A Software Engineering Project
On

Customer Relationship Management

as the partial fulfillment of

Semester -V study

for the degree of

Bachelor of Science (Computer Science)
(Affiliated to Veer Narmad South Gujarat University)

during the academic year 2022-2023.

Developed By:

Dhruvan Bhakhar

Guided By:

Mrs. Shweta Bhatia

Sarvajanik Education Society

Shree Ramkrishna Institute of Computer Education and Applied Sciences

Behind P.T Science College, M.T.B. College Campus, Athwalines, Surat-395 001.

Sarvajanik Education Society
Shree Ramkrishna Institute of Computer Education and Applied Sciences
Behind P.T. Science College, M.T.B College Campus, Athwalines, Surat-395 001.

CERTIFICATE

DEPARTMENT OF COMPUTER SCIENCE

This is to certify that

	Student name	*Exam no*
1)	Dhruvan Bhakhar	20188

has / have successfully completed his / her / their software engineering project work entitled

Customer Relationship Management

as the partial fulfillment of

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during the academic year 2022-2023.

_____ **Internal Project Guide**

_____ **HOD**
Dept. of Computer Science

Date : _____

Place : Surat

University Examination:

Examination No. : _____

Signature of External Examiners : _____

_____

_____

Sarvajanik Education Society
Shree Ramkrishna Institute of Computer Education and Applied Sciences
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2021-2022.

Developed By:

1)Bhakhar Dhruvan

Guided By:

Shweeta Bhatia

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Customer Relationship Managment

as the partial fulfillment of

Semester -VI study

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2021-2022.

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_____

INDEX for Project Documentation

SR.NO	CONTENTS		Page. No
1.	**Introduction**		
	•	Project Profile	
2.	**System Introduction**		
	•	System Definition, Objective and scope	
	•	Hardware & Software Requirements	
3.	**Requirement Analysis & Modeling**		
	•	Expected working of system	
	•	Data Flow Diagrams (DFD)	
	•	Process Specification	
	•	Data Dictionary	
4.	**Design**		
	•	ER Diagram & Database Design	
	•	System Flowchart	
	•	Form & Report Designs (Screenshots) Layouts	
5.	**Coding**		
	•	Coding Approach/style	
	•	Code Snippets	
6.	**Testing**		
	•	Testing Data Inputs (Data Validations)	
	•	Testing Operations (Actions on each screen)	
7.	**New Tools/ Technologies learned/used**		
8.	**System Limitations/Restrictions and Dependencies/Constraints**		
9.	**Future Enhancement & Opportunities**		
10.	**Bibliography & References**		

1. Introduction

System Profile

- Project Title – Customer relationship managment

- Organization - Shree Ramakrishna Institute
Of Education and Applied Sciences.

- Front -End tool - PHP
- Back -End tool - My Sql
- Project Category - CRM
- Operating System – Windows 11
- Project Duration – 6month
- Project Guided By – Shweta Bhatia
- Developed By – Dhruvan Bhakhar

2. System Introduction

2.1 System Definition, Objective and scope

Definition

Customer Relationship Management (CRM) is a well-known system for managing an Organization's communications with customers, clients and sales prospects. This system uses technology for organizing, synchronizing and automating business and sales activities. This is a virtual system and this system does not require any physical offices or environment. So everybody can use this system easily. Administrator can communicate and provide services through this system, and also user can access and check his status and his project opportunity as well as getting more information about the projects and updating systems.

Objective

- For simplifying marketing and sales system.
- For providing better customer service.
- For discovering new customers and raise customer profit.
- For increasing cross sell products more effectively.

The Customer Relationship Management (CRM) system needs to support all the basic step of customer life cycle.

The Basic Steps are:

- Attracting present and new leads (customers).
- Adding new customers.
- Adding new business opportunities.
- Buildup communication to customer.
- Holding the customers.

Purpose

The purpose of CRM system is to:

- Maintain good relationship with customer
- Manage business opportunity
- Lead Management
- Track the business opportunity and develop it
- Daily Meeting, Task, Note, Emails with contacts or leads
- Alert Notification for meeting or call
- Customer Observation

The overall purposes are to search, allure and get new clients, nurture and hold those the organization already has. Entice former clients back in to the fold, and decrease marketing and client service cost.

2.2 Hardware & Software Requirements

Hardware:-

- Processor : Lenovo Thinkbook Core i5 10^{th} Gen or above
- Ram : 8 GB and 4 GB Graphics Card
- Hard-Disk : 512 GB SSD

Software:-

- Backend : My Sql.
- Frontend : PHP(Core).
- Operating System : Windows 11 pro or above

3. REQUIREMENT ANALYSIS

3.1 Expected working of System

In our project we have two types of roles:

- Administrator
- CRM User

➢ Admin Module:

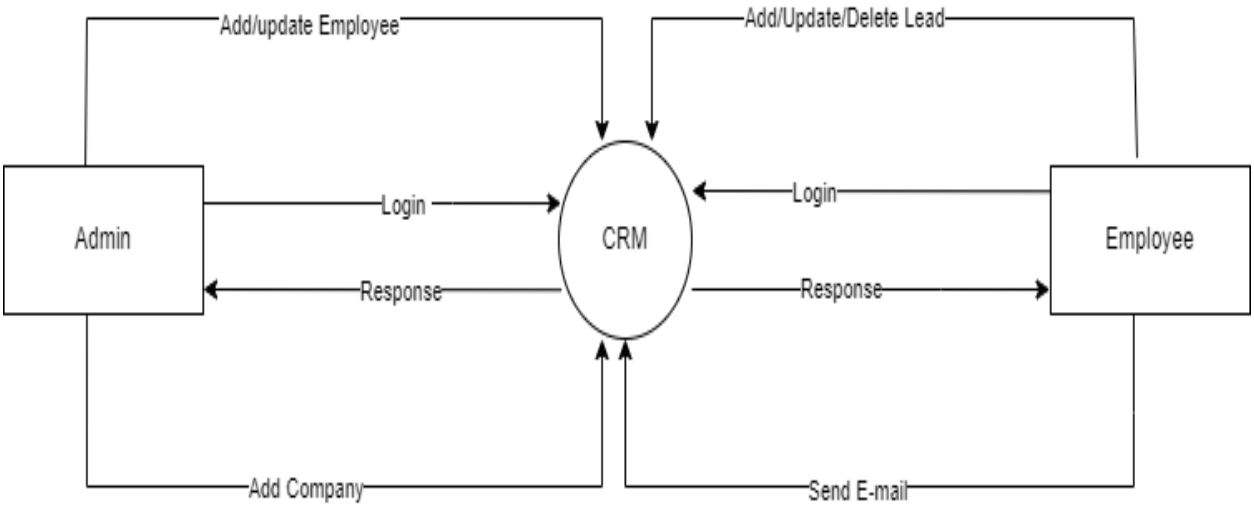
- Admin Login
- Add Employee
- Add Company
- Edit Employee
- Logout

➢ User Module:

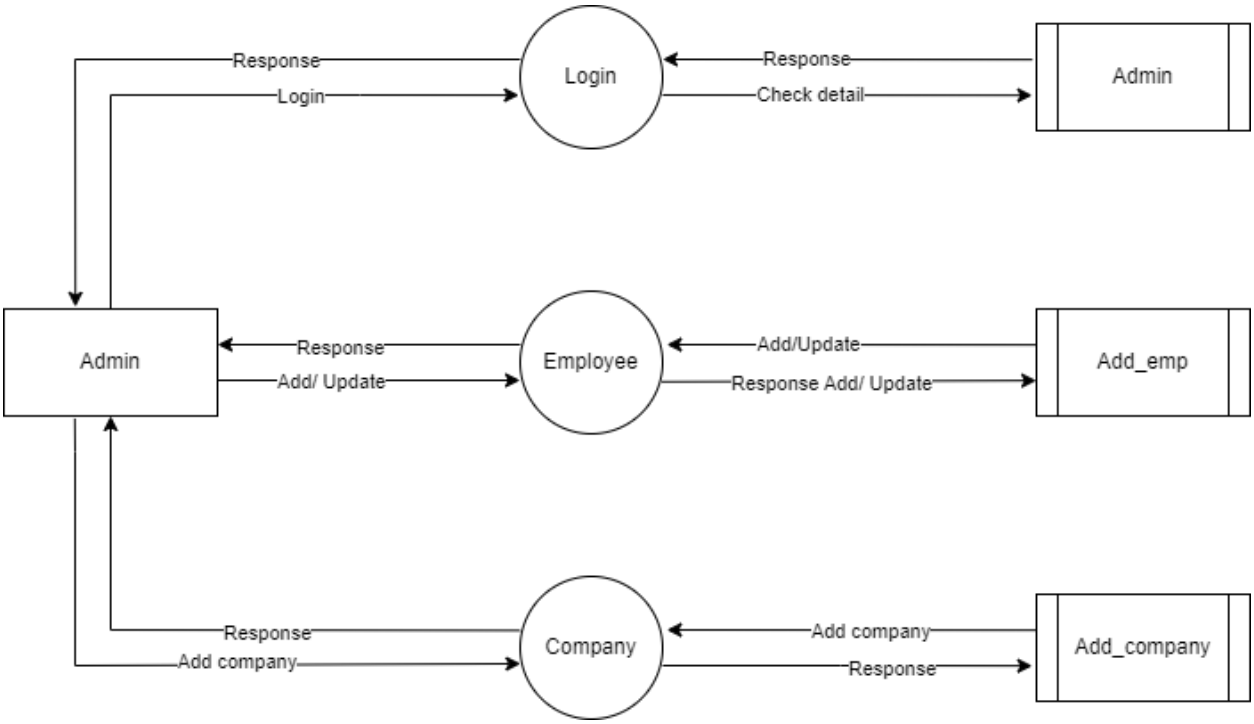
- Employee login
- Dashboard
- Add Lead
- Opportunity
- Communication
- Search Company
- Edit lead
- Logout

3.2 Data Flow Diagrams (DFD)

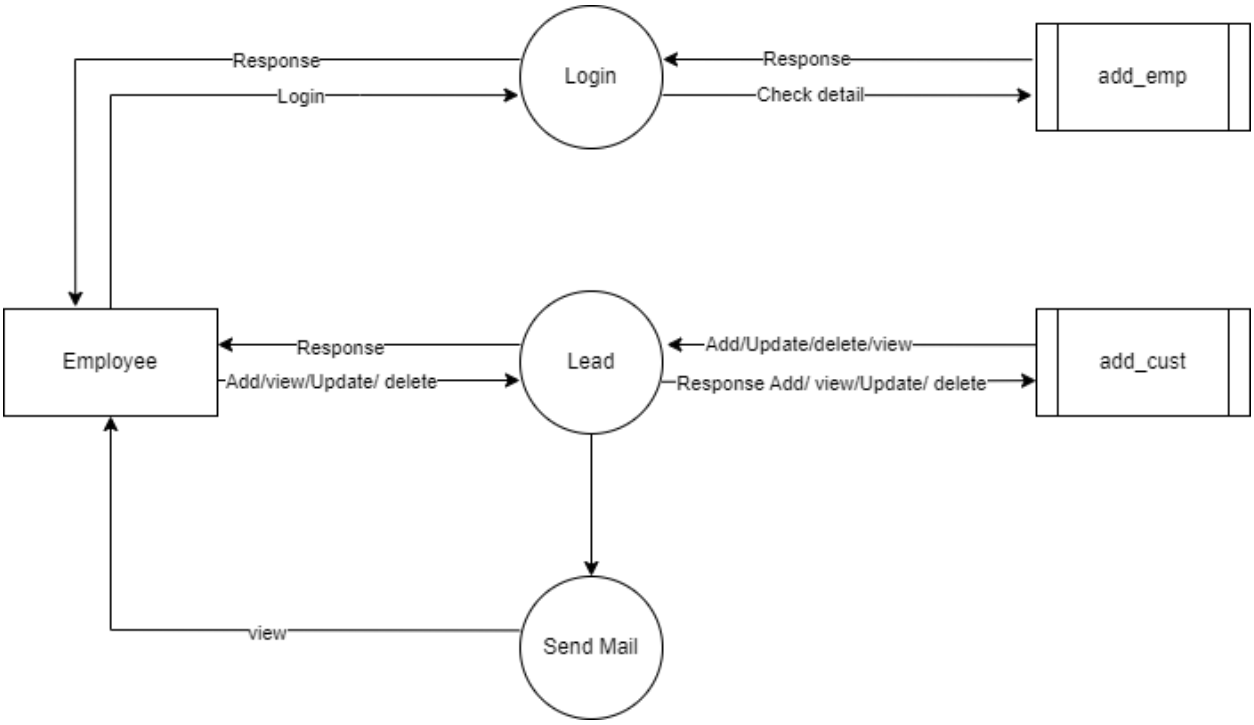
Context level DFD:



1st level DFD of Admin:



1st level DFD of Employ:



3.3 Process Specification

- **PROCESS For LOGIN**

Name:	**Login**
Description:	This process is save all the information of the Admin and Employ like Userid, Password etc.

