IBM CAREER EDUCATION

MAIN PROJECT

DOMAIN NAME: JAVA

E - BILL MANAGEMENT SYSTEM

Submitted By,

Name	Course	Enrollment No.
Saloni Doshi	CBA-08	18162101008
Khushi Jani	CBA-09	18162101009
Rhythm Mendawala	CBA-12	18162101012

II Year – (CBA) 'A' Section
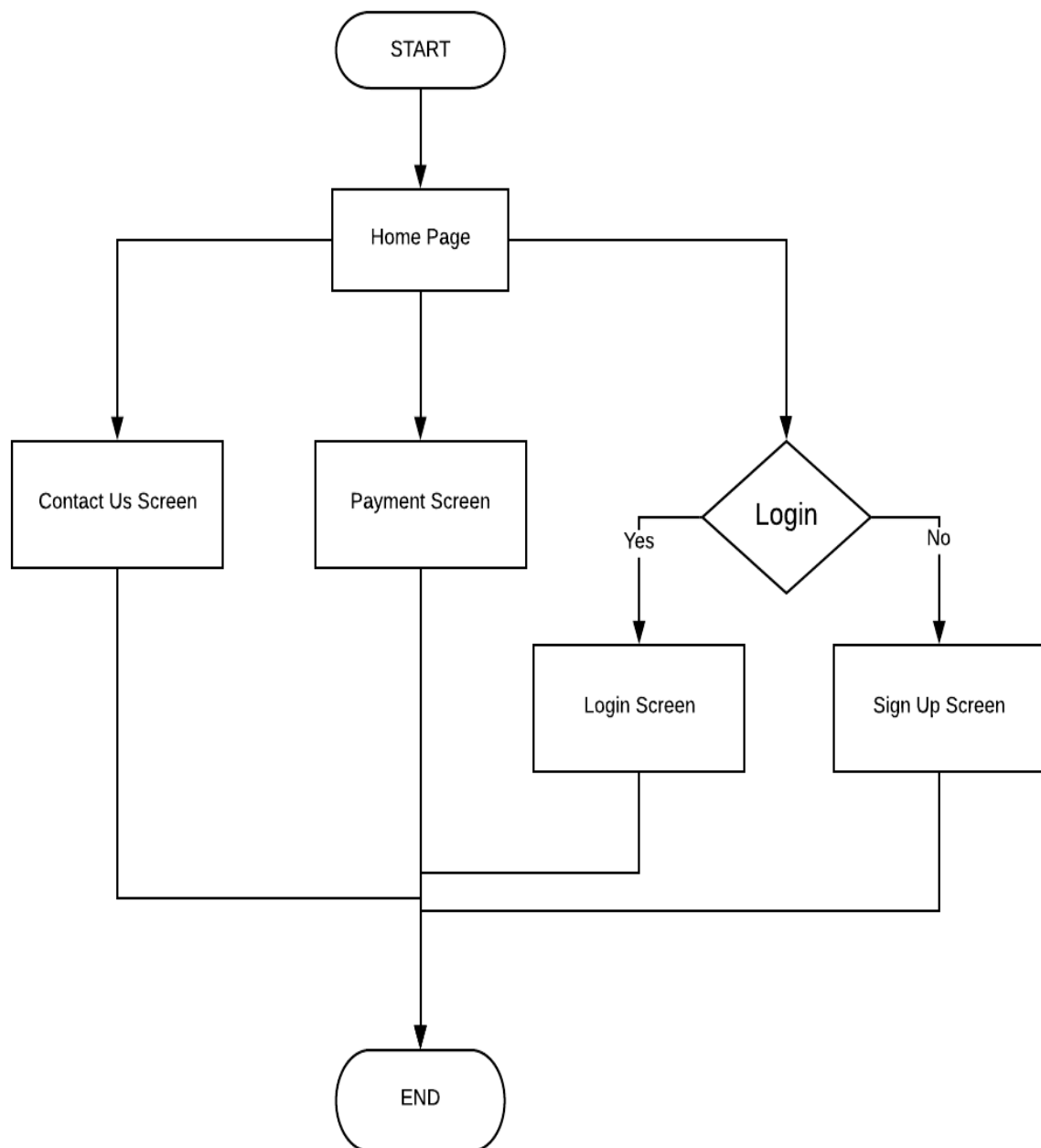
Ganpat University, Ahmedabad.

