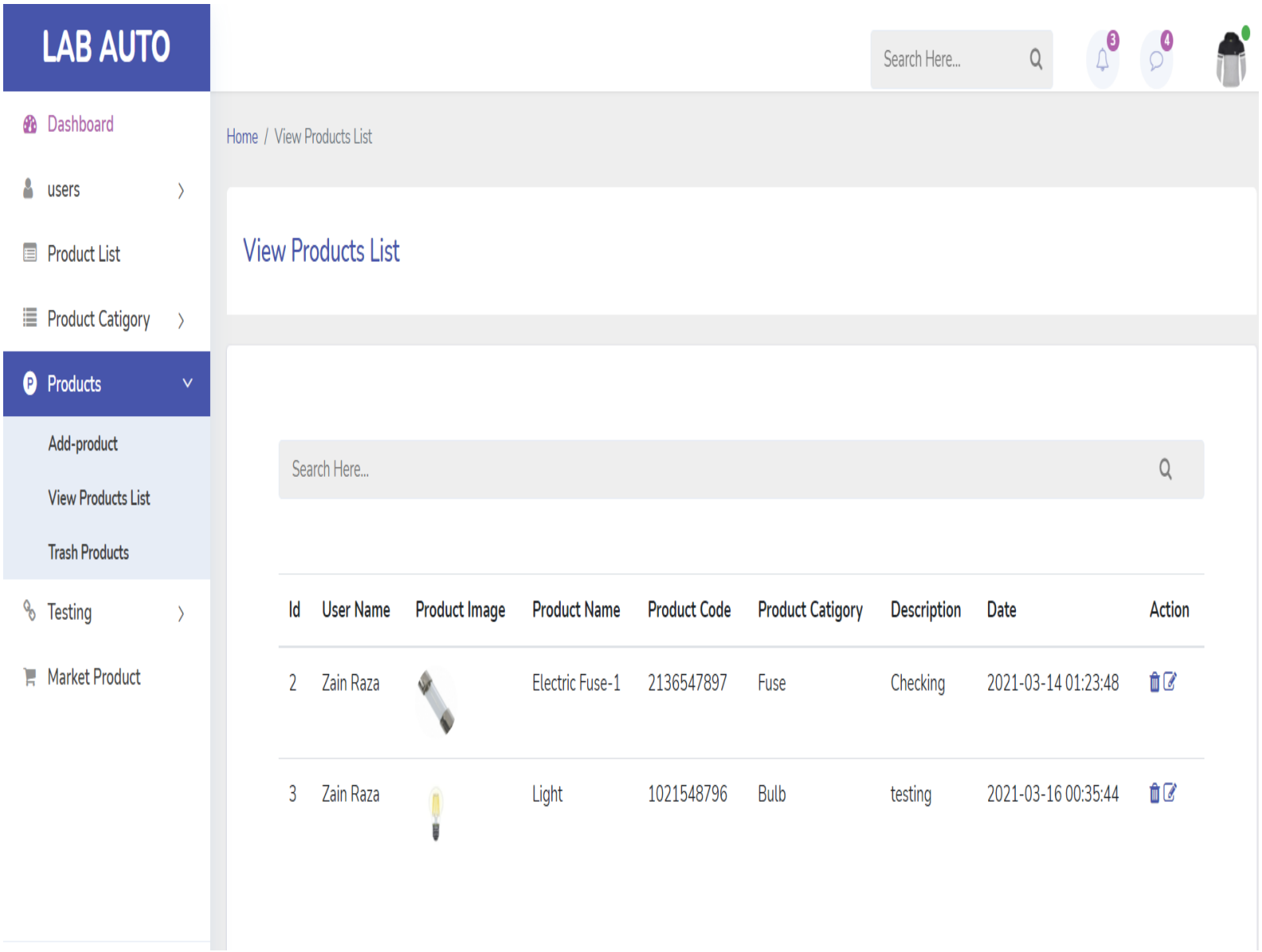


LAB AUTOMATION

ADD PRODUCT :

