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ELECTRONIC SERVICE FIRM MANAGEMENT

PROJECT FINAL REPORT

TECHNICAL ANWERS FOR REALWORLD PROBELMS CSE – 3999

Under the guidance of

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DECLARATION

I hereby declare that the thesis entitled "**ELECTRONIC SERVICE FIRM MANAGEMENT**" submitted by me, for the award of the degree of ***Bachelor of Technology in Computer science*** to VIT is a record of bonafide work carried out by me under the supervision of **Prof. VAIRAMUTHU S**.

I further declare that the work reported in this thesis has not been submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university.

Place : Vellore
Date :

Signature of the Candidate

CERTIFICATE

This is to certify that the thesis entitled “Analytical Agriculture” submitted **by Sai Sushant Koranne 17BCE0611, A Hari Kishore 17BCE0504, K. Saipoornachand 17BCE0624, Sai Teja 17BCE0016, Singuru Chandra Sekhar 17BCE0953,** VIT, for the award of the degree of *Bachelor of Technology in Computer Science*, is a record of bonafide work carried out by him / her under my supervision during the Fall Semester 2020-2021 , as per the VIT code of academic and research ethics

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Place : Vellore

Date :

Signature of the Guide

Internal Examiner

External Examiner

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This is to acknowledge the immense support I got from my faculty and institution while pursuing this project “Wireless drowsiness detect and alert system”. I would like to take this moment to thank VIT for giving us this opportunity. I would also like to thank Dean of School of Computer Science and Engineering for their unconditional support. I would also like to thank our faculty VAIRAMUTHU S for his immense support and guidance.

We would also like to thank my parents and friends for constantly supporting and inspiring us to learn more

ABSTRACT

Suppose there is an electronics firm, which fixes damaged peripherals related to laptops and desktops and fixes the software related problems. But the communication between the store manager and the customers is not good since the complaints were taken down manually and customers had to stand in long que to register their complaints, and during this pandemic it's not recommended to stay outside for a long time. So, to avoid all these problems we develop an app where the engineers and the customers can communicate properly. All the things such as the problem description, repair status, average cost will be displayed on the app. In this way rush in store can be reduced since all the communications take place through the app.

Recent growth in information technology has set the pace for an electronic revolution leading to emergence of electronic services. Business to consumer e-service assists organizations to decrease costs, speed up delivery time and serve more customers. Therefore, many enterprises have already moved or planning to move their services and goods to the electronic environment. In this regard, it is crucial to recognize the characteristics of each type of products and services. The main goal of this research is to provide an extensive review and gather conceptual perspectives of electronic services. In order to understand the nature of electronic services it is essential to explore the characteristics, advantages and barriers of e-services. This study sets theoretical and research foundation for future empirical researches by differentiates of service and e-service features and furthermore categorization of e-service users.

INTRODUCTION

Efficient queue management is very essential anywhere in order to keep the people involved in the system to be on the move. The case is no different in the case of an Electronic Services Firm as well, there has been instances when the customers involved in the queue are frustrated and leave because of their long waiting time in the queue. The actual source of problem was not just a single reason but many. A single-handed solution to all these problems was not easy. The problems identified included the lack of counters, increasing arrival rate of customers, fault in the scanning machines that consumed extra time, time lapse/failure in scanning the bar code of the product purchased and tiredness from the side of the customer service personnel. Although there have been certain physical and electronic queue management systems, that were developed in order to manage the queue, actual problem of reducing the length of the queue has not been achieved. This project is done in order to study the queue lengths in one of the Electronic Services Firm in the city of Cochin by analysing their queuing system, to find the major areas that causes bottlenecks in the queue, to suggest alternatives to the present queuing system and to develop an application that would be a single handed solution to all the major problems discussed above. The research will be done after careful questionnaire with the customers in the queue and about their willingness to move into a new strategy than the traditional one.