Submitted To,

Saai Sanjeev Achaarya

IBM Software Technical Trainer

E - Bill Management System

FlowChart

E - BILL MANAGEMENT SYSTEM

SOFTWARE SPECIFICATIONS

- ➢ OPERATING SYSTEM : Cent OS/ Windows
- ➢ ENVIRONMENT : VMware Workstation

HARDWARE SPECIFICATIONS

- ➢ PROCESSOR : Core™i3-7020U CPU @2.30 GHz
- ➢ RAM : 8.00 GB (7.89 GB usable)
- ➢ MONITOR : 15" COLOR
- ➢ HARD DISK : 50 GB
- ➢ FLOPPY DRIVE : 1.44 MB

E - BILL MANAGEMENT SYSTEM

DESCRIPTION

INTRODUCTION:

The Project "E-Bill Management System " is the process of billing the electricity used .

This Program also administrates its users and customers.

The project is a web based where users can get instant electricity bill and pay them online via credit card. The system automates the conventional process of paying electricity bill by visiting the place.

The system would be having two logins admin login and user login. Admin can view user account details and can even add or updates things in their account. Admin has to feed the system with electricity usage data into respective users account. The system then calculates the electricity bill for every user and updates the information into their account every month. User can then view their electricity bill and pay on the spot before month end. If user is incapable of paying the bill before month end, it then calculates fine for each subsequent day.

DESCRIPTION:

This Project will serve the following Purpose:-
  ➢ Add and maintain records of customers.
  ➢ Make an easy to use environment for users and customers.
  ➢ Provide reports to the owner monthly, weekly and yearly.
  ➢ To reduce the manual processing time.
  ➢ To make the system easy for handling by organizing the system in the regular order.
  ➢ To reduce the maintenance cost of the system
  ➢ To easily incorporate the future developments and changes.
  ➢ To maintain an error free data base.

PROS:

➢ The system excludes the need of maintaining paper electricity bill as all the electricity bill records are managed electronically.

➢ Administrator doesn't have to keep a manual track of the users. The system automatically calculates fine

➢ The system excludes manual bill calculation.

➢ Users don't have visit the office for bill payment.

➢ There is no need of delivery boy for delivering bills to users place.

➢ Thus, it saves human efforts and resources.

CONS:

➢ Users must have a reliable internet connection.

➢ There is no human interaction if users have some enquiry.

➢ With online billing system there is always fear of safety and security to the personal information due to the increased spywares and malwares being rampant on the internet.

➢ Most of the online billings systems are outsourced. As a result of the outsource billing there is a fee involved when making use of this system of billing.

➢ Risk of being hacked using E-Billing system.

➢ Restrictions and Limitations of E-Billing System.

➢ Disputed Transaction and false identity E-Bill System

➢ Managing data is tedious.

E - Bill Management System

Pictures

E - Bill Management System

AIM:

> Homepage , Customer Details.
> Unit Details , Ebill Calculation Page.
> Bill Generation , Final Report.

PROGRAM:

CODE OF HTML (MAIN PAGE) :

```html
<html>
<head>
<title>Sunpower Power Endless </title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">

<link href="project.css" rel="stylesheet" type="text/css">
</head>
<body>

<div class="header">
  <img src="logo.png" alt="Sunpower">
</div>
<div class="header1">
  <h1><B><U>SUNPOWER</U></B></h1>
  <h2><B>POWER ENDLESS</B></h2>
</div>
<div class="topnav">
   <a class="a1"><B>HOME</B></a>
   <a href="Contact.html"><B>CONTACT US</B></a>
   <a href="bill.html"><B>PAYMENT</B></a>
```

```html
    <a href="login.html" class="log"><B>LOGIN</B></a>
</div>

<div class="row">
<section id="cols">
  <div class="column">
    <h1>About Power</h1>
    <h3>Sunpower Power Endless Limited is a holding company. The
company is engaged in providing electric power generation by coal-
based thermal power plants and coal trading. Its business activity is
undertaken at Ahmedabad Thermal Power Plant of the company in
Gujarat and Thermal Power Plant of its subsidiaries at Daishar
(Maharashtra), and at Kawai (Rajasthan).</h3>
    <h1><B>Vision</B></h1>
    <h3>To be a world class leader in businesses that enrich lives and
contribute to nations in building infrastructure through sustainable
value creation.</h3>

  </div>

  <div class="column1" style="background-color:rgb(255, 206, 101)">
   <img src="images.jpg" style="width:22%">
   <img src="tower.jpg" style="width:22%">
  </div>
  </section>
</div>
 </body>
</html>
```