- **PROCESS FOR Company:**

Name:	**Company**
Description:	Admin can manage All the company he can Add

	New company, update company & Delete company. User can view the company list.

- **PROCESS FOR Employ:**

Name	**Employ**
Description:	Admin can manage All the employ he can Add new Employ, update & Delete employ. User is the employ.

- **PROCESS FOR Lead:**

Name	**Lead**
Description:	This process is save all the information of the Lead like Lead name, mobile no, email id, company interested and status.

- **PROCESS FOR Opportunity :**

Name	**Opportunity**
Description:	Employee can manage can pending lead to customer after lead has parched from the interested company or if it lead is not interested than that lead is lost and deleted by employee in opportunity.

- **PROCESS FOR Communication:**

Name:	Communication
Description:	Employee can communicate to there lead via email. Employee send email to there respected pending leads Here only pending leads are show.

3.4 Data Dictionary

- **Employee Table**

Name:	Add_emp
Alias:	Employee details
Where used/How used:	Data use for login as employee and add employee details
Content Description:	Emp_id + name+ email_id+ mobile_no+ password+

- **Company Table**

Name:	Add_company

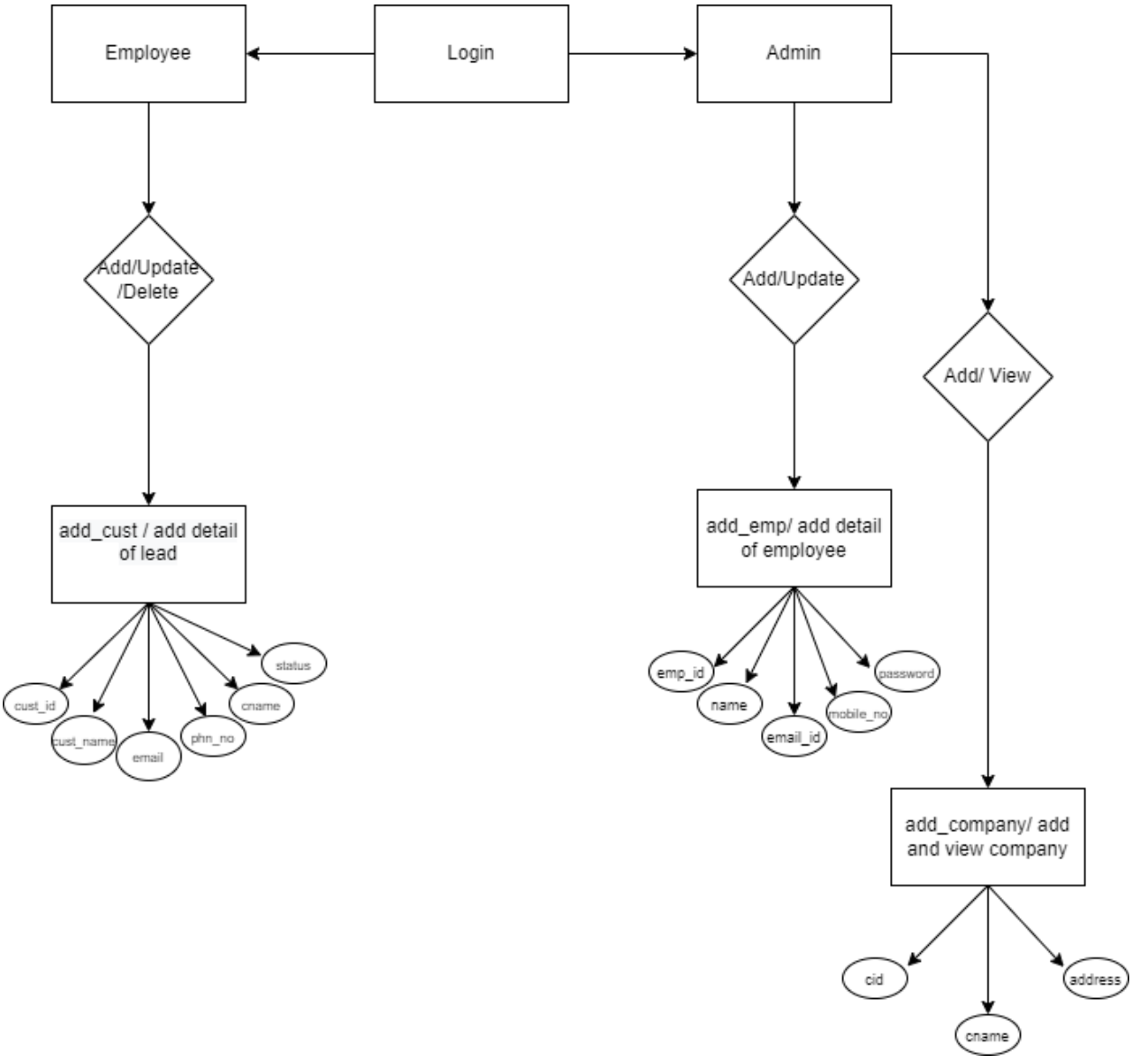
Alias:	Company
Where used/How used:	How many companies are there.
Content Description:	cid+ cname+ address+

- **Lead Table**

Name:	Add_cust
Alias:	Lead detail
Where used/How used:	Data use for add update and delete the lead information
Content Description:	cust_id+ cust_name+ email+ phn_no+ cname+ status+

4. Design

4.1 E-R Diagram :



4.2 Database design :

➢ Table Name : ***add_emp***

Field Name	Data Type	Constraints	Field Size	Description
emp_id	int	Primary Key	11	Contains ID of employee
name	varchar		100	Contains name of employee
email	varchar		100	Contains Email i of employee
phonenum	int		11	Contains mobile no of employee
password	varchar		100	Contains password of employee

➢ Table Name : add_***company***

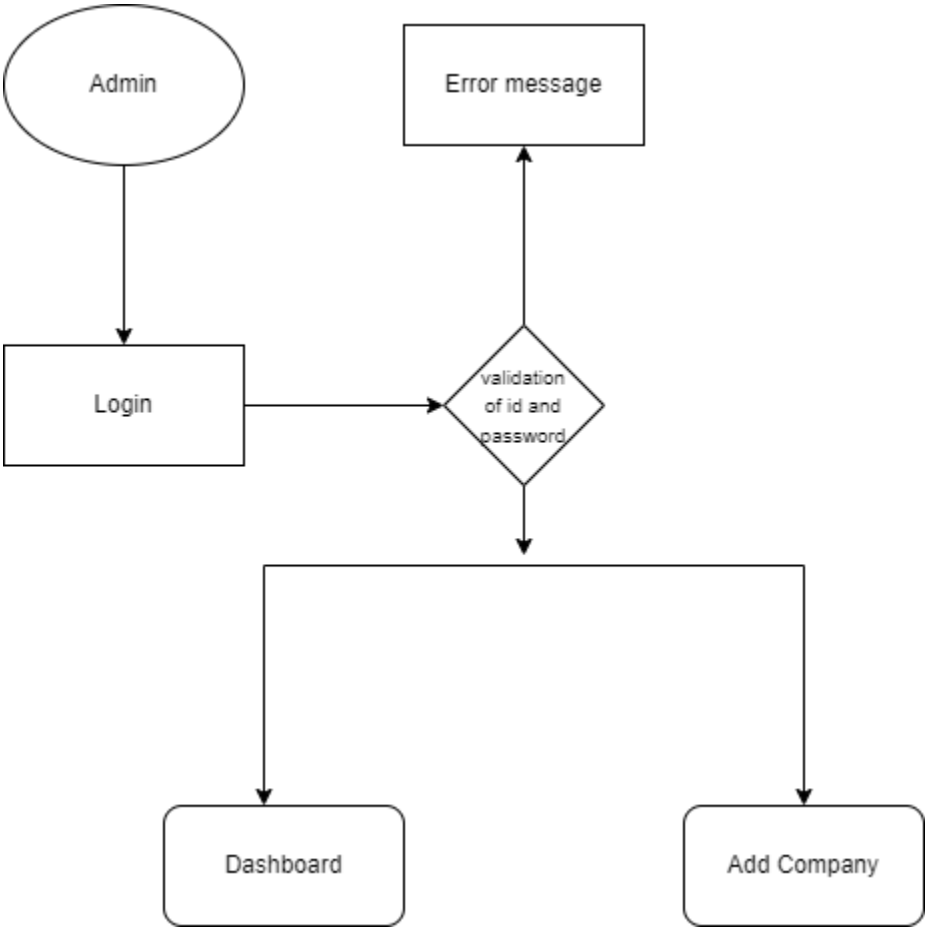
Field Name	Data Type	Constraints	Field Size	Description
cid	int	Primary Key	11	Contains ID of company
address	varchar		100	Contains address of company
cname	varchar		100	Contains name of company

➢ Table Name : ***add_cust***

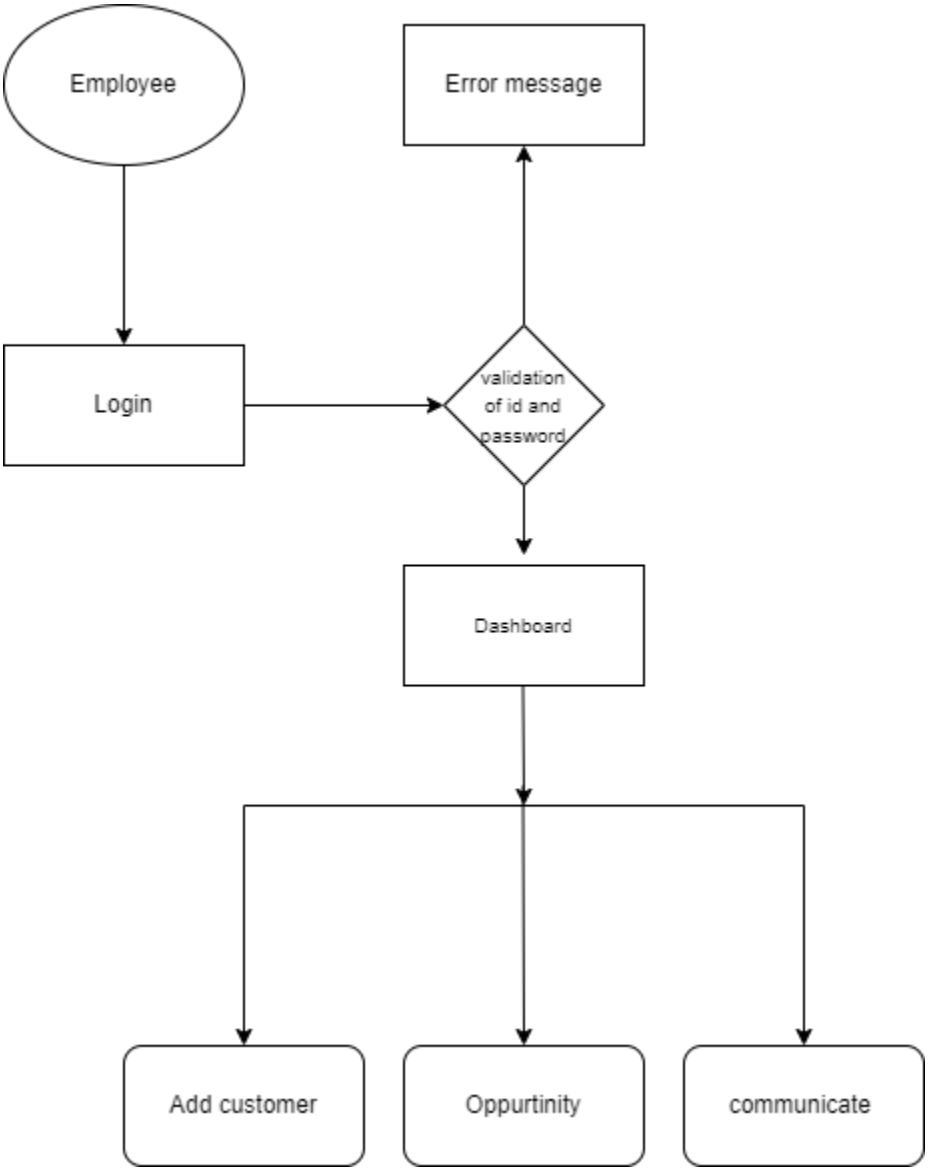
Field Name	Data Type	Constraints	Field Size	Description
cust_id	int	Primary Key	11	Contains ID of lead
Cust_name	varchar		100	Contains name of lead
email	varchar		100	Contains Email id of lead
phn_no	int		10	Contains Mobile no of lead
cname	varchar		50	Contains Interested company of lead
status	varchar		50	Check status of lead.