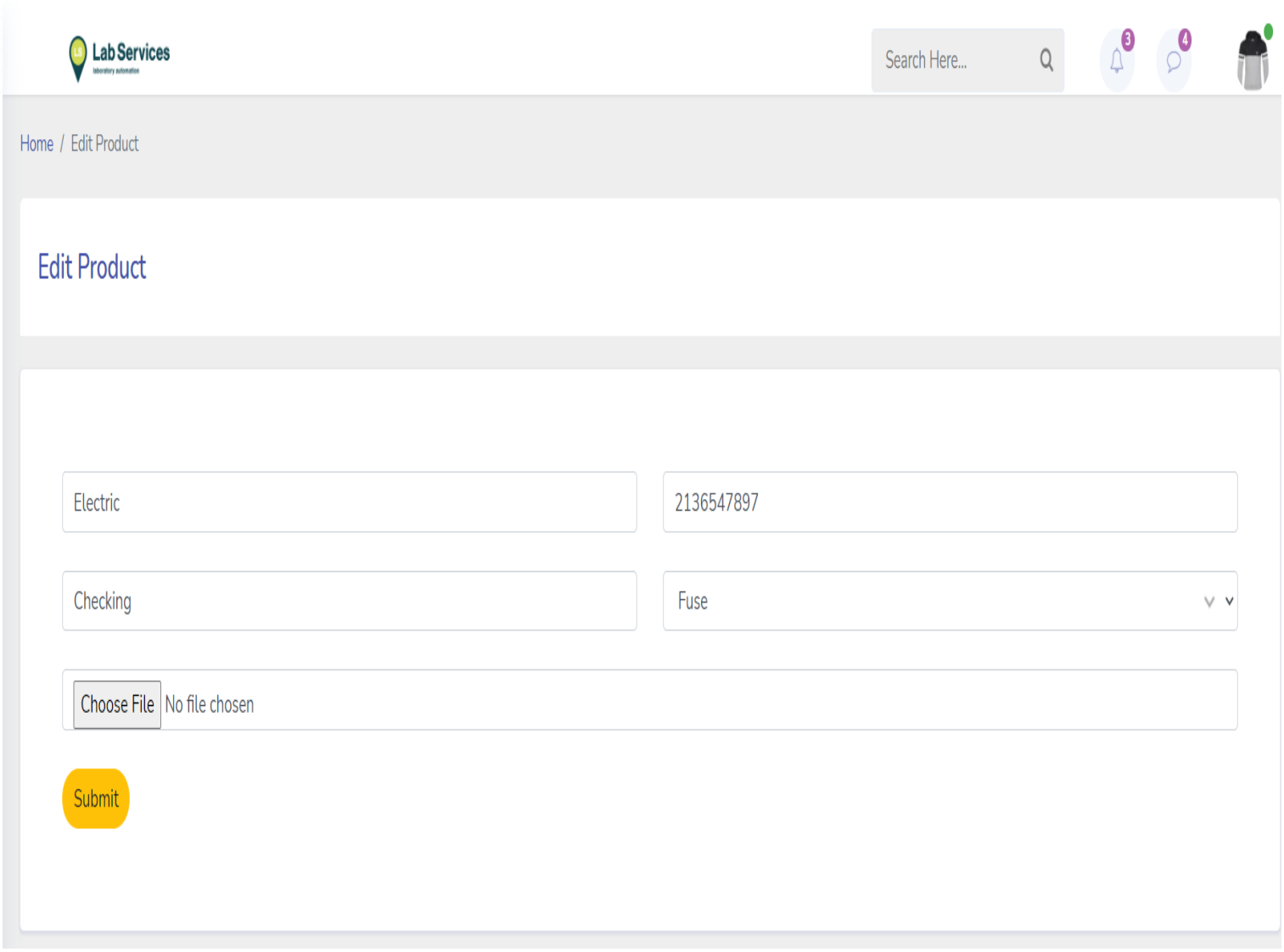

LAB AUTO
Search Here...
Dashboard
users
Product List
Product Catigory
Products
Testing
Market Product
Home / Add Product
Add Product
Enter Product Name
Enter Product Code (10 digits)
Enter Product Description
Select One
Choose File
No file chosen
Submit

VIEW PRODUCT LIST:

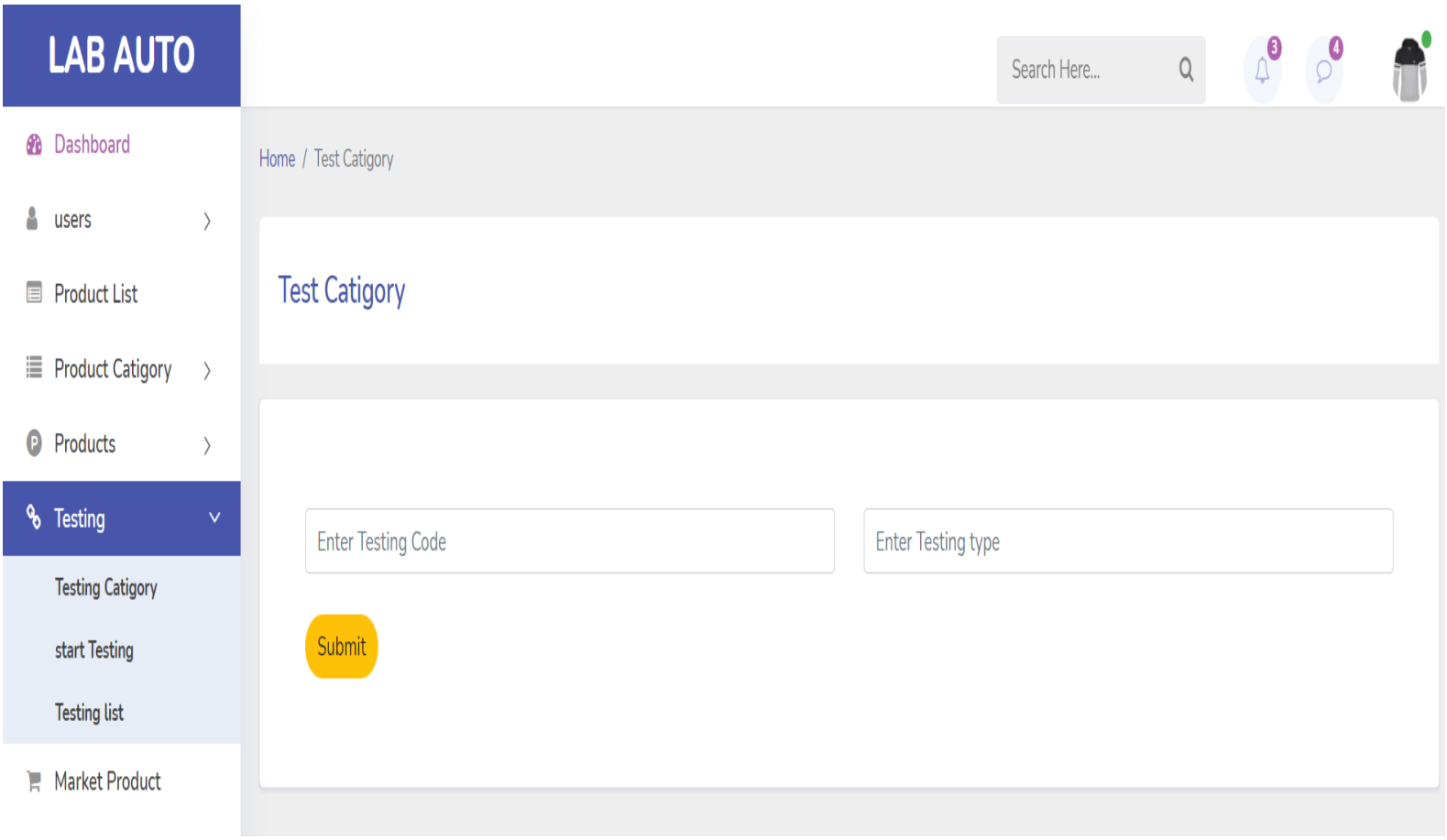


LAB AUTOMATION

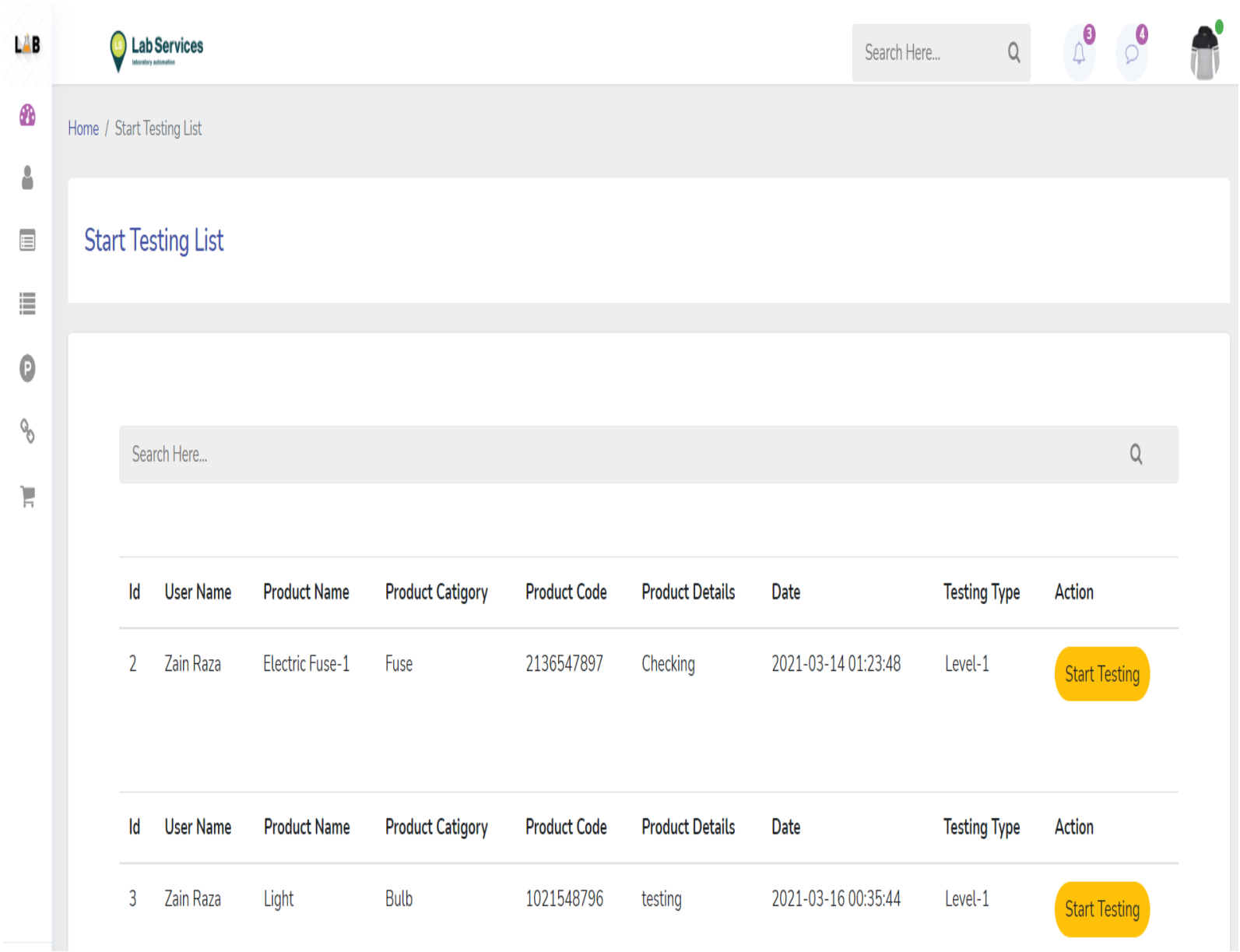
EDIT PRODUCT:



TEST CATIGORY:

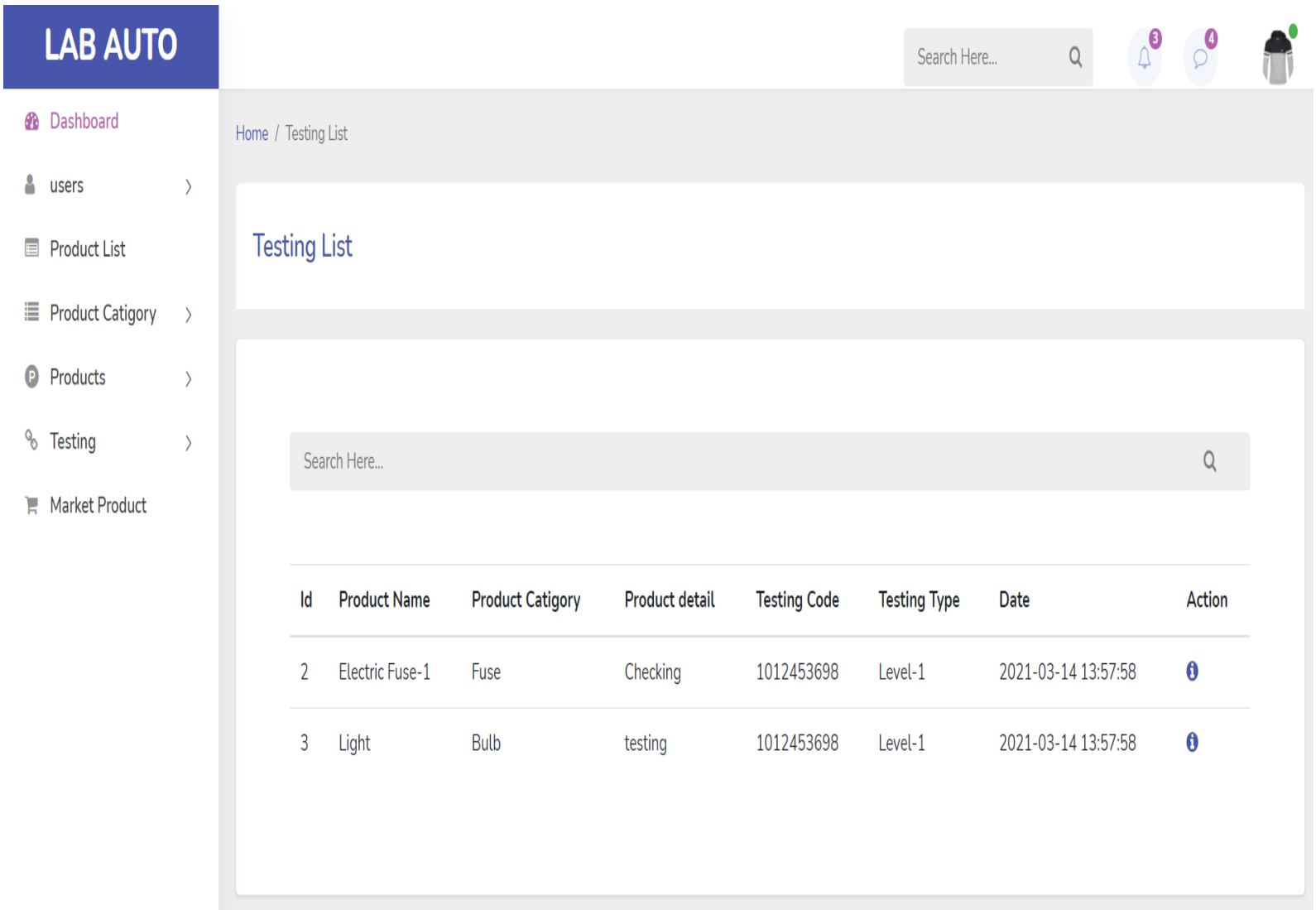


START TESTING LIST:



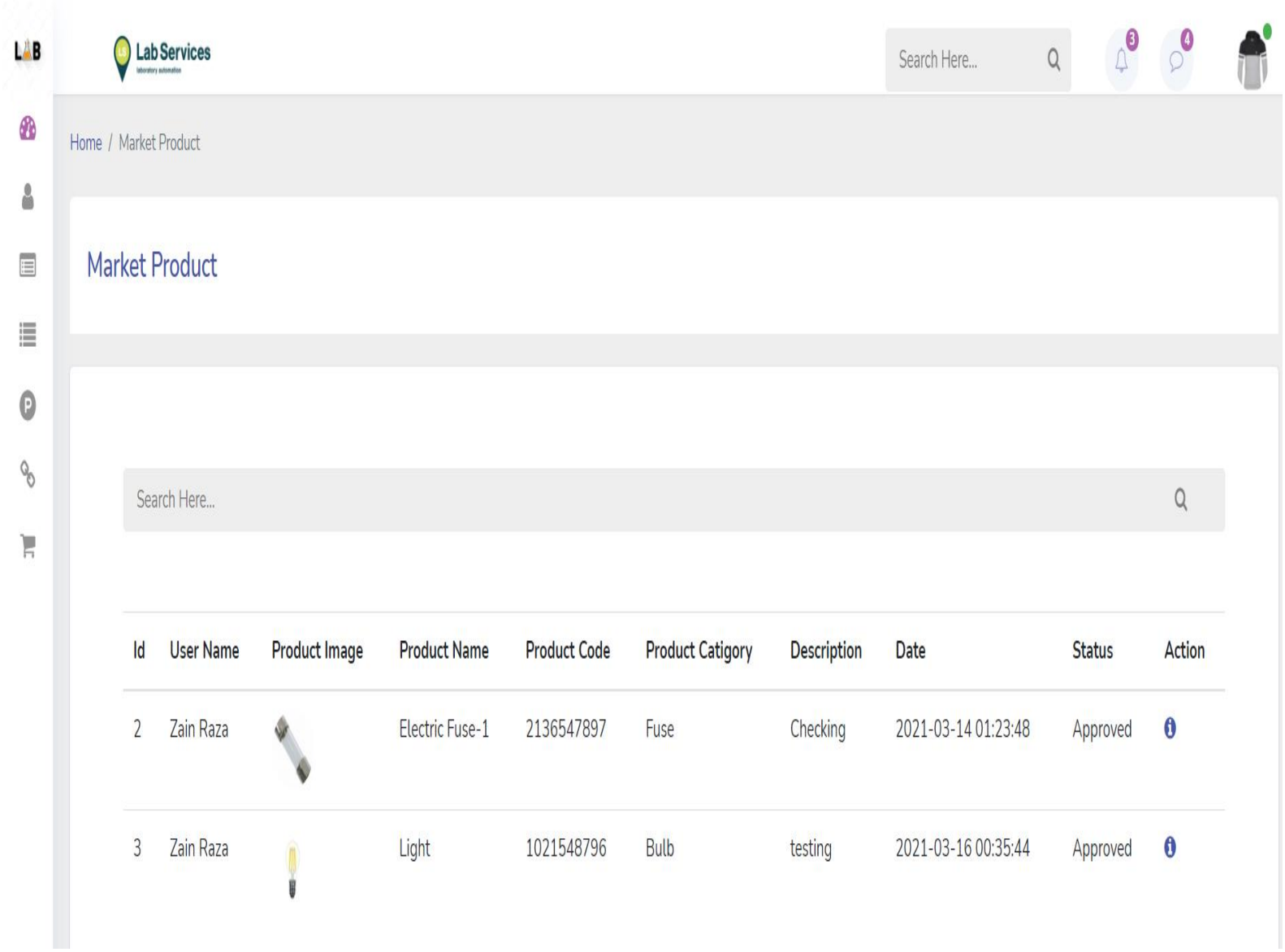
LAB AUTOMATION

TESTING LIST:



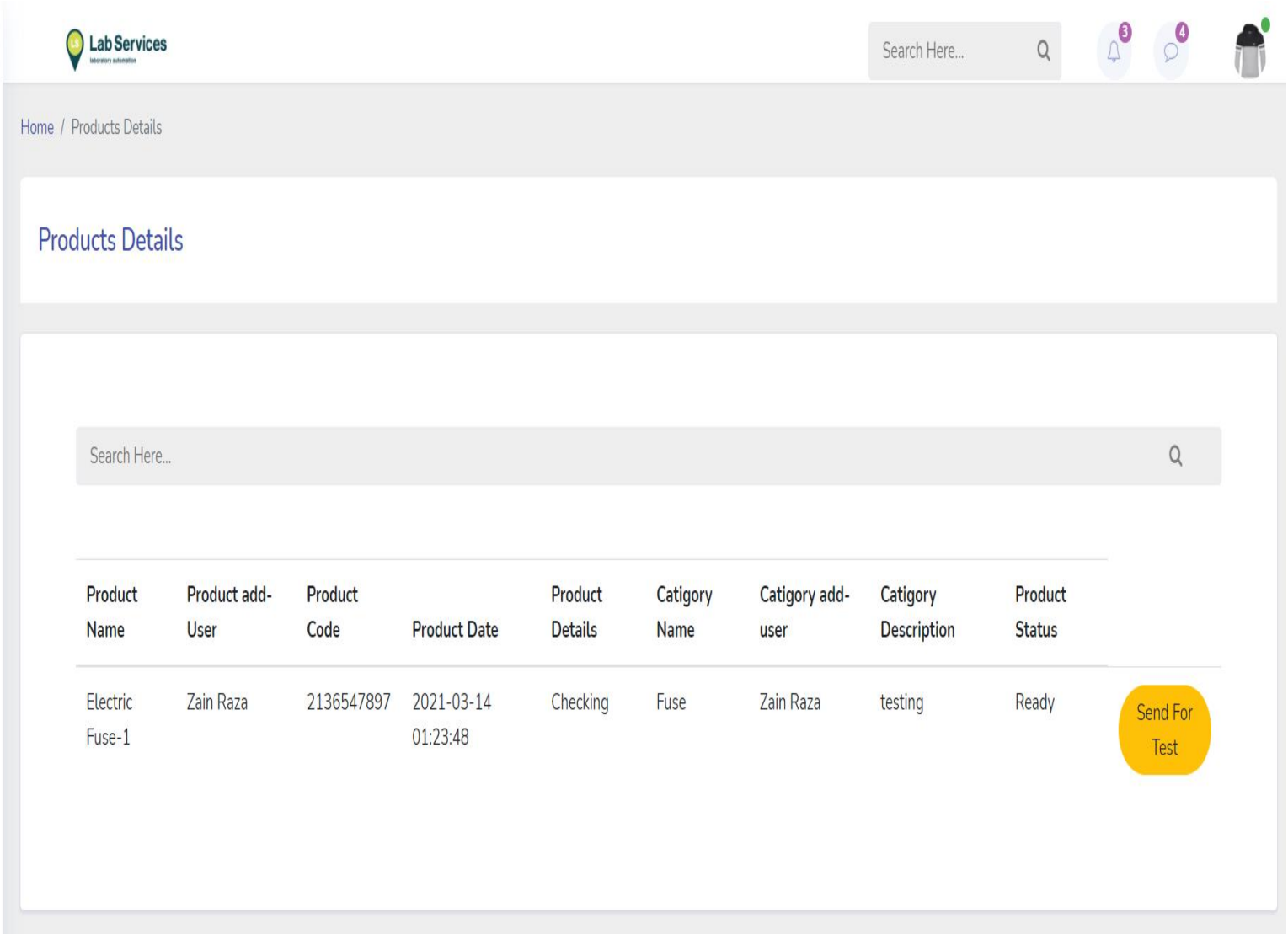
LAB AUTOMATION

MARKET PRODUCT:

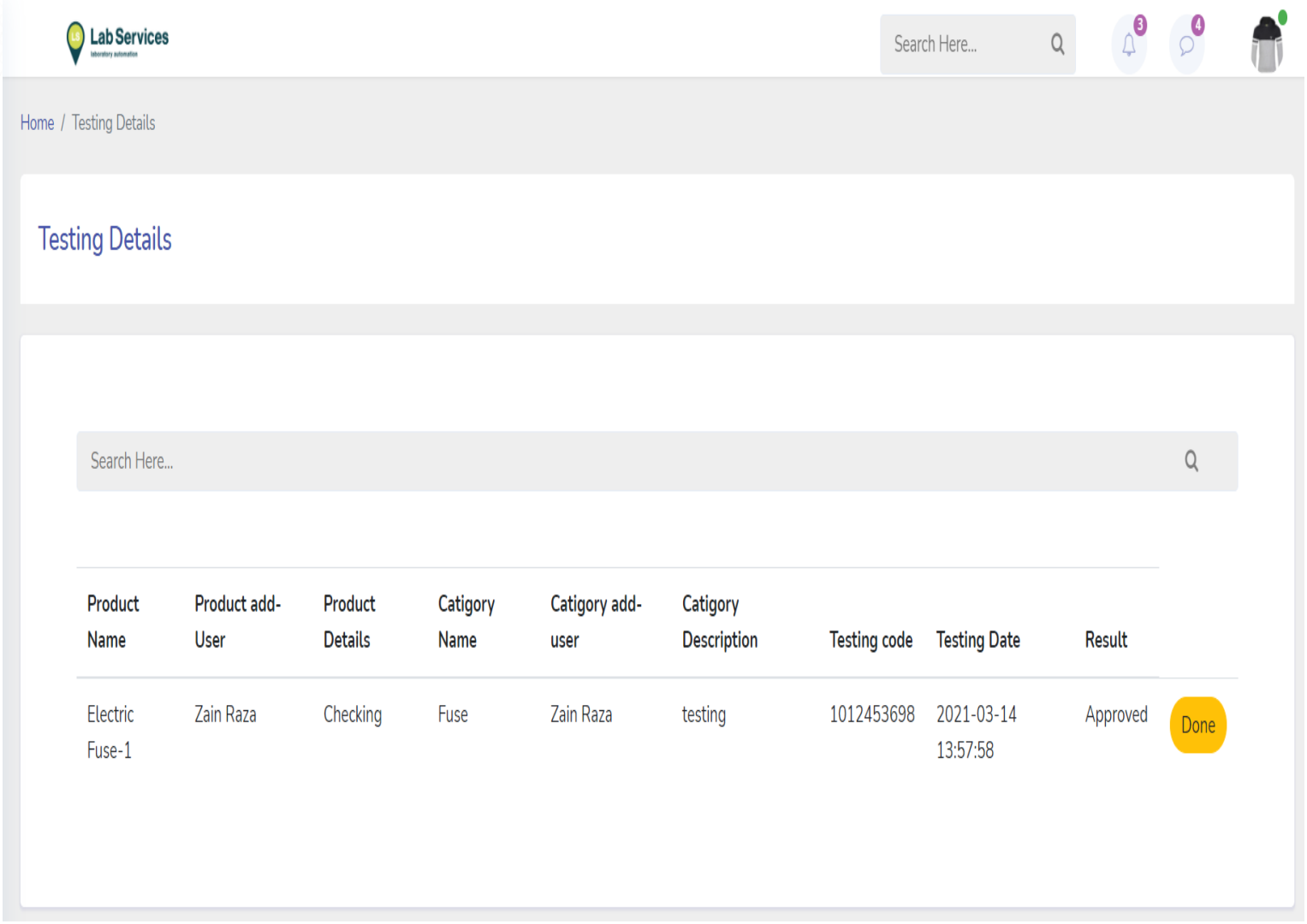


LAB AUTOMATION

PRODUCT DETAILS:



TESTING DETAILS:



SOURCE CODE

LAB AUTOMATION

main.php > over_store

```php
<?php session_start();

class over_store{

    function con(){
        $con = mysqli_connect('localhost','root','','lab_automation');
        return $con;
    }



    function user_account(){
        if(isset($_POST['btn-user'])){

            $a = $_POST['fname'];

            $c = $_POST['email'];
            $d = $_POST['psw'];

            $f = $_POST['role'];
            $img = $_FILES['img']['name'];

            $qu = mysqli_query($this->con(),"INSERT INTO `user_register`
            ( `u_fullname`, `u_email`, `u_psw`, `u_role`,  `u_img`) VALUES ('$a','$c','$d','$f','$img')");

            move_uploaded_file($_FILES['img']['tmp_name'],"assets/images/user/".$img);
        }
    }


    function user_login(){

        if(isset($_POST['btn_login'])){


            $email = $_POST['username'];
            $psw = $_POST['psw'];
```

```php
function user_login(){

    if(isset($_POST['btn_login'])){


        $email = $_POST['username'];
        $psw = $_POST['psw'];

        $qu = mysqli_query($this->con(),"SELECT * FROM `user_register` WHERE u_email = '$email' and u_psw = '$psw'");
        $count = mysqli_num_rows($qu);
        if($count == 0){

            echo('<script>alert("Email and Password incorrect")</script>');
        }
        else{

            $_SESSION['register'] = $_POST['username'];
            header('location:index.php');

        }
    }

}

function user_data(){
    $qu = mysqli_query($this->con(),"SELECT  * FROM user_register WHERE u_email = '".$_SESSION['register']."' ");
    return $qu;
}
```

```php
function user_data(){
    $qu = mysqli_query($this->con(),"SELECT  * FROM user_register WHERE u_email = '".$_SESSION['register']."' ");
    return $qu;
}


function add_catlog(){
    if(isset($_POST['btn-catlog'])){
        $a = $_POST['c-name'];
        $b = $_POST['c-des'];


        $query = mysqli_query($this->con(),"INSERT INTO `product_category`( `c_name`, `c_des`) VALUES ('$a','$b')");

        if($query){
            echo ('<script>alert("Done")</script>');

        }
        else{
            echo ('<script>alert("This Catigory is already Added....!!")</script>');

        }
        return $query;
    }
}




function catlog_list(){
    $query = mysqli_query($this->con(),"SELECT * FROM `product_category`");
    return $query;
}
```

```php
function ad_products(){
    if(isset($_POST['btn-product'])){

        $a = $_POST['p-name'];
        $img = $_FILES['p-img']['name'];
        $b = $_POST['p-code'];
        $d = $_POST['p-catlog'];

        $c = $_POST['p-des'];

        // $im = json_encode($img);
        // $txt = $_POST['p-dec'];

        $query = mysqli_query($this->con(),"INSERT INTO `products`( `p_name`, `p_img`, `p_code`, `p_cid`, `p_des`) VALUES
         ('$a','$img','$b','$d','$c')");
         move_uploaded_file($_FILES['p-img']['tmp_name'],"assets/images/product/".$img);



           // $count = count($img);
           // for($i=0; $i< $count ; $i++){
           //  $tmp = $_FILES['p-img']['tmp_name'][$i];
           //  move_uploaded_file($tmp,"assets/images/product/".$img[$i]);
           // }
        //  return $query;

    }
}
```

```php
function add_edit_user(){
    if(isset($_POST['btn-edit-user'])){

        $pid = $_GET['id'];
        $a = $_POST['fname'];
        $b = $_POST['email'];
        $c = $_POST['psw'];


        $img = $_FILES['img']['name'];

        if($img == ''){
            $im = $_POST['img'];
        }
        else{
            $im = $_FILES['img']['name'];

        }

        $query = mysqli_query($this->con(),
        "UPDATE `user_register` SET `u_fullname`='$a',`u_email`='$b',`u_psw`='$c',`u_img`='$im' WHERE u_id=$pid"
         );

         move_uploaded_file($_FILES['img']['tmp_name'],"assets/images/product/".$im);
         if($query){
            echo('<script>window.location.href="view-user-account.php"</script>');
         }
         return $query;

    }
}
```

```php
function add_edit_pro(){
    if(isset($_POST['btn-edit-product'])){

        $pid = $_GET['pid'];
        $a = $_POST['p-name'];
        $b = $_POST['p-code'];
        $c = $_POST['p-des'];
        $d = $_POST['p-catlog'];


        $img = $_FILES['p-img']['name'];

        if($img == ''){
            $im = $_POST['img'];
        }
        else{
            $im = $_FILES['img']['name'];

        }

        $query = mysqli_query($this->con(),
        "UPDATE `products` SET `p_name`='$a',`p_code`='$b',`p_des`='$c',`p_cid`='$d',`p_img`='$im' WHERE p_id=$pid"
         );

         move_uploaded_file($_FILES['img']['tmp_name'],"assets/images/product/".$im);
         if($query){
            echo('<script>window.location.href="view-product.php"</script>');
         }
         return $query;

    }
}
```

```php
function view_pro(){
    $qu = mysqli_query($this->con(),"SELECT p.p_id,p.p_name,p.p_img,p.p_code,c.c_id,c.c_name,c.c_des,p.p_des,p.p_status,p.p_datetime FROM
     `products` AS p LEFT JOIN product_category AS c ON p.p_cid=c.c_id where p.p_status='Ready'");
    return $qu;
}


function trash_pro(){
    $qu = mysqli_query($this->con(),"SELECT p.p_id,p.p_name,c.c_name,p.p_stock,p.p_price,p.p_sale_price,p.p_img,p.p_datetime
     FROM `product` AS p LEFT JOIN catlog AS c ON p.p_cid=c.c_id where p.p_status=2");
    return $qu;
}



function move_to_trash(){
    $a = $_GET['id'];
    $qu = mysqli_query($this->con(),"UPDATE `product` SET p_status=2 WHERE p_id=$a");
    return $qu;
}




function edit_pro($a){
    $qu = mysqli_query($this->con(),"SELECT * FROM products AS p LEFT JOIN product_category AS c ON p.p_cid=c.c_id where p_id=$a");
    return $qu;
}

function edit_user($a){
    $qu = mysqli_query($this->con(),"SELECT * FROM user_register where u_id=$a");
    return $qu;
}
```