CODE OF CSS (MAIN PAGE) :

```css
*
{
 box-sizing: border-box;

}

body
{
 margin: 0;
}
```

```css
.header
{
 float: left;
 background-color:rgb(255, 206, 101);
 padding: 10px;
 text-align: left;
}
.header1
{
 background-color:rgb(255, 206, 101);
 padding: 10px;
 text-align: center;
}

.topnav
{
 overflow: hidden;
 background-color:rgb(202, 131, 38);
}

.topnav a
{
 float: left;
 display: block;
 color:whitesmoke;
 text-align: centre;
 padding: 16px 18px;
 text-decoration: none;
}

.topnav a:hover
{
 background-color:rgb(255, 206, 101);
 color: black;
}

.topnav a.log
{
 float: right;
 display: block;
```

```css
  color:whitesmoke;
  text-align: centre;
  padding: 16px 18px;
  text-decoration: none;

}

.topnav a.log:hover
{
  background-color:rgb(255, 206, 101);
  color: black;
}
.topnav a.a1
{
  background-color:rgb(255, 206, 101);
  color:black;
}

#cols .column
{
  float:left;
  width: 70%;
  padding: 6%;
  background:rgb(204, 243, 245);
}


.row:after {
  content: "";
  display: table;
  clear: both;
}
```
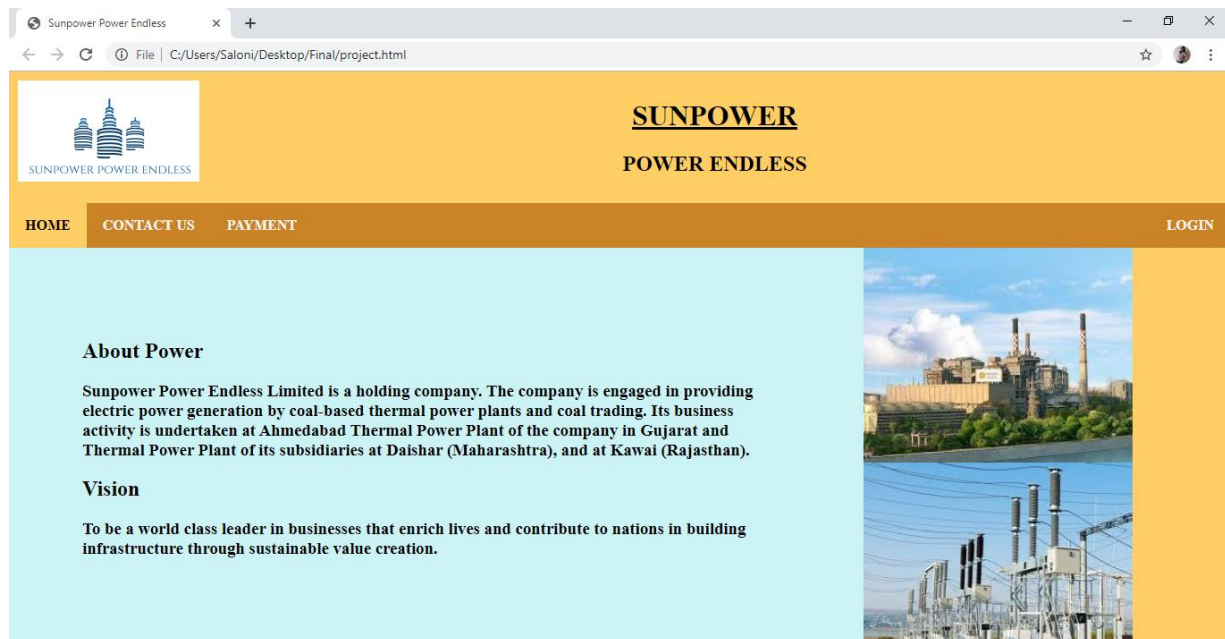
OUTPUT OF MAIN PAGE :