4.3 System Flowchart :

4.3.1 Admin Side :



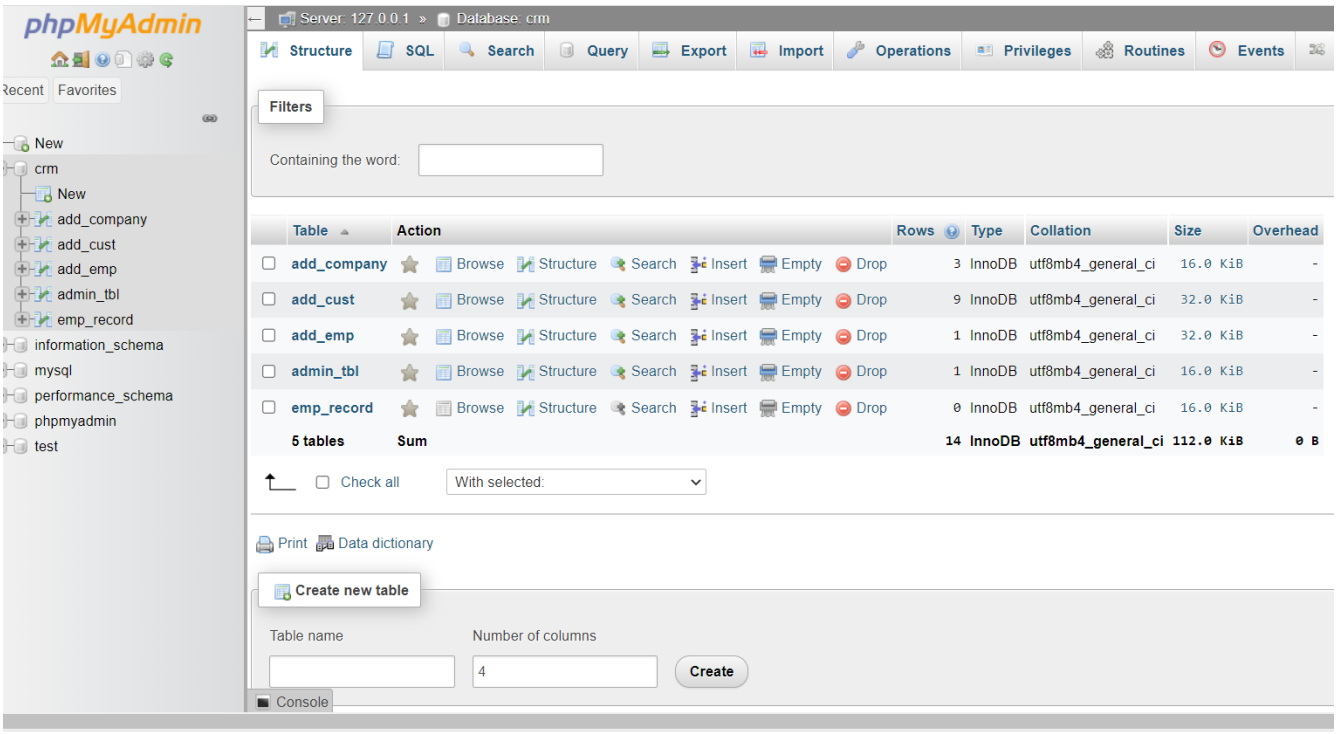
4.3.2 User Side :



4.4 FORM AND REPORT DESIGN(SCREENSHOT)LAYOUT:

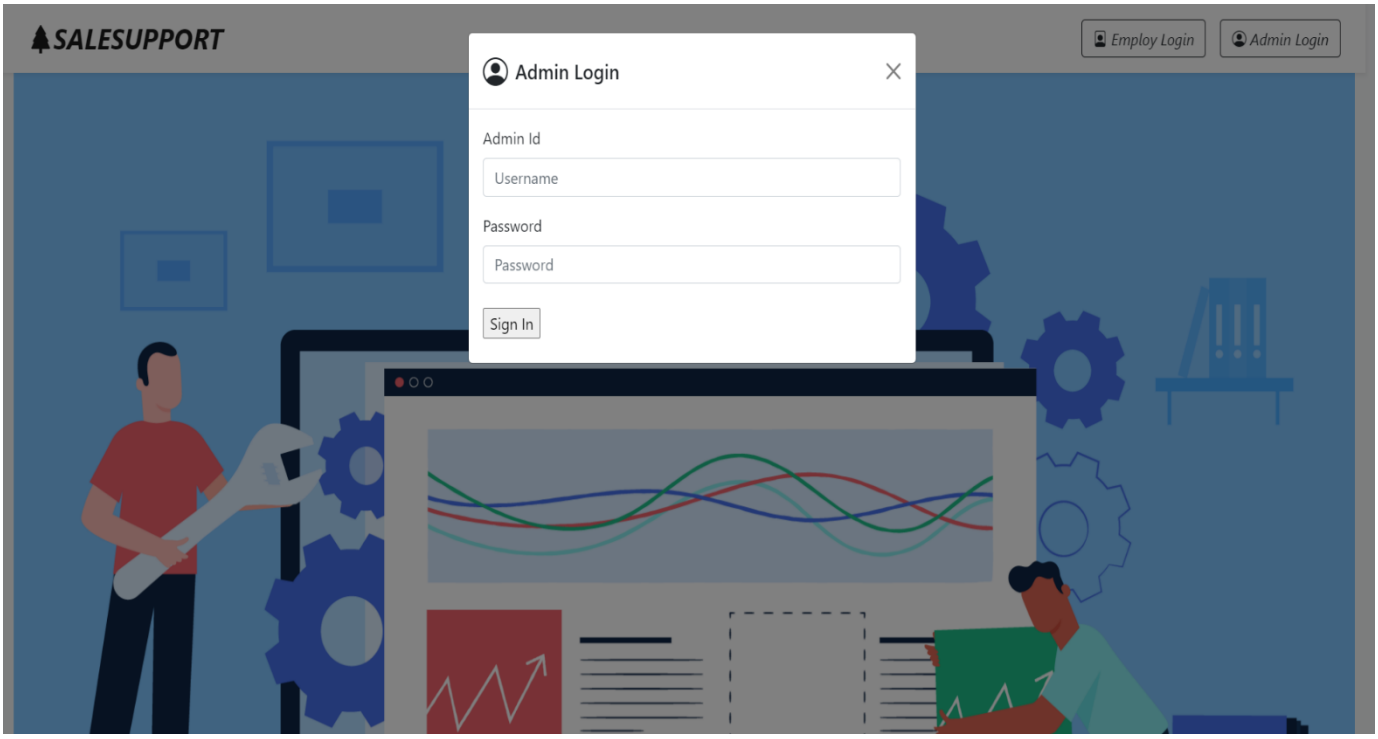
- **Database Screenshot**

➢ Database name :- crm



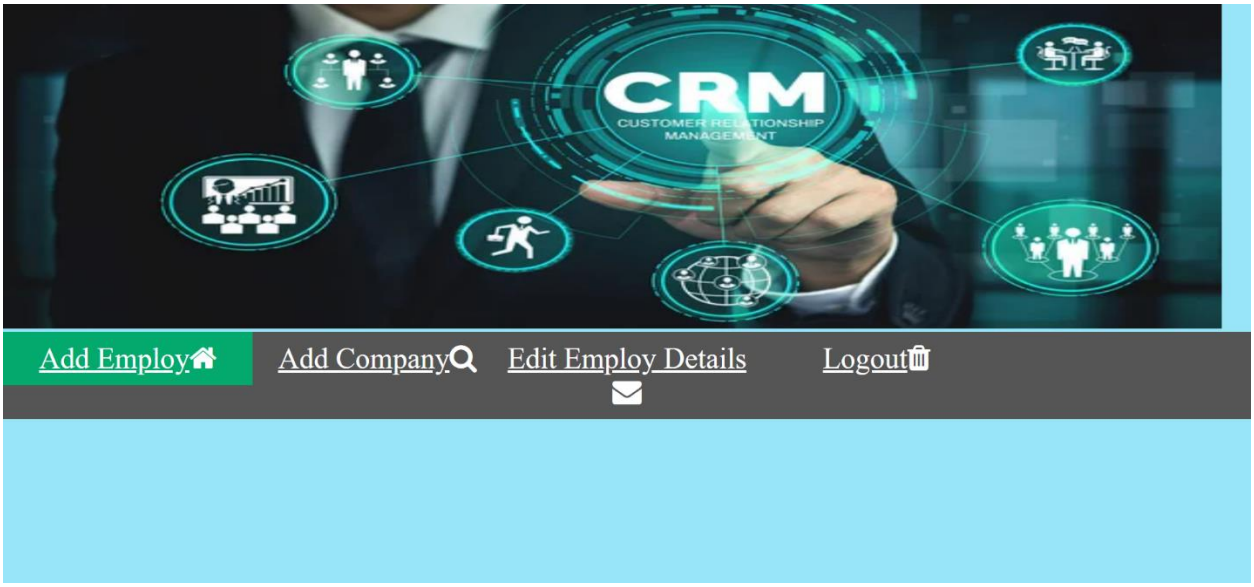
- **Login Page Admin**

  ➢ Login page used by admin to login in customer relationship management.



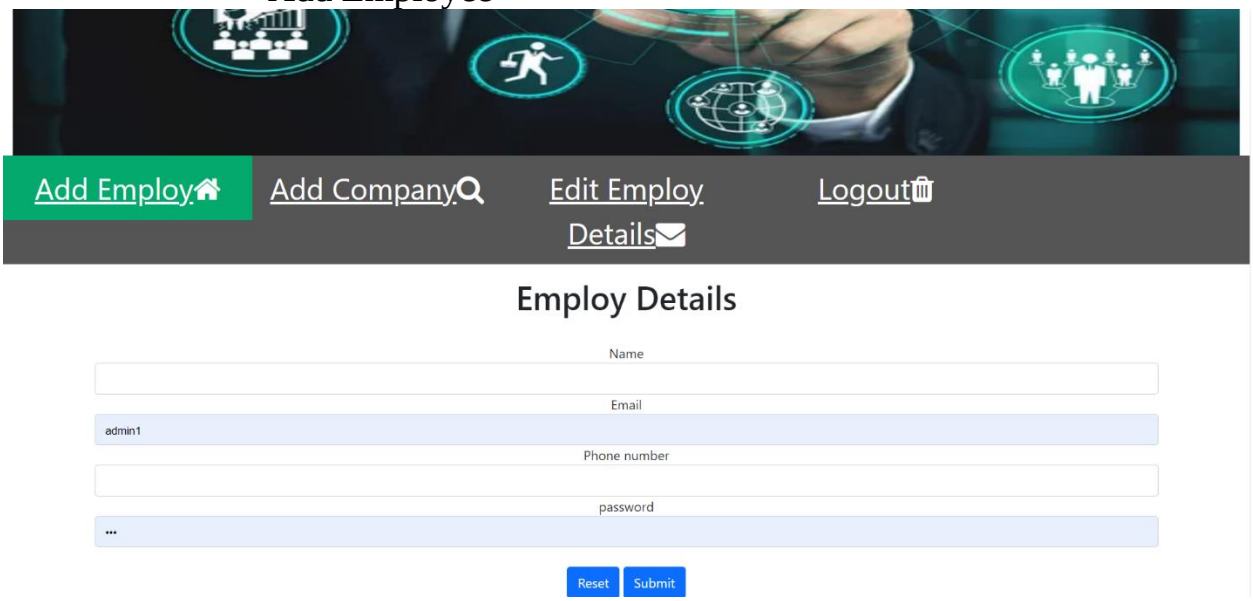
- **Admin Home Page**

  ➢ If admin is login in this system then admin redirected on home page of admin.