Activate Windows
Go to Settings to activate W

```php
    function edit_product(){
        $qu = mysqli_query($this->con(),"SELECT * FROM products AS p LEFT JOIN product_category AS c ON p.p_cid=c.c_id ");
        return $qu;
    }

    function view_accounts(){
        $query  = mysqli_query($this->con(),"SELECT * FROM `user_register`");
        return $query;
    }

    
function total_admin(){
    $qu = mysqli_query($this->con(),"SELECT COUNT(u_role) as Total_Admin FROM `user_register` WHERE u_role = 'Admin'
    ");
        return $qu;
}

function total_srs(){
    $qu = mysqli_query($this->con(),"SELECT COUNT(u_role) as Total_srs FROM `user_register` WHERE u_role = 'SRS'
    ");
        return $qu;
}

function total_cpri(){
    $qu = mysqli_query($this->con(),"SELECT COUNT(u_role) as Total_cpri FROM `user_register` WHERE u_role = 'CPRI'
    ");
        return $qu;
}
```

```php
function testing_type() {
    if(isset($_POST['btn-testing'])){
        $a = $_POST['t-code'];
        $b = $_POST['t-type'];

        $query  = mysqli_query($this->con(),"INSERT INTO `test_product`( `t_code`, `t_type`) VALUES ('$a','$b')");
        if($query){
            echo ('<script>alert("Done")</script>');

        }
        else{
            echo ('<script>alert("This Testing Code is already Exits....!!")</script>');

        }
        return $query;
    }

}

function sel_testing(){
    $query = mysqli_query($this->con(),"SELECT * FROM `test_product`");
    return $query;
}

}

$ob = new over_store;

// if(isset($_POST['btn-product'])){
//  $ob->add_product();
// }

// if(isset($_GET['btn_login'])){
//  $ob->user_login();
// }

?>
```

```php
<?php include('header.php');
$ob->ad_products();
$ob->add_edit_pro();

?>
<div class="main-content">

  <!-- content -->
  <div class="container-fluid content-top-gap">
<?php
if(isset($_GET['pid'])){
  $a = $_GET['pid'];
  foreach($ob->edit_pro($a) as $pro){
    echo('<!-- breadcrumbs -->
    <nav aria-label="breadcrumb" class="mb-4">
      <ol class="breadcrumb my-breadcrumb">
        <li class="breadcrumb-item"><a href="index.php">Home</a></li>

        <li class="breadcrumb-item active" aria-current="page">Edit Product</li>
      </ol>
    </nav>
    <!-- //breadcrumbs -->

    <!-- card heading -->
    <div class="cards__heading">
      <h3>Edit Product</h3>
    </div>
    <!-- //card heading -->

    <!-- content block style 1-->
    <div class="card card_border p-lg-5 p-3 mb-4">
      <div class="card-body py-3 p-0">
        <form method="post" enctype="multipart/form-data">
        <div class="row">
```

LAB AUTOMATION

```php
<?php include('main.php');
if(!$_SESSION['register']){
  header("location:login.php");
}
foreach($ob->user_data() as $user){
  $name = $user['u_fullname'];
}
?>
<!doctype html>
<html lang="en">

<head>
  <!-- Required meta tags -->
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

  <title>Lab Automation</title>

  <!-- Template CSS -->
  <link rel="stylesheet" href="assets/css/style-starter.css">

  <!-- google fonts -->
  <link href="//fonts.googleapis.com/css?family=Nunito:300,400,600,700,800,900&display=swap" rel="stylesheet">
</head>

<body class="sidebar-menu-collapsed">
  <div class="se-pre-con"></div>
<section>
  <!-- sidebar menu start -->
  <div class="sidebar-menu sticky-sidebar-menu">

    <!-- logo start -->
    <div class="logo">
      <h1><a href="index.php">LAB AUTO</a></h1>
```

```php
<div class="row">
  <div class="col-xl-6 pr-xl-2">
    <div class="row">
      <div class="col-sm-6 pr-sm-2 statistics-grid">
        <div class="card card_border border-primary-top p-4">
          <i class="lnr lnr-users"> </i>
          <h3 class="text-primary number">
          <?php
          // foreach($ob->total_pro() as $to){
          //   echo $to['total'];
          // }
          $total = mysqli_fetch_array($ob->total_srs(),MYSQLI_ASSOC)['Total_srs'];
          echo $total;
           ?>
          </h3>
          <p class="stat-text">SRS</p>
        </div>
      </div>
      <div class="col-sm-6 pl-sm-2 statistics-grid">
        <div class="card card_border border-primary-top p-4">
          <i class="lnr lnr-eye"> </i>
          <h3 class="text-secondary number"><?php
          // foreach($ob->total_admin() as $admin){
          //   echo($admin);

          // }
           $total = mysqli_fetch_array($ob->total_admin(),MYSQLI_ASSOC)['Total_Admin'];
           echo $total;
          ?></h3>
          <p class="stat-text"> Admin</p>
        </div>
      </div>
    </div>
  </div>
```

logout.php

```php
<?php session_start();

session_destroy();
header("location:login.php");


?>
```