CODE OF HTML (LOGIN PAGE) :

```html
<html>
<head>
<link href="login.css" rel="stylesheet" type="text/css">

</head>
<body>
<script src="login.js"></script>
<h2>Login Form</h2>

<form method="post">
  <div class="imgcontainer">
    <img src="smile.jpg" alt="Profil Photo" class="photo">
  </div>

  <div class="container">
    <label for="uname"><b>Username</b></label>
    <input type="text" placeholder="Enter Username" name="uname" required>

    <label for="psw"><b>Password</b></label>
    <input type="password" placeholder="Enter Password" name="psw" required>
```

```html
      <button type="submit" onclick="myFunction()">Login</button>
      <label>
        <br><input type="checkbox" checked="checked"
name="remember"> Remember me
      </label>
    </div>

    <div class="container" style="background-color:#f1f1f1">
      <button type="button" class="cancelbtn"
onclick="myFunction1()">Cancel</button>
      <button type="button" class="cancelbtn"><a
href="signup.html">Sign Up</a></button>
      <span class="psw">Forgot <a href="#">password?</a></span>
    </div>
</form>
</body>
</html>
```

CODE OF CSS (LOGIN PAGE) :

```css
body
{
   font-family: Arial, Helvetica, sans-serif;
   background-color:rgb(255, 206, 101);
}
form
{
   border: 3px solid #f1f1f1;
}

input[type=text], input[type=password]
{
  width: 100%;
  padding: 12px 10px;
  margin: 8px 0;
  display: inline-block;
  border: 1px solid #ccc;
  box-sizing: border-box;
}

button
{
```

```css
 background-color:rgb(202, 131, 38);
 color: white;
 padding: 12px 2px;
 border: none;
 cursor: pointer;
 width: 30%;
}

button:hover
{
   background-color:#a54006;
}

.cancelbtn
{
 width: auto;
 padding: 10px 18px;
 background-color:rgb(202, 131, 38);
}
.cancelbtn:hover
{
   background-color:#a54006;
}

.imgcontainer
{
 text-align: center;
 margin: 10px 0 2px 0;
}

img.photo
{
 width: 9%;
 border-radius: 50%;
}

.container
{
 padding: 16px;
}
```

```
span.psw
{
 float: right;
 padding-top: 16px;
}
```

CODE OF JS (LOGIN PAGE) :

```javascript
function myFunction()
{
   var txt;
   if (confirm("Press a ok to confirm!"))
   {
    txt = "Confirm!";
   }
   else
   {
    txt = "Cancel!";
   }
   document.getElementById("demo").innerHTML = txt;
}
function myFunction1()

{
   var txt;
   if (confirm("Are you sure You want to Cancel!"))
   {
    txt = "Yes!";
   }
   else
   {
    txt = "No!";
   }
   document.getElementById("demo").innerHTML = txt;
  }
```

OUTPUT OF LOGIN PAGE :

Login Form

Username

Enter Username

Password

Enter Password

Login

☑ Remember me

Cancel Sign Up

Forgot password?

Login Form

This page says

Press a ok to confirm!

OK Cancel

Username

Saloni Doshi

Password

•••••

Login

☑ Remember me

Cancel Sign Up

Forgot password?

Login Form

This page says

Are you sure You want to Cancel!

OK Cancel

Username

Saloni Doshi

Password

•••••

Login

☑ Remember me

Cancel Sign Up

Forgot password?

CODE OF HTML (SIGN UP PAGE) :

```html
    <html>
<link href="signup.css" rel="stylesheet" type="text/css">

<body bgcolor="yellow">

<script src="signup.js"></script>
<form>
  <div class="container">
   <h1>Sign Up</h1>
   <p>Please fill in this form to create an account.</p>
   <hr>

   <label for="email"><b>Full Name</b></label>
   <input type="text" placeholder="Enter Full Name" name="name"
required>

   <label for="email"><b>Email</b></label>
   <input type="text" placeholder="Enter Email" name="email"
required>

   <label for="psw"><b>Password</b></label>
   <input type="password" placeholder="Enter Password"
name="psw" required>

   <label for="psw-repeat"><b>Repeat Password</b></label>
   <input type="password" placeholder="Repeat Password"
name="psw-repeat" required>

   <label>
     <input type="checkbox" checked="checked" name="remember"
style="margin-bottom:15px"> Remember me
   </label>

   <p>By creating an account you agree to our <a href="#"
style="color:dodgerblue">Terms & Privacy</a>.</p>

   <div class="clearfix">
     <button type="submit" class="signupbtn"
onclick="myFunction()">Sign Up</button>
     <button type="button" class="cancelbtn"
```

```
onclick="myFunction1()">Cancel</button>
   </div>
  </div>
</form>


</body>
</html>
```