- **Category**

➢ Add Employee



➢ Add Company

Add Employ Add Company Edit Employ Logout Details

-->

Add Company

Name

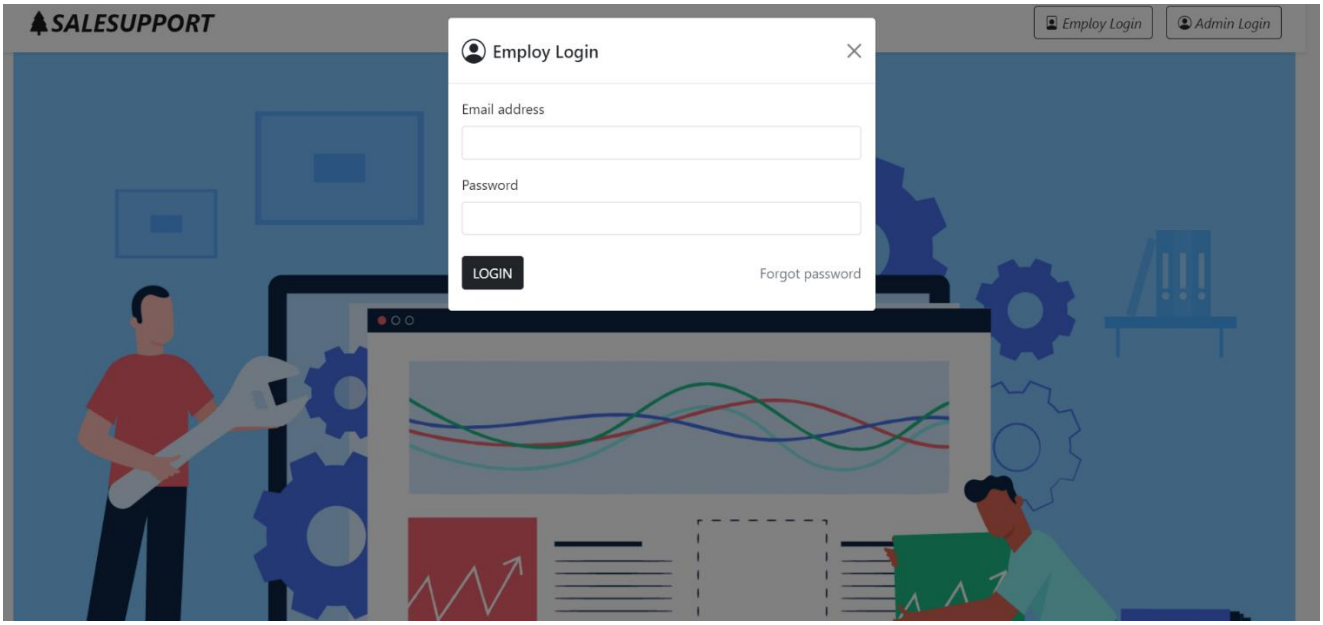
Address

Reset Submit

➢ Edit Employee Detail

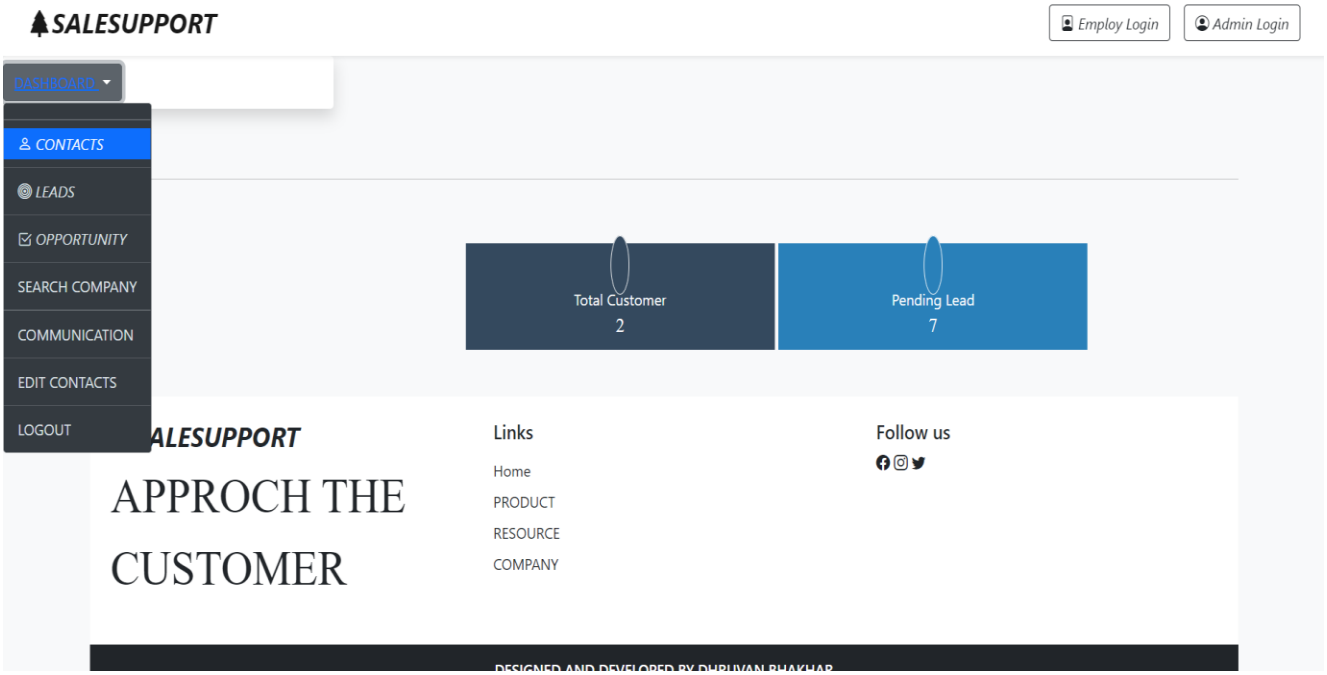
- **Login Page Employee**

  ➢ Login page used by employee to login in customer relationship management.

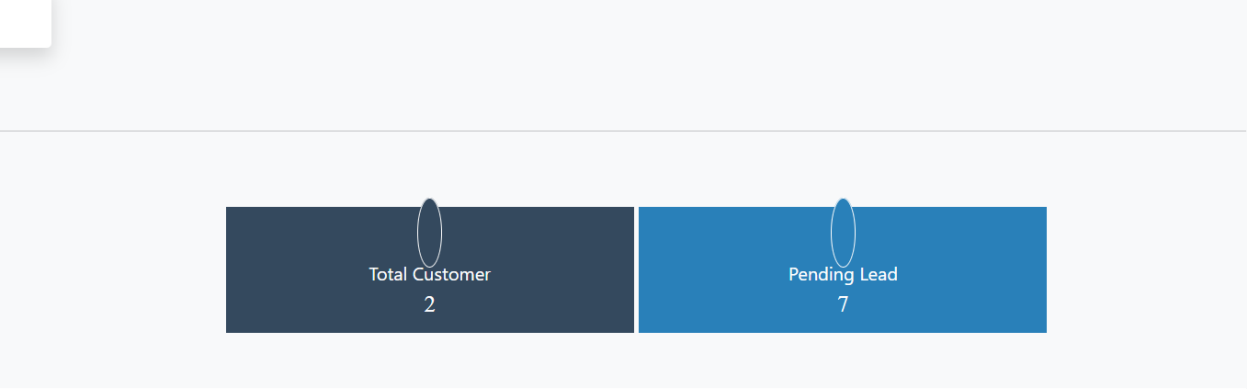


- **Employee Home Page**

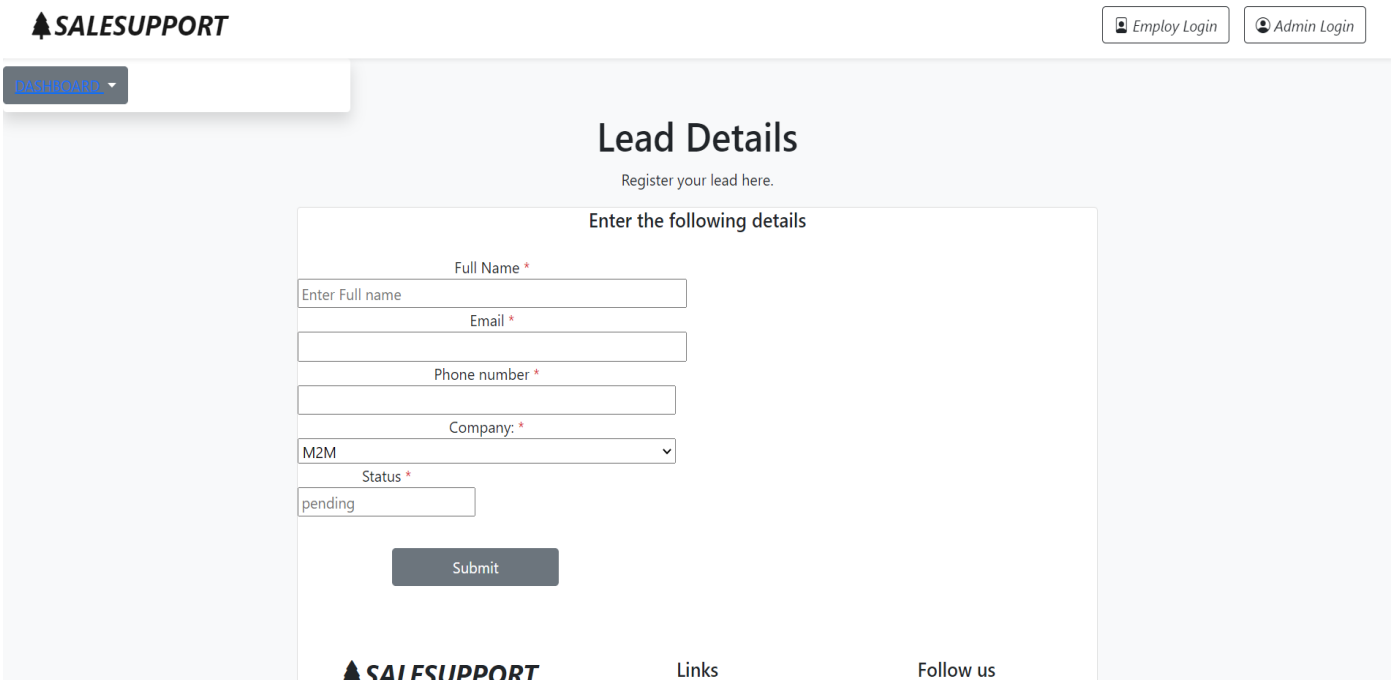
➢ Employee is login in this system.