The research will include a primary study on the present customer arrival rate, the time spend by customer in the queue as well as in the system. These data will be compared during different times in a single busy day and the peak hours will be noted. The obtained data will also be compared with the secondary data available with the company and the changes (if any) will be suggested. During the survey any improvements in the present queuing system will also be suggested. The development of the application would be on an android platform and our research will be only confined towards designing the framework of the application and integrating it with the queue management system. Electronic queue management systems are not new technologies and are being implemented in most of the western countries where an extra counter is opened for you if there is more than one customer in front of you (Irsys technology at TESCO). This will be only applicable at places where there are numerous counters which is an exception in a small City like Cochin. Different from this our solution as an application talks about reducing the queue effectively by encouraging the customers to buy their products through mobile phones. Customers will choose to register their complaints and

the token number is given to the customer through the application itself. The token number and the complaint details are given to service department at the supermarket and the staff will collect the order and bill the products on their (customers) behalf. The customers may either pay the money via net banking or pay the money at the time collection of the products from the

alternative counter arranged for this purpose. The advantages of such a system are many, it reduces the considerable time a customer spends inside the supermarket, it reduces the time taken for scanning the product at the counter, any issues with the failure in scanning the product the supermarket staff will take necessary action to find an alternative at the earliest thus by not making the customer wait at the queue. As and when their order is ready the customers receive a message in the mobile application that would tell them that their order is ready

Tools used for work

1. MySql- For Database

   MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB.

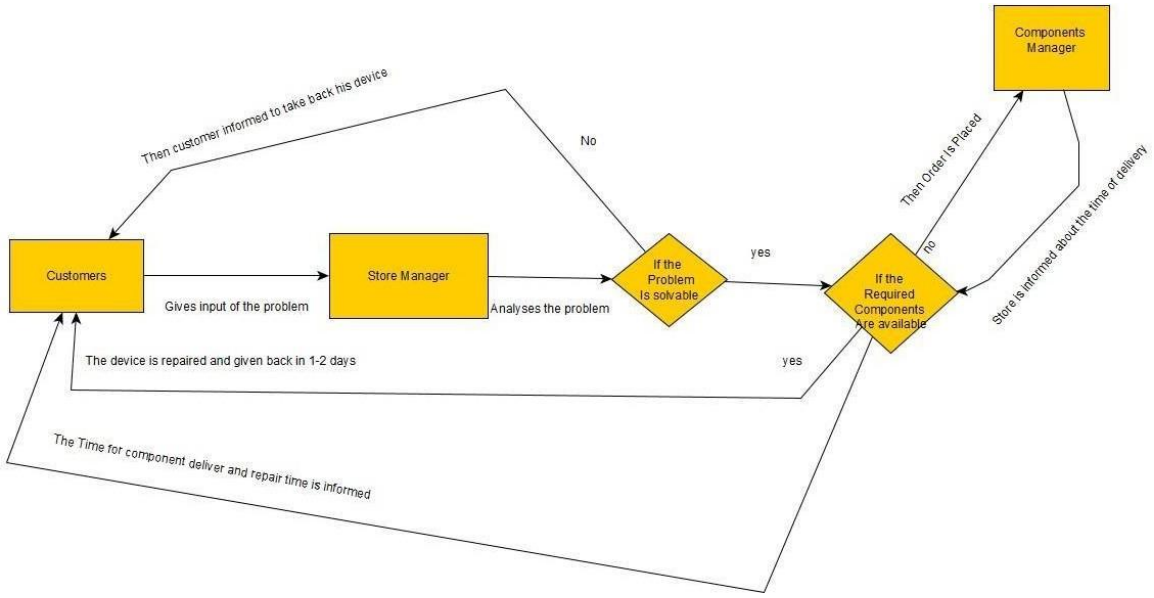
2. Php- For API

   PHP is a server scripting language, and a powerful tool for making dynamic and interactive Web pages. PHP is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP.

3. Html and CSS – For User Interface Design

   Hypertext Markup Language is the standard markup language for documents designed to be displayed in a web browser.
   Cascading Style Sheets (CSS) is used to format the layout of a webpage. With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more.

Design Methodology Flow chart



Modules:

There are three modules in this project:

1.User View:

This is for the user, where the user register's complaint and see's the status of their complaint. **2.Firm's View:**

This is where the firm looks after the complaints and updates the status of the complaints. Also, the firm can order peripherals from Go-down.