CODE OF CSS (SIGN UP PAGE) :

```
body
{
     font-family: Arial, Helvetica, sans-serif;
     background-color:rgb(255, 206, 101);
}
*
{
     box-sizing: border-box;
}

input[type=text], input[type=password]
{
 width: 100%;
 padding: 15px;
 margin: 5px 0 22px 0;
 display: inline-block;
 border: none;
 background: #f1f1f1;
}

input[type=text]:focus, input[type=password]:focus
{

 background-color: #ddd;
 outline: none;
}

hr {
 border: 1px solid #f1f1f1;
 margin-bottom: 25px;
}

button
```

```css
{
 background-color: #4CAF50;
 color: white;
 padding: 14px 20px;
 margin: 8px 0;
 border: none;
 cursor: pointer;
 width: 100%;
 opacity: 0.9;
}

.cancelbtn
{
 padding: 14px 20px;
 background-color:rgb(202, 131, 38);
}
.cancelbtn:hover
{
 background-color:#a54006;
}
.signupbtn
{
 width:15%;
}
.signupbtn:hover
{
 background-color:#008f07;
}
.cancelbtn
{
 width: 15%;
}

.clearfix::after

{
 content: "";
 clear: both;
 display: table;
}
```
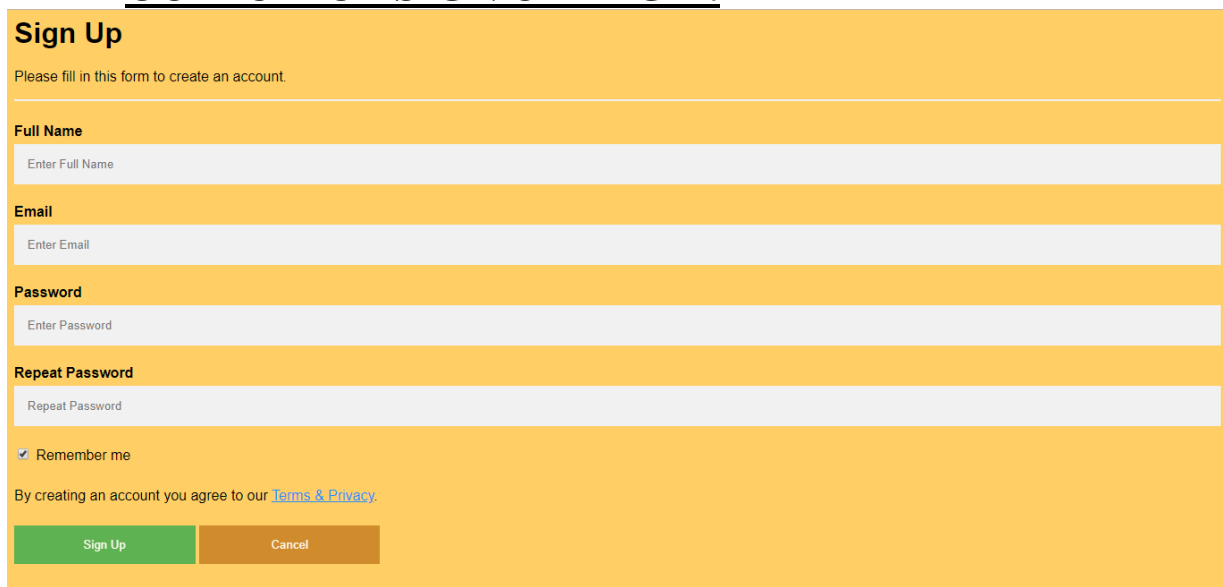
```
@media screen and (max-width: 300px)
{
  .cancelbtn, .signupbtn
  {
    width: 100%;
  }
}
```

CODE OF JS (SIGN UP PAGE) :

```
function myFunction()
{
    var txt;
    if (confirm("Press a ok to Sign Up!"))
    {
     txt = "Confirm!";
    }
    else
    {
     txt = "Cancel!";
    }
    document.getElementById("demo").innerHTML = txt;
}
function myFunction1()
{
    alert("Are you sure you want to cancel!");
  }
```

OUTPUT OF SIGN UP PAGE :

Sign Up

Please fill in this form to create an account.

Full Name

Enter Full Name

Email

Enter Email

Password

Enter Password

Repeat Password

Repeat Password

☑ Remember me

By creating an account you agree to our Terms & Privacy.

Sign Up   Cancel

Sign Up

Please fill in this form to create an account.