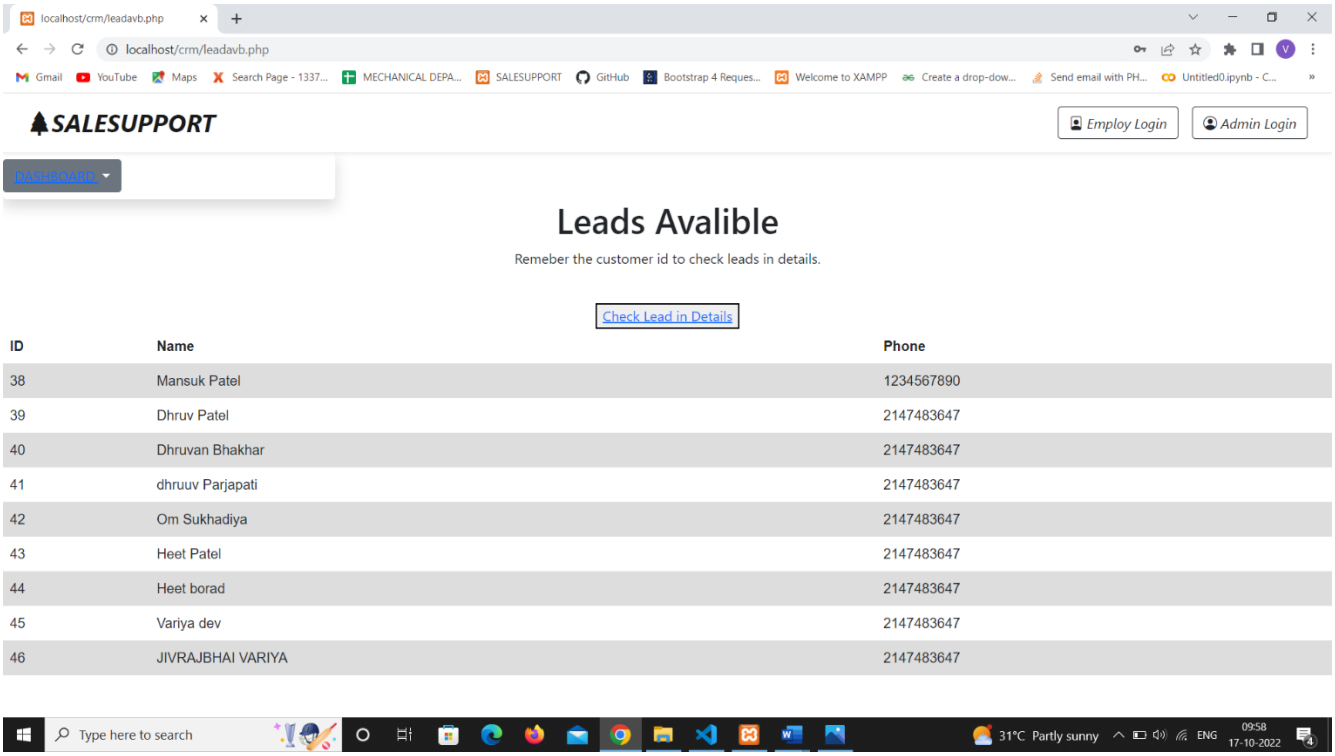
- **Dashboard**



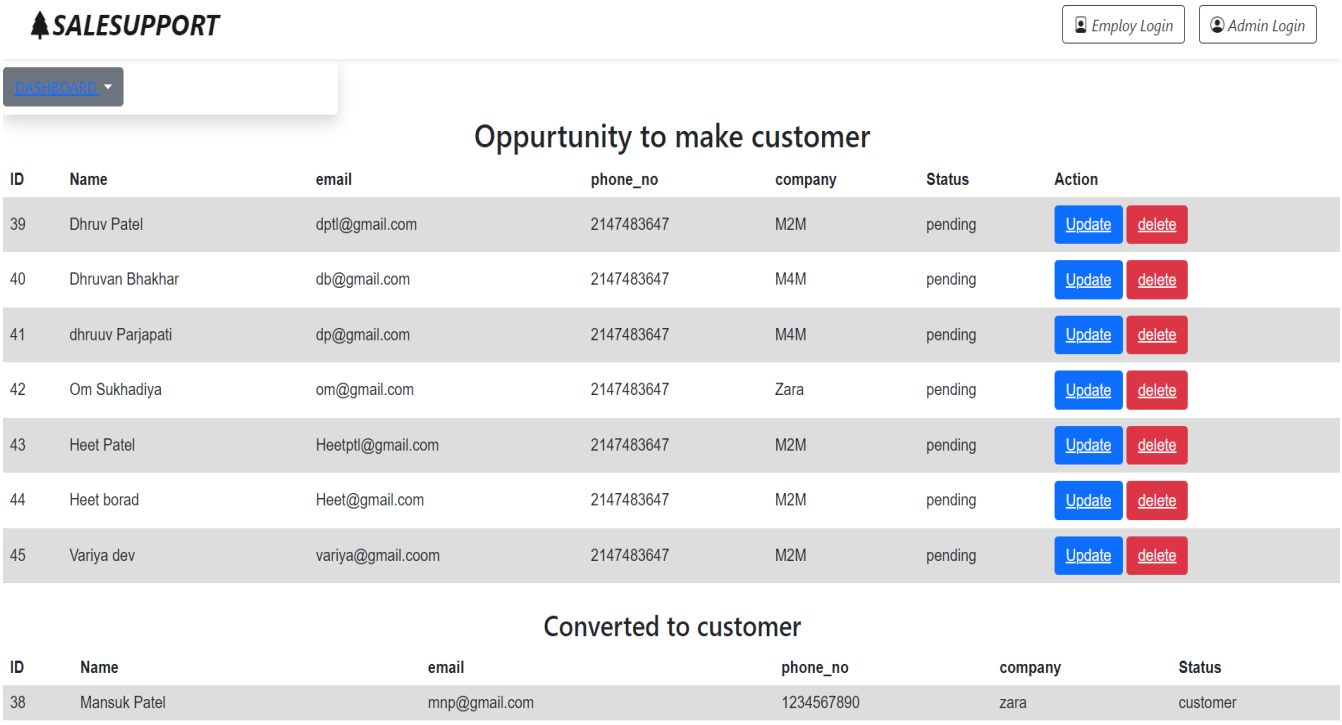
- **Add Lead**


SALESUPPORT
Employ Login
Admin Login
DASHBOARD
Lead Details
Register your lead here.
Enter the following details
Full Name *
Enter Full name
Email *
Phone number *
Company: *
M2M
Status *
pending
Submit
SALESUPPORT
Links
Follow us