3.Godown's View:

Here the Go-down looks at the orders from the firm and updates the status of their order.

UI Design:

1.In the User's view the first page contains the advertisement about the firm. 2.Next there is a column for registration and login.

3. After loging in, there are two options, complaint registration and checking status of older complaints.

4. In the Firm's view, the employees can see their complaints and update data if necessary.

5. In the Go-Down's view, they can view the order details and update status when necessary.

DB Design:

Tables:

1.Custome

Column Name	Datatype
Id (Key)	Int
Name	varchar (45)
Email	varchar (45)
Phone	varchar (45)
Address	varchar (45)
Password	varchar (45)

2.Complaints:

Column Name	Datatype
Id(key)	Int
Device_Name	Varchar (200)
Description	Varchar (200)
Registered_on	timestamp
Cutomer_Phone(FK)	Varchar (10)
Finishes_on	datetime
Status	Varchar (20)
Acceptence	Varchar (20)
Emp_id(FK)	int

3.Employee

Column Name	Datatype
Id (Key)	Int
Name	varchar (45)
Email	varchar (45)
Phone	varchar (45)
Address	varchar (45)
Password	varchar (45)

4. Periperals_Order

Column Name	Datatype
Order_id	Int
Periperal_Name	varchar (45)
Ordered_on	timestamp
Status	varchar (45)
Availability	varchar (45)
ToBe_DeliverdOn	datetime

COST ANALYSIS

This is a very low cost project which requires a local processing unit and an active internet connection, so that the data is continuously sent and assessed.

CODE SNIPPETS

```php
<?php

$sname= "localhost";
$unmae= "root";
$password = "";

$db_name = "tarp";

$conn = mysqli_connect($sname, $unmae, $password, $db_name);

if (!$conn) {
        echo "Connection failed!";
}
```

```php
<?php
include "db_conn.php";
$id=$_GET['GetID'];
$res= mysqli_query($conn, "SELECT * FROM tarp.complaints where ID='$id';");
while($row=mysqli_fetch_assoc($res))
{
    $id=$row['ID'];
    $fd=$row['Finishes_on'];
    $status=$row['Status'];
    $acc=$row['Acceptence'];
}
?>
```

```
</style>
    </head>
    <body style="background-color:powderblue;">
    <center>

        <div  class="containers" style="margin-top: 100px;">
            <h1> Employee Login</h1><br><br>
            <form name="form1" method="post" action="<?php echo $_SERVER['PHP_SELF']; ?>" >
                <label class="labels">Phone Number</label><br>
                <input type="text" name="phno" placeholder="Enter Phone Number" required class="inputvalues"><br>

                <label class="labels">Password</label><br>
                <input type="password" name="password" placeholder="Enter Password" required class="inputvalues"><br>

                <button type="submit" name="login" id="login_btn">Login</button><br><br>

            </form>
        </div>
    </center>
    </body>
```

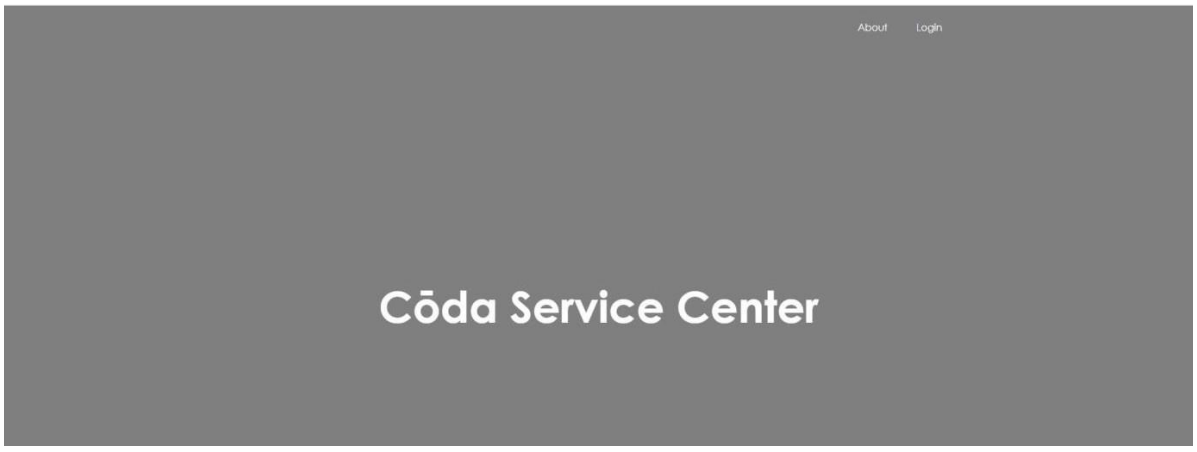
```
.inputvalues
{

        height: 45px;
        width: 300px;
        font-size: 18px;
        margin-bottom: 20px;
        background-color: #fff;
        padding-left: 40px;
}

#login_btn
{
        padding: 15px 25px;
        border: none;
        background-color: #27ae60;
        color: #fff;
}
```