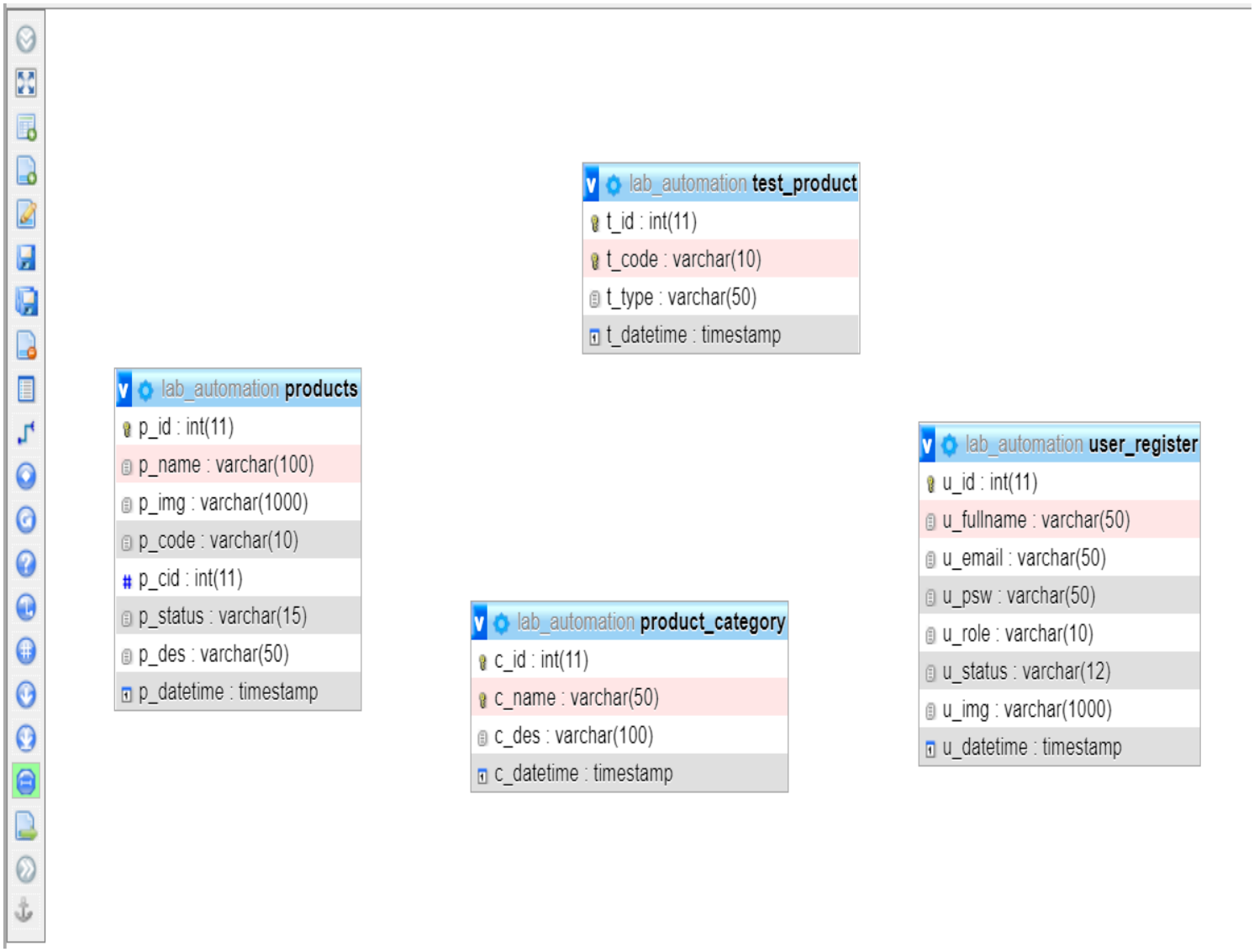
```
  </tr>
</thead>

            <tr>
                <td>'.$data['p_name'].'</td> ');

                foreach($ob->user_data() as $user){
                  echo('<td>'.$user['u_fullname'].'</td>

                  <td>'.$data['p_code'].'</td>
                  <td>'.$data['p_datetime'].'</td>

                  <td>'.$data['p_des'].'</td>
                  <td>'.$data['c_name'].'</td>
                  ');

                  foreach($ob->user_data() as $user){
                    echo('<td>'.$user['u_fullname'].'</td>

                    <td>'.$data['c_des'].'</td>
                    <td>'.$data['p_status'].'</td>
                <td>
                <a href="Start-testing.php?pid='.$data['p_id'].'"><button class="btn btn-warning ">Send For Test</button></a>

                </td>

                </tr>

            ');
```

```
        <th>Id</th>

        <th>User Name</th>
        <th>Product Image</th>
        <th>Product Name</th>
                <th>Product Code</th>
                <th>Product Catigory</th>
                <th>Description</th>
                <th>Date</th>
                <th>Status</th>

                <th>Action</th>


    </tr>
  </thead>
  <tbody>

            <?php
            foreach($ob->view_pro() as $view){
                echo('
                <tr>
                    <td>'.$view['p_id'].'</td> ');
                    foreach($ob->user_data() as $user){
                      echo('<td>'.$user['u_fullname'].'</td>
                    <td><img src="assets/images/product/'.$view['p_img'].'"></td>
                    <td>'.$view['p_name'].'</td>

                    <td>'.$view['p_code'].'</td>
                    <td>'.$view['c_name'].'</td>
                    <td>'.$view['p_des'].'</td>

                    <td>'.$view['p_datetime'].'</td>
                    <td>'.$view['p_status'].'</td>
                    <td>
```

```php
<?php include('header.php');
$ob->add_product();
$ob->add_edit_product();

?>
<div class="main-content">

  <!-- content -->
  <div class="container-fluid content-top-gap">




   <?php
if(isset($_GET['pid']))
{
  $a = $_GET['pid'];
  foreach($ob->edit_pro($a) as $data){


  echo('
  <!-- breadcrumbs -->
  <nav aria-label="breadcrumb" class="mb-4">
    <ol class="breadcrumb my-breadcrumb">
      <li class="breadcrumb-ite
      m"><a href="index.php">Home</a></li>

      <li class="breadcrumb-item active" aria-current="page">Edit Product</li>
    </ol>
  </nav>
  <!-- //breadcrumbs -->
  <!-- card heading -->
  <div class="cards__heading">
    <h3>Edit Products</h3>
  </div>
  <!-- //card heading -->
```

ER-DIAGRAM

LAB AUTOMATION



LAB AUTOMATION

LAB AUTOMATION