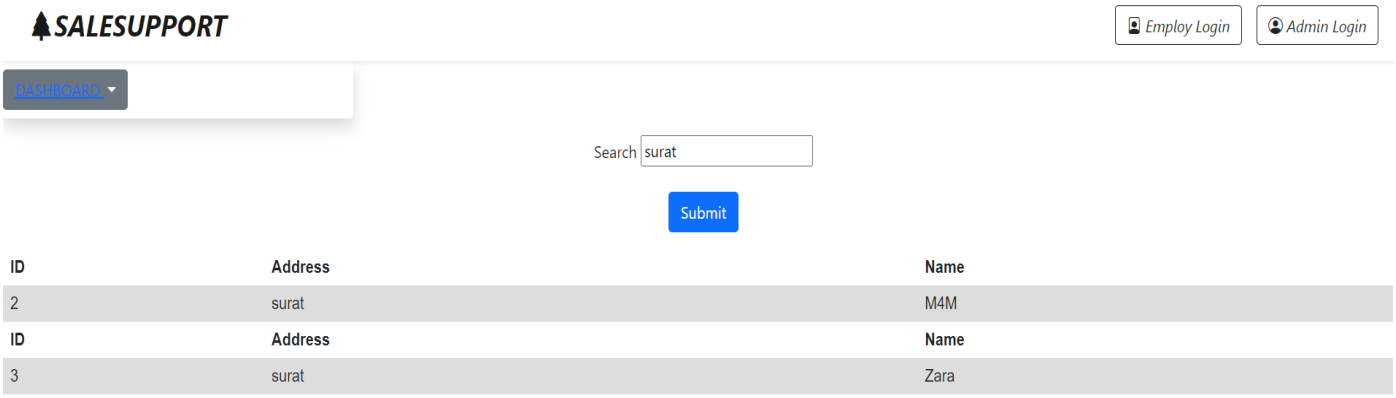
- **Lead Available**



- **Opportunity**

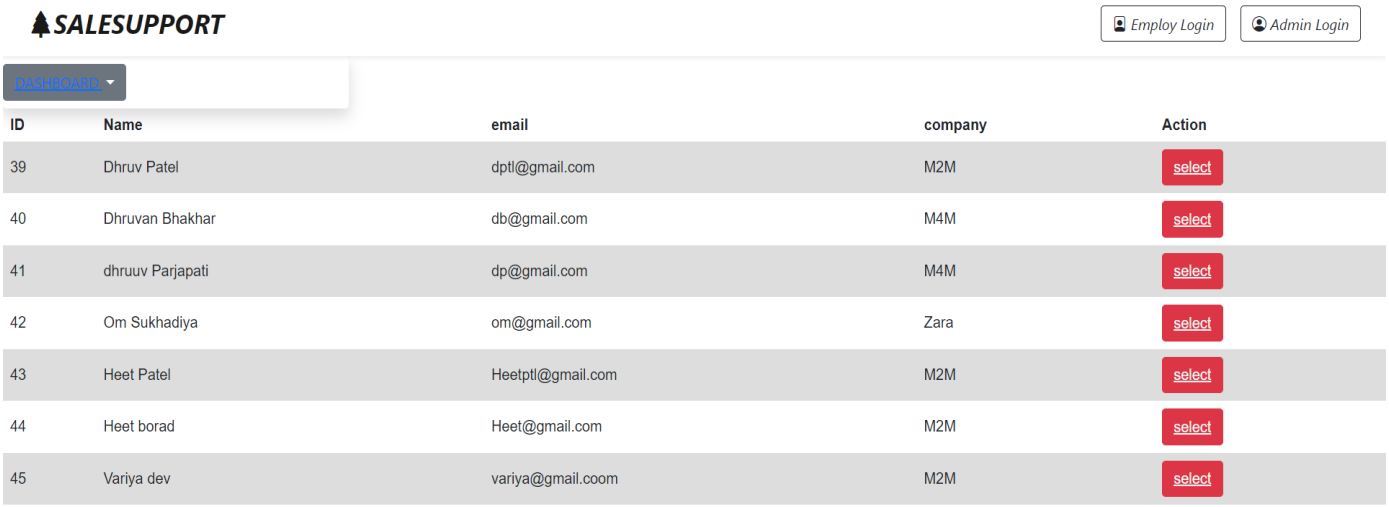


- **Search Company**

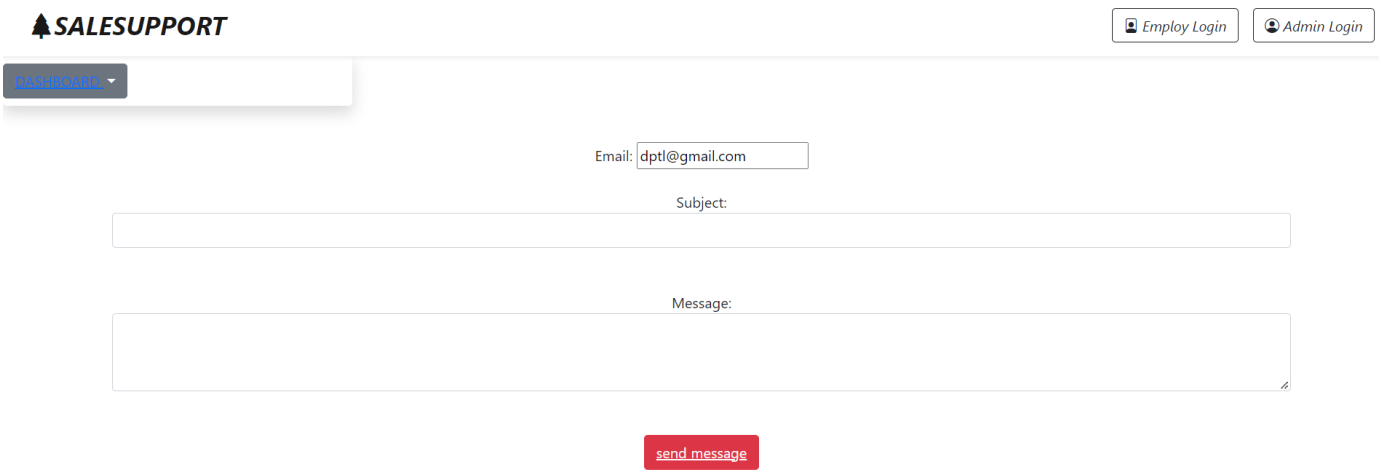


- **Communication**

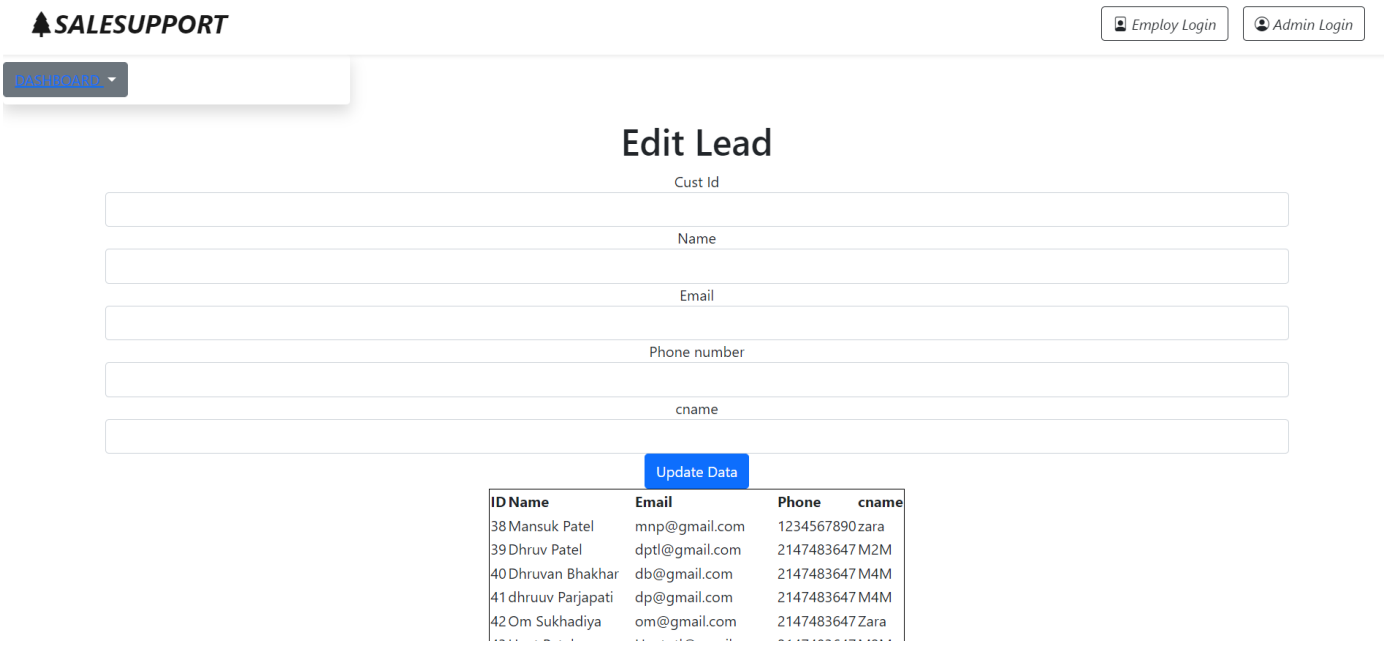
➢ Contact Lead



➢ Send Mail


SALESUPPORT
Employ Login
Admin Login
DASHBOARD
Email: dptl@gmail.com
Subject:
Message:
send message

- **Edit lead**


SALESUPPORT
Employ Login
Admin Login
DASHBOARD
Edit Lead
Cust Id
Name
Email
Phone number
cname
Update Data
ID Name Email Phone cname
38 Mansuk Patel mnp@gmail.com 1234567890 zara
39 Dhruv Patel dptl@gmail.com 2147483647 M2M
40 Dhruvan Bhakhar db@gmail.com 2147483647 M4M
41 dhruuv Parjapati dp@gmail.com 2147483647 M4M
42 Om Sukhadiya om@gmail.com 2147483647 Zara

5. Coding

connection.php

```php
<?php
$conn = "";

try {
    $servername = "localhost";
    $dbname = "crm";
    $username = "root";
    $password = "";

    $conn = new PDO(
        "mysql:host=$servername; dbname=crm",
        $username, $password
    );

   $conn->setAttribute(PDO::ATTR_ERRMODE,
                       PDO::ERRMODE_EXCEPTION);
}
catch(PDOException $e) {
    echo "Connection failed: " . $e->getMessage();
}

?>
```

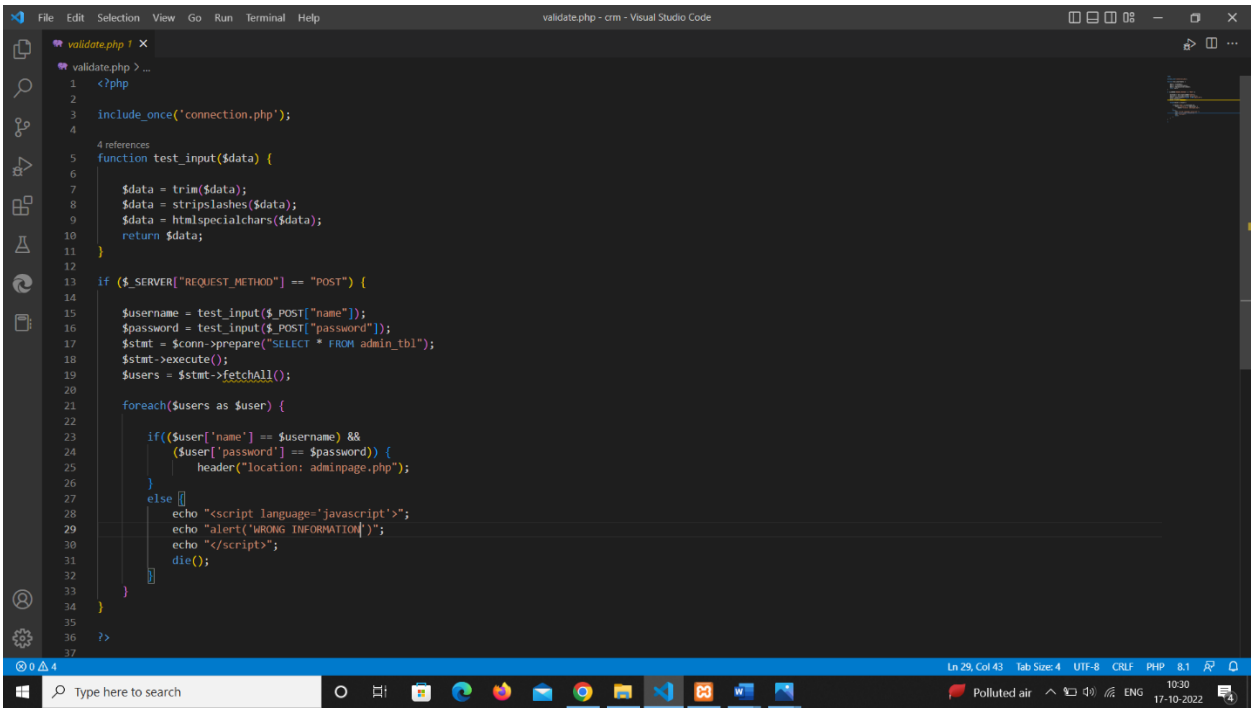
Loginvalidate.php

```php
<?php

include_once('connection.php');

4 references
function test_input($data) {

    $data = trim($data);
    $data = stripslashes($data);
    $data = htmlspecialchars($data);
    return $data;
}

if ($_SERVER["REQUEST_METHOD"] == "POST") {

    $username = test_input($_POST["name"]);
    $password = test_input($_POST["password"]);
    $stmt = $conn->prepare("SELECT * FROM add_emp");
    $stmt->execute();
    $users = $stmt->fetchAll();

    foreach($users as $user) {

        if(($user['email'] == $username) &&
            ($user['password'] == $password)) {
                header("location: dashboard.php");
        }
        else {
            echo "<script language='javascript'>";
            echo "alert('WRONG INFORMATION')";
            echo "</script>";
            die();
        }
    }
}

?>
```

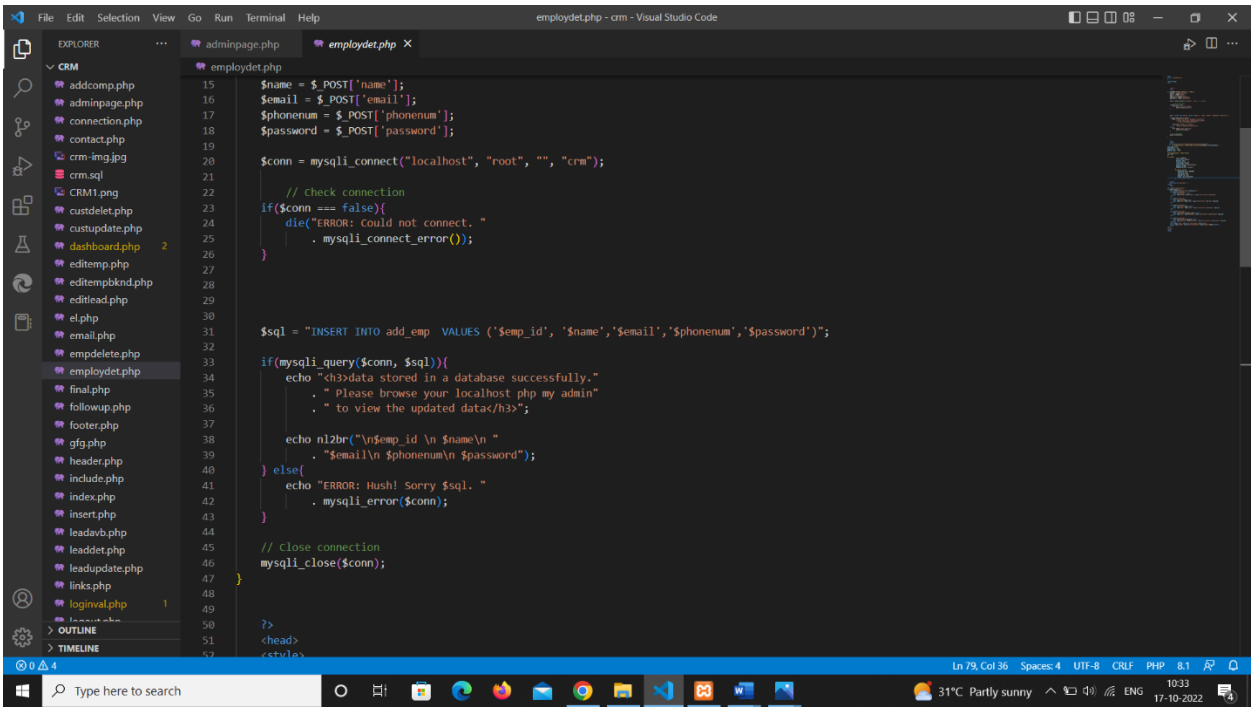
dashboard.php

```php
<div class="container">

        <div class="main-section">
          <div class="dashbord">
            <div class="icon-section">
              <i class="fa fa-users" aria-hidden="true"></i><br>
             Total Customer
            <p> <?php
                echo number_format($conn->query("SELECT * FROM add_cust where status='customer'")->rowCount());
              ?></p>
            </div>


          </div>
           <div class="dashbord dashbord-blue">
            <div class="icon-section">
              <i class="fa fa-money" aria-hidden="true"></i><br>
             Pending Lead
              <p><?php  echo number_format($conn->query("SELECT * FROM add_cust where status='pending'")->rowCount());?></p>
            </div>

          </div>


</div>
</div>
<br>
```