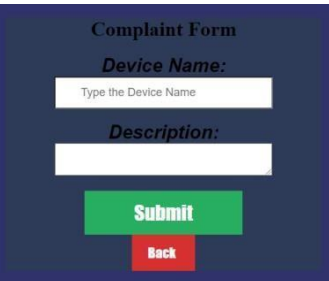
RESULT

1. Customer View:



Back

Logout

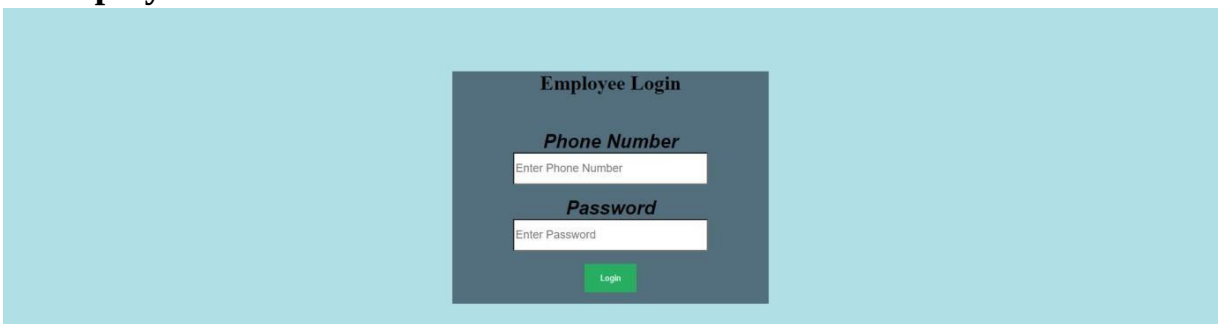


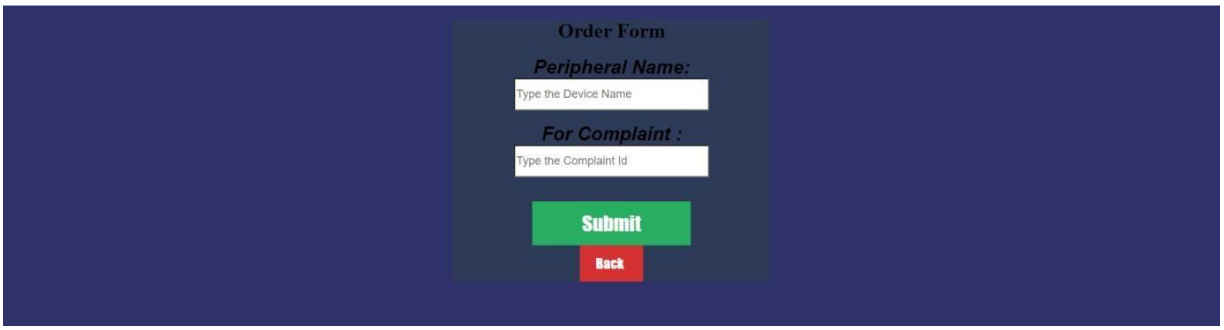
View Your Complaints

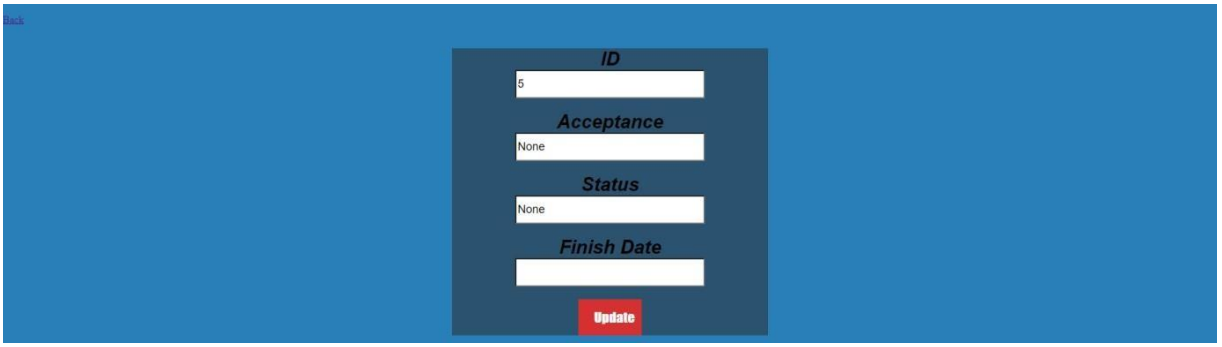