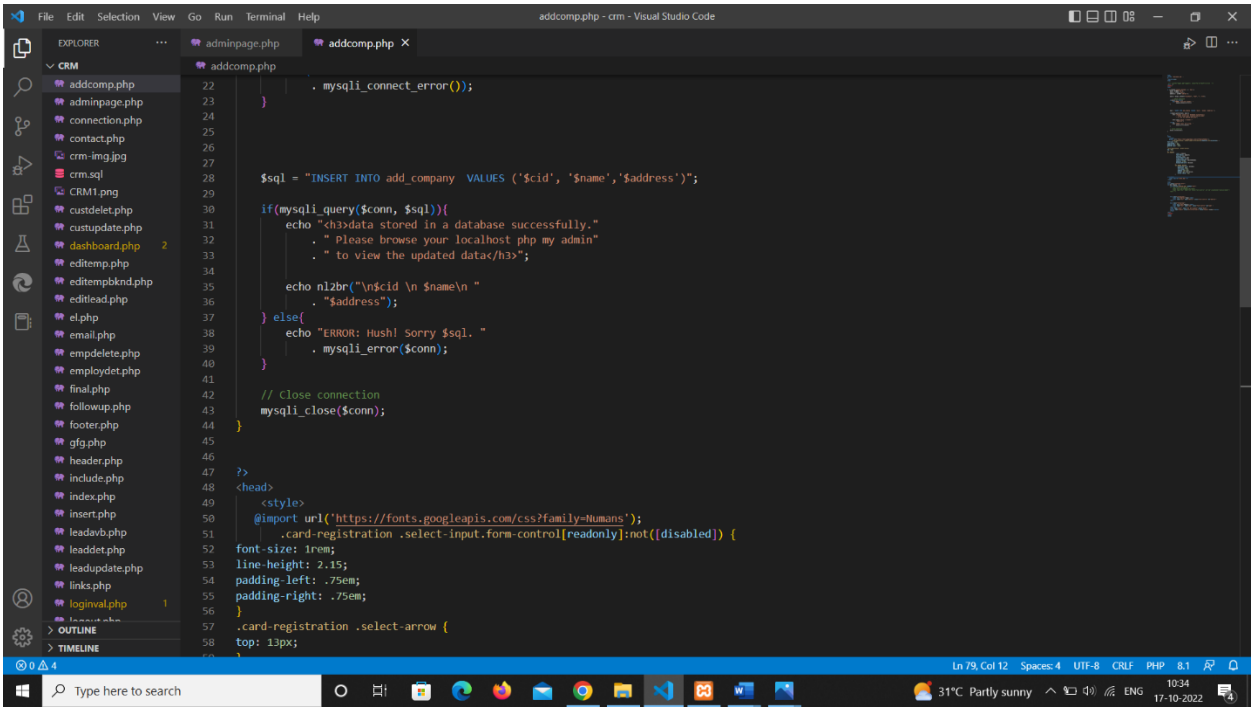
Validate.php



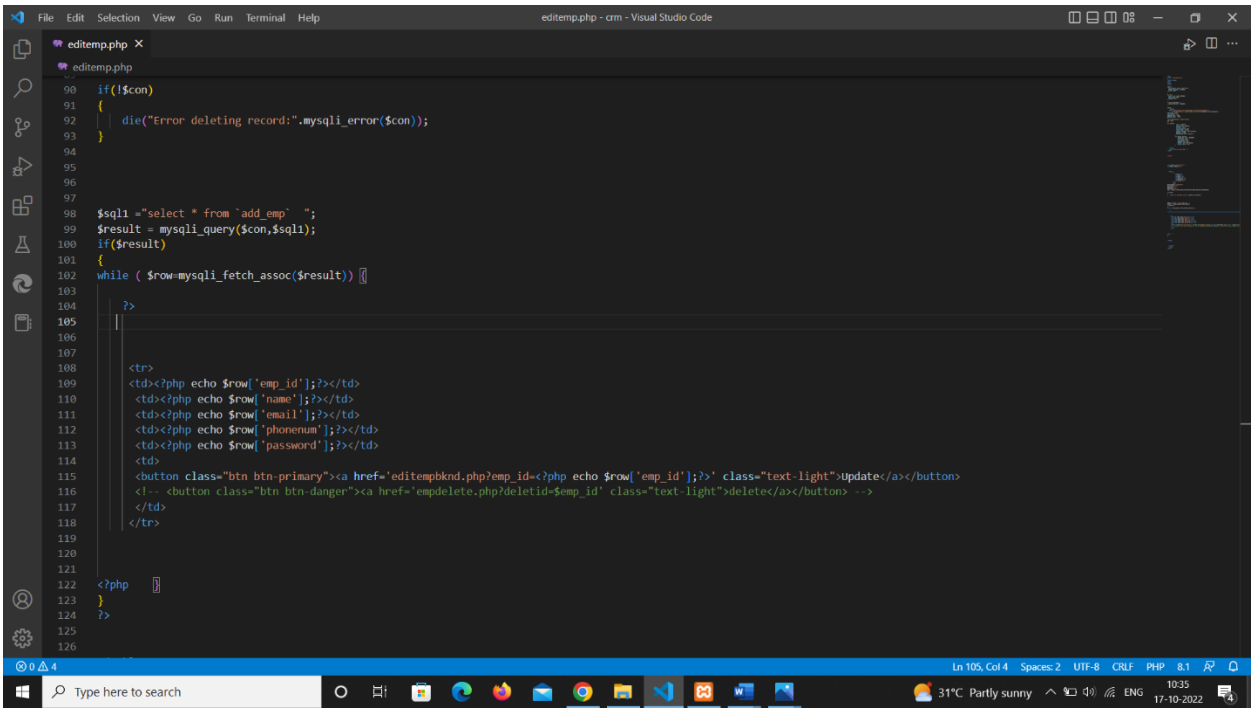
employdet.php



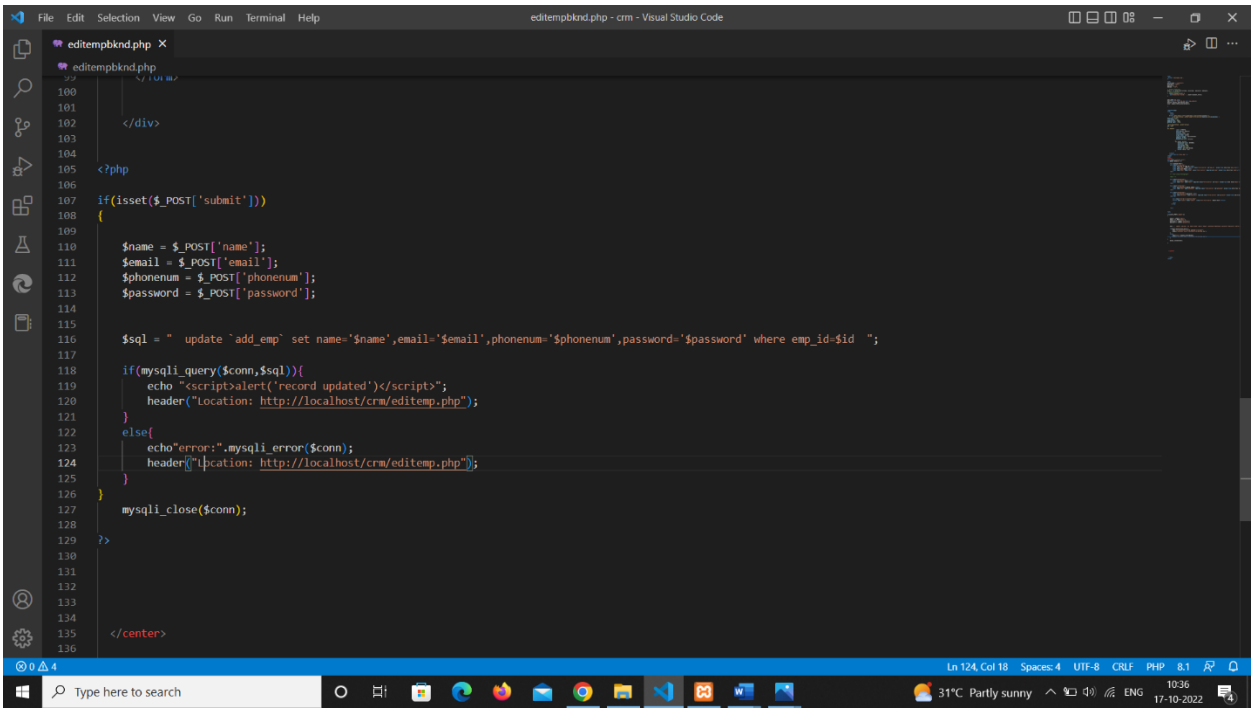
Add_company.php



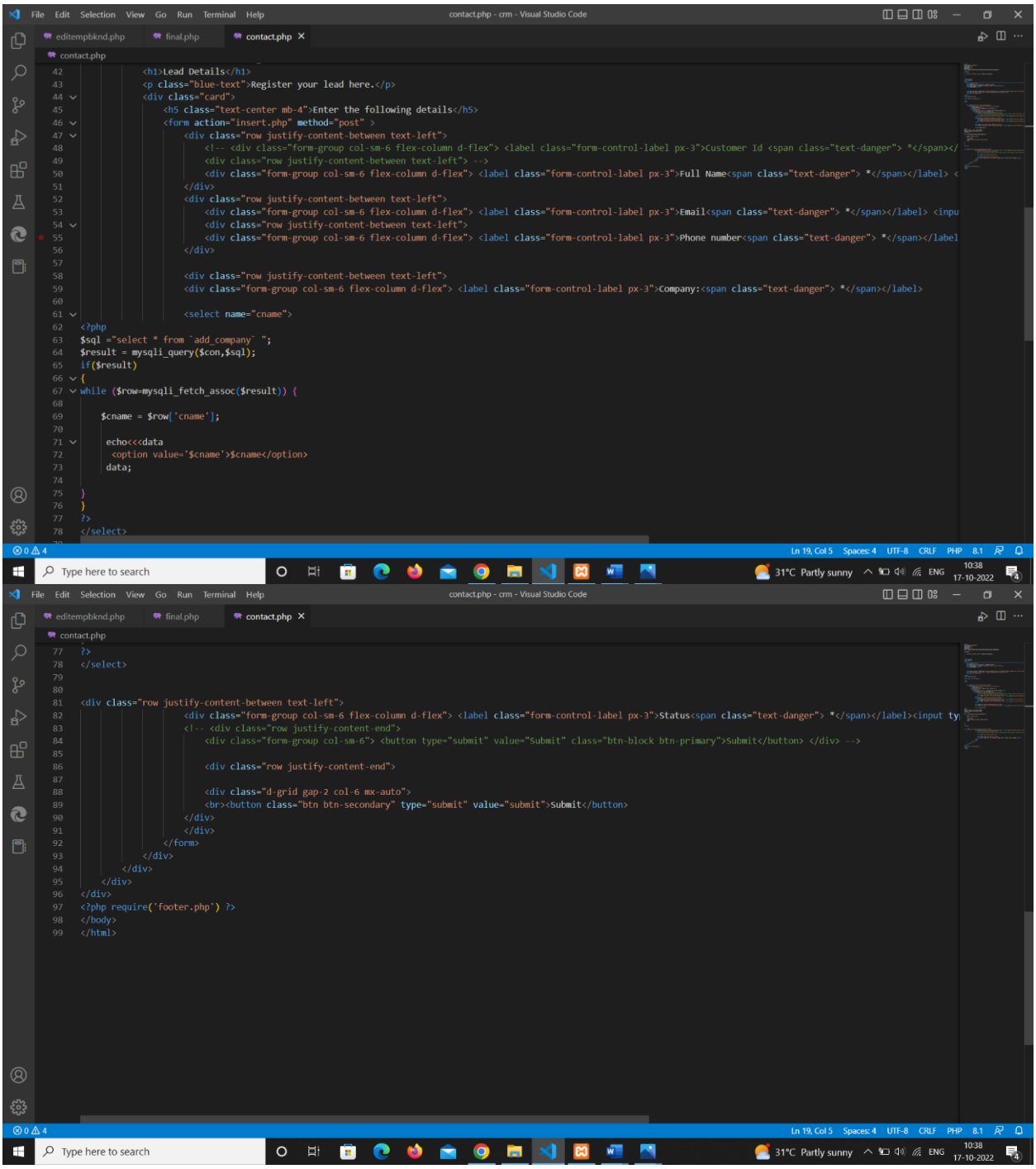
editemp.php



editempbknd.php



contact.php


File Edit Selection View Go Run Terminal Help
contact.php - crm - Visual Studio Code
editempbknd.php
final.php
contact.php
<h1>Lead Details</h1>
Register your lead here.

<h5 class="text-center mb-4">Enter the following details</h5>
<form action="insert.php" method="post" >

 <label class="form-control-label px-3">Full Name *</label>

 <label class="form-control-label px-3">Email *</label>

 <label class="form-control-label px-3">Phone number *</label>

 <label class="form-control-label px-3">Company: *</label>
<select name="cname">
<?php
$sql ="select * from `add_company` ";
$result = mysqli_query($con,$sql);
if($result)
{
while ($row=mysqli_fetch_assoc($result)) {
$cname = $row['cname'];
echo<<<data
<option value='$cname'>$cname</option>
data;
}
}
?>
</select>
Ln 19, Col 5 Spaces: 4 UTF-8 CRLF PHP 8.1
Type here to search
31°C Partly sunny
ENG
10:38
17-10-2022
File Edit Selection View Go Run Terminal Help
contact.php - crm - Visual Studio Code
editempbknd.php
final.php
contact.php
?>
</select>

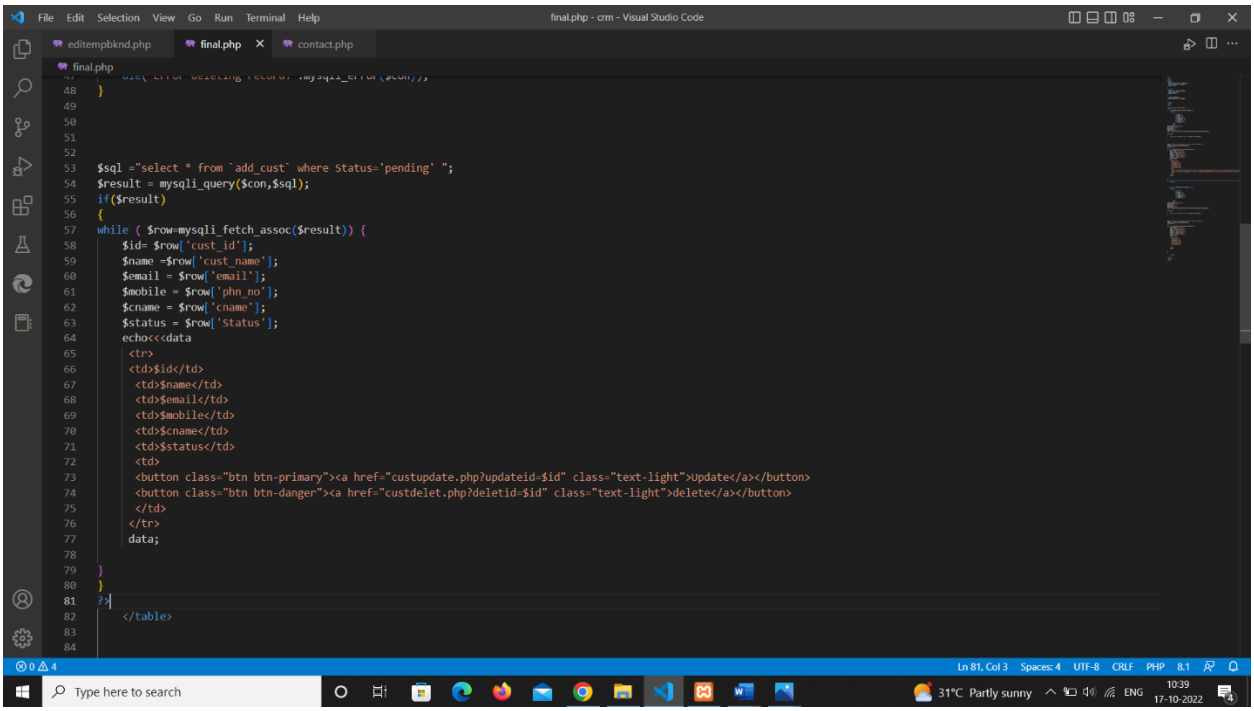
 <label class="form-control-label px-3">Status *</label><input ty
<!--
 <button type="submit" value="Submit" class="btn-block btn-primary">Submit</button> -->

<button class="btn btn-secondary" type="submit" value="submit">Submit</button>

</form>

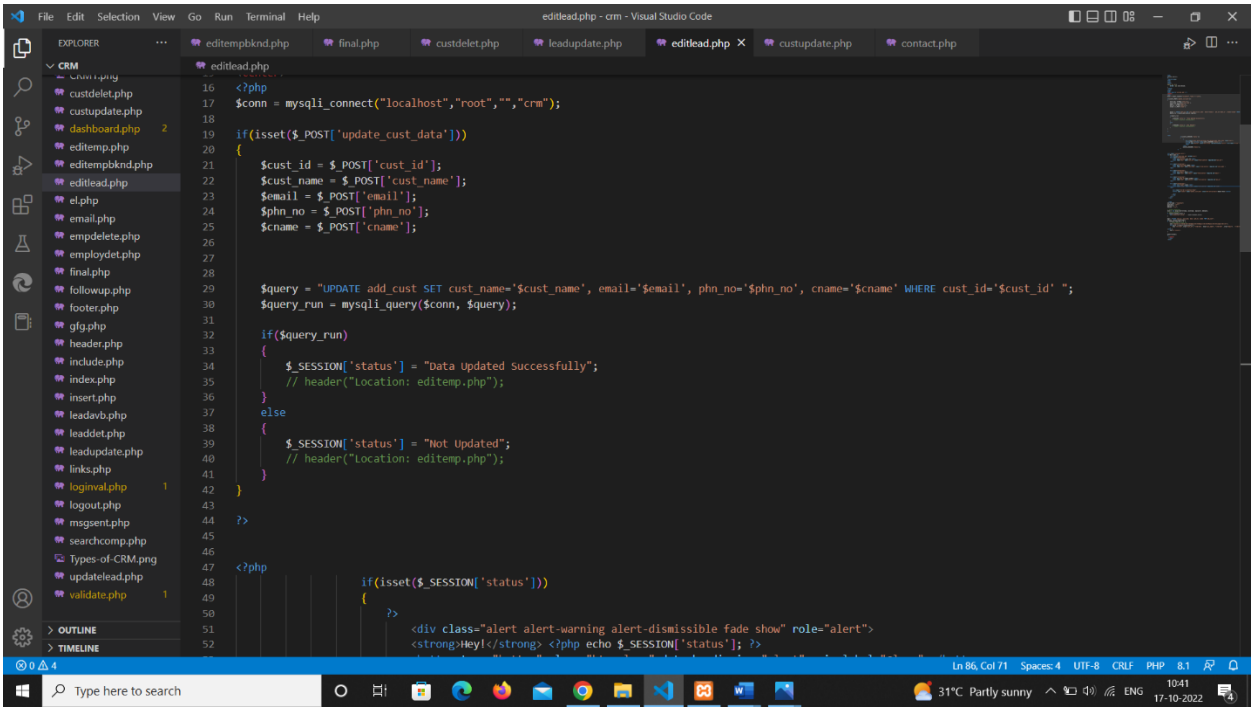
<?php require('footer.php') ?>
</body>
</html>
Ln 19, Col 5 Spaces: 4 UTF-8 CRLF PHP 8.1
Type here to search
31°C Partly sunny
ENG
10:38
17-10-2022

final.php



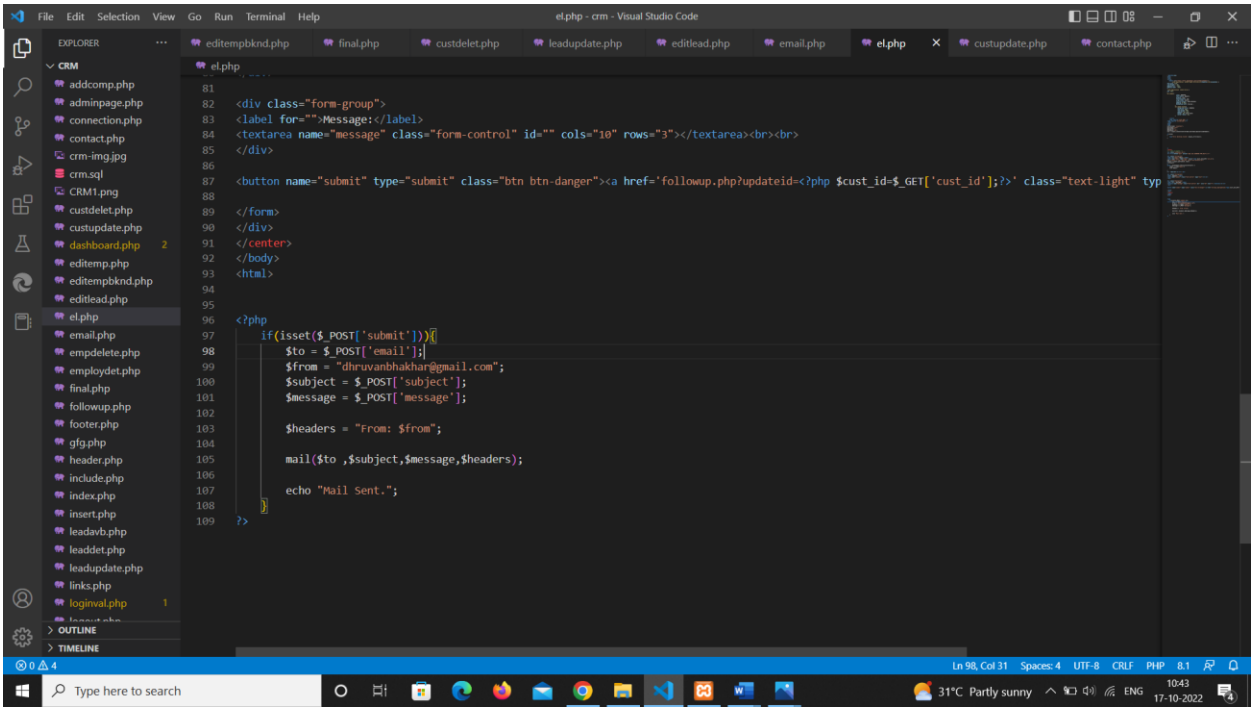
```
$sql ="select * from `add_cust` where Status='pending' ";
$result = mysqli_query($con,$sql);
if($result)
{
while ( $row=mysqli_fetch_assoc($result)) {
    $id= $row['cust_id'];
    $name =$row['cust_name'];
    $email = $row['email'];
    $mobile = $row['phn_no'];
    $cname = $row['cname'];
    $status = $row['Status'];
    echo<<<data
     <tr>
     <td>$id</td>
      <td>$name</td>
      <td>$email</td>
      <td>$mobile</td>
      <td>$cname</td>
      <td>$status</td>
      <td>
      <button class="btn btn-primary"><a href="custupdate.php?updateid=$id" class="text-light">Update</a></button>
      <button class="btn btn-danger"><a href="custdelet.php?deletid=$id" class="text-light">delete</a></button>
      </td>
     </tr>
     data;

}
}
?>
    </table>
```

Editlead.php



```
<?php
$conn = mysqli_connect("localhost","root","","crm");

if(isset($_POST['update_cust_data']))
{
    $cust_id = $_POST['cust_id'];
    $cust_name = $_POST['cust_name'];
    $email = $_POST['email'];
    $phn_no = $_POST['phn_no'];
    $cname = $_POST['cname'];



    $query = "UPDATE add_cust SET cust_name='$cust_name', email='$email', phn_no='$phn_no', cname='$cname' WHERE cust_id='$cust_id' ";
    $query_run = mysqli_query($conn, $query);

    if($query_run)
    {
        $_SESSION['status'] = "Data Updated Successfully";
        // header("Location: editemp.php");
    }
    else
    {
        $_SESSION['status'] = "Not Updated";
        // header("Location: editemp.php");
    }
}

?>


<?php
                if(isset($_SESSION['status']))
                {
                    ?>
                        <div class="alert alert-warning alert-dismissible fade show" role="alert">
                        <strong>Hey!</strong> <?php echo $_SESSION['status']; ?>
```

el.php



logout.php

6 .Testing

❖ Login Page:

NO.	Input	Description	Expected Output	Actual Output	Result
1	Empty Email	Blank	Error	Error	Login Fail
2	Empty /Wrong password	Blank/Wrong	Error	Error	Login Fail

❖ Add Deatil page:

❖

O.	Input	Description	Expected Output	Actual Output	Result
1	Empty Name	blank	Error	Error	Not add
2	Empty Email	Blank	Error	Error	Not add
3	Empty Contact	Blank	Error	Error	Not add

4	Empty Password	Blank	Error	Error	Not add

7.0 NEW TOOLS/ TECHNOLOGIES LEARNED/ USED:

- VS code:-VS code is a sophisticated text editor for code, markup and prose.
- Users can expand its functionality with plugins , typivally community-built and maintained under free-software licenses.
- Some CSS for page design
- Template field for passing value
- mysql: It integrates with wamp.

8.0 SYSTEM LIMITATION/CONSTRAINTS:

- Link will be uploaded when you are connected with internet.
- Employee cant update particular data.
- Cant see how many time follow up is taken to particular lead.

9.0 Future Enhancement & Opportunities

- Passing session.
- Apply More efficient constraints .
- Number of time follow up taken with lead by employee
- Admin see employee detail with its lead count.
- Employee feature to add meeting whith lead.
- Add feature of login/signup using google/facebook.
- Add feature to import data by CSV file.

10.0 BIBLIOGRAPHY & REFERENCES:

Website

- www.google.com
- www.stackoverflow.com
- www.youtube.com

- https://nevonprojects.com/android-customer-relationship-management-system/