Complaint Id	Device Name	Description	Registered On	Finishes On	Status	Acceptence	
5	Dell Inspiron 3542	Laptop is Not switching on.	2020-09-23 22:58:47		None	None	2

Back

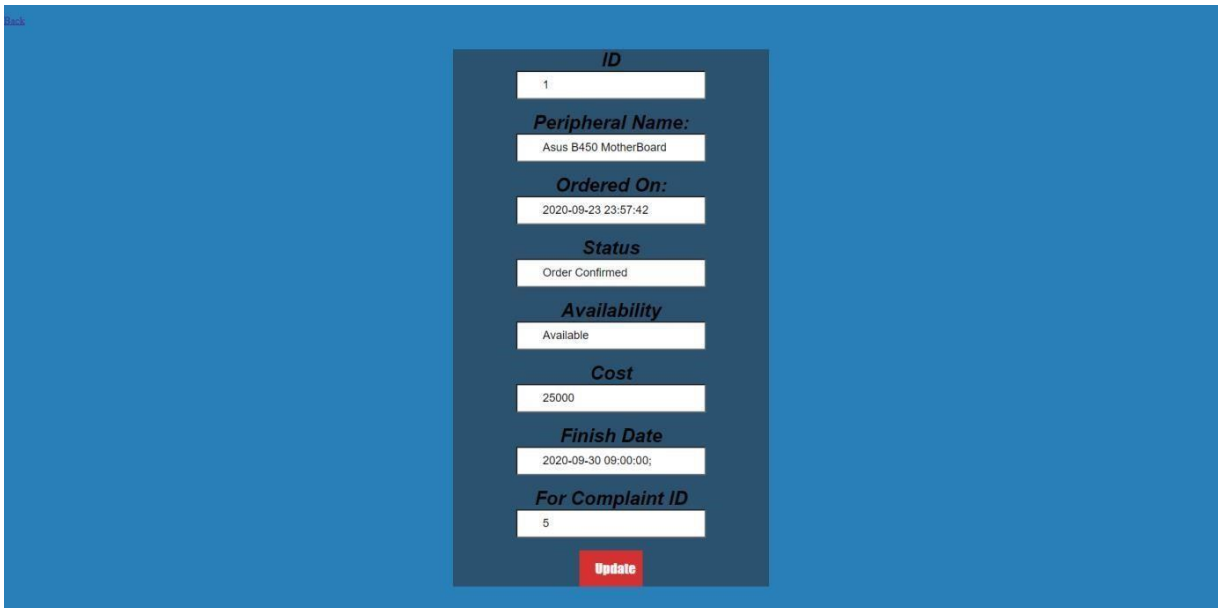
2. Employee View:





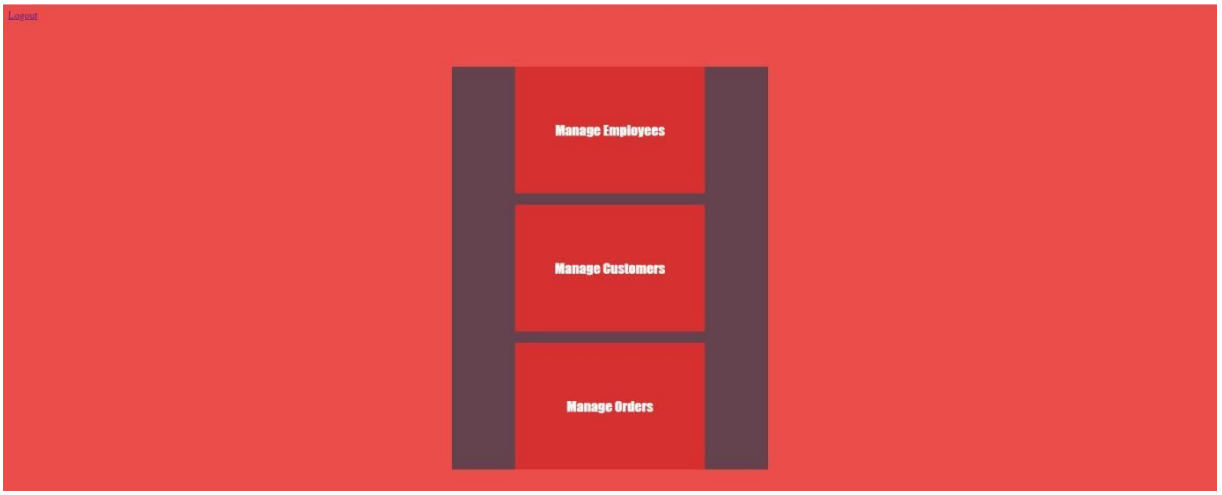


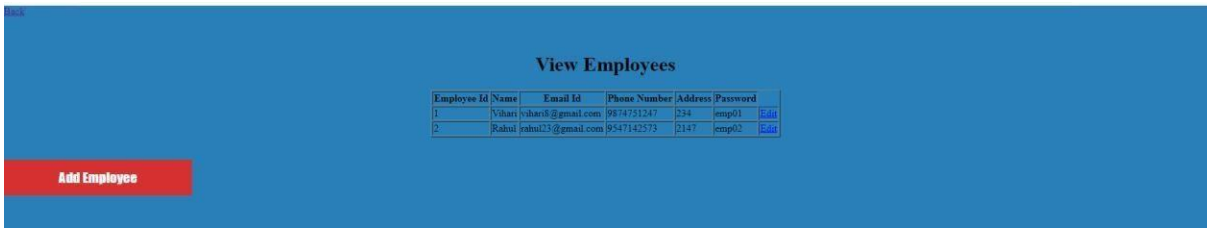
3. GoDown View:

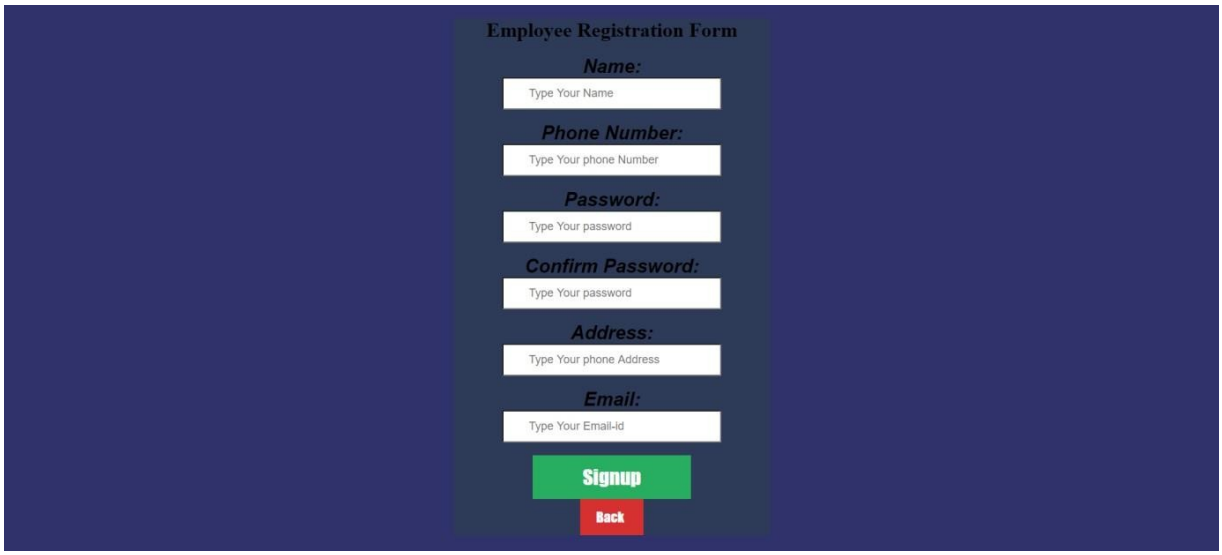

Back
ID
1
Peripheral Name:
Asus B450 MotherBoard
Ordered On:
2020-09-23 23:57:42
Status
Order Confirmed
Availability
Available
Cost
25000
Finish Date
2020-09-30 09:00:00;
For Complaint ID
5
Update

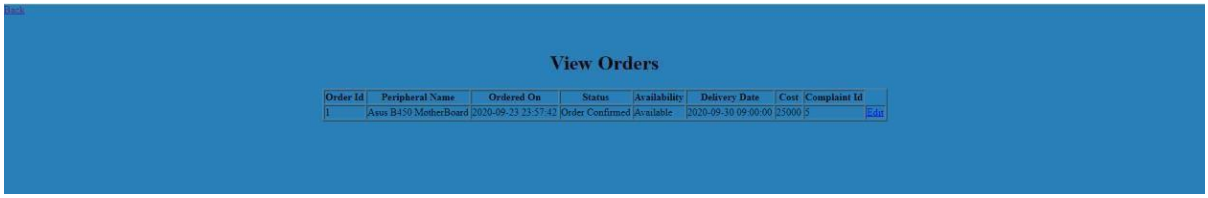
4. Admin View


Admin ID
Enter Id
Password
Enter Password
Login


Logout
Manage Employees
Manage Customers
Manage Orders


Back
View Employees
Employee Id
Name
Email Id
Phone Number
Address
Password
1
Vihari
vihari8@gmail.com
9874751247
234
emp01
Edit
2
Rahul
rahul23@gmail.com
9547142573
2147
emp02
Edit
Add Employee





CONCLUSION

It completely meets the objectives and requirements of the system. The framework has achieved an unfaltering state where all the bugs have been disposed of. With the help of this software, the customers can now get their electronics devices repaired without any delay or waiting which is a help during this pandemic

Nowadays in intensive competitive environments for business success, the design and delivery of inventive, flexible, and effective services is of paramount importance. According to this research, electronic users could be classified from three different perspectives. Each of these angels has been evaluated based on results obtained from the online survey. In brief, majority of Web based services are not trained and use e-services for externally, Further, most of the e-service users have clear purposes.

The results reveal that those users are more using the e-services which provide them with higher levels of information on service, product and processes. Consequently, customers are more intention to use the e-service that modifies the structure of competition, market and customer relationships.

Finally, it has been figure out that users are less utilizing the e-services which only replace the human interaction with electronic interaction. For future work, the effect of e-service characteristics and quality on the application usage might be evaluated.

Service and products has been classified based on the level of digitalization and co-creation. It is illustrated that services such as media, entertainment and communication services are at the high level of e-service with high level of digitization and low level of co-creation. On the other hand, utilities, commodities and consumer goods are at lowest level of e-service with low level of digitization and co-creation. Furthermore, financial, travel and government service with high level of both digitization and co-creation are at moderate level of e-service. Finally, B2B service, e-tailer and legal services have the high level of co-creation and low level of digitization.

Future Scope

The model can be improved incrementally if this is widely used we plan to create an app for this purpose which is supported by both Android and Ios systems. A person will be sent to collect the device from their doorsteps which will be done taking the local police approval especially in the containment areas

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