Full Name

Saloni Doshi

Email

salonidoshi34@gmail.com

Password

•••••

Repeat Password

•••••

☑ Remember me

By creating an account you agree to our Terms & Privacy.

| Sign Up | Cancel |

This page says

Press a ok to Sign Up!

OK   Cancel

Sign Up

Please fill in this form to create an account.

Full Name

Saloni Doshi

Email

salonidoshi34@gmail.com

Password

•••••

Repeat Password

•••••

☑ Remember me

By creating an account you agree to our Terms & Privacy.

| Sign Up | Cancel |

This page says

Are you sure you want to cancel!

OK

CODE OF HTML (PAYMENT PAGE) :

```html
<html>
<head>
<meta name="viewport" content="width=device-width, initial-
scale=1">
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
<link href="bill.css" rel="stylesheet" type="text/css">
</head>
<body>
<script src="bill.js"></script>
<div class="row">
```

```html
  <div class="col-75">
   <div class="container">
    <form >
      <div class="row">
        <div class="col-50">
          <h3>Electricity Bill</h3>
          <label for="fname"><i class="fa fa-user"></i> Full
Name</label>
          <input type="text" id="fname" name="firstname"
placeholder="Full Name">
          <label for="email"><i class="fa fa-envelope"></i>
Email</label>
          <input type="text" id="email" name="email"
placeholder="example@example.com">
          <label for="adr"><i class="fa fa-address-card-o"></i>
Address</label>
          <input type="text" id="adr" name="address"
placeholder="Address">
          <label for="city"><i class="fa fa-institution"></i> City</label>
          <input type="text" id="city" name="city" placeholder="City">

          <div class="row">
           <div class="col-50">
             <label for="state">State</label>
             <input type="text" id="state" name="state"
placeholder="State">
           </div>
           <div class="col-50">

  <label for="zip">Pincode</label>
           <input type="text" id="zip" name="zip"
placeholder="Pincode">
           </div>
          </div>
        </div>

        <div class="col-50">
          <h3>Payment</h3>
          <label for="fname">Accepted Cards</label>
          <div class="icon-container">
            <i class="fa fa-cc-visa" style="color:navy;"></i>
```

```
            <i class="fa fa-cc-amex" style="color:blue;"></i>
            <i class="fa fa-cc-mastercard" style="color:red;"></i>
            <i class="fa fa-cc-discover" style="color:orange;"></i>
          </div>
          <label for="cname">Name on Card</label>
          <input type="text" id="cname" name="cardname"
placeholder="Card holder Name">
          <label for="ccnum">Credit card number</label>
          <input type="text" id="ccnum" name="cardnumber"
placeholder="0000-0000-0000">
          <label for="expmonth">Exp Month</label>
          <input type="text" id="expmonth" name="expmonth"
placeholder="Month">
          <div class="row">
            <div class="col-50">
              <label for="expyear">Exp Year</label>
              <input type="text" id="expyear" name="expyear"
placeholder="Year">
            </div>
            <div class="col-50">
              <label for="cvv">CVV</label>
              <input type="text" id="cvv" name="cvv"
placeholder="000">
            </div>
          </div>
        </div>
        <label>
          <input type="checkbox" checked="checked" name="sameadr">
Shipping address same as billing

 </label>
        <input type="submit" onclick="myFunction()" value="Submit"
class="btn">
      </form>
    </div>
  </div>
  <div class="col-25">
    <div class="container">
      <h4>Amount To Pay<span class="price"
style="color:black"></span></h4>
```

```html
    <p>Fixed Charge: <span class="price">15</span></p>
    <p>Energy Charge: <span class="price">4</span></p>
    <p>Energy Tax:<span class="price">1</span></p>
    <hr>
    <p><B>Total : </B><span class="price"
style="color:black"><b>20</b></span></p>
   </div>
  </div>
</div>

</body>
</html>
```

CODE OF CSS (PAYMENT PAGE) :

```css
body
{
   font-family: Arial;
   font-size: 17px;
   padding: 8px;
}

*
{
   box-sizing: border-box;
}

.row
{
   display: -ms-flexbox;
   display: flex;
   -ms-flex-wrap: wrap;
   flex-wrap: wrap;
   margin: 0 -16px;

margin-top : -10px;
}

.col-25
{
   -ms-flex: 25%;
   flex: 25%;
}
```

```css
.col-50
{
   -ms-flex: 50%;
   flex: 50%;
}

.col-75
{
   -ms-flex: 75%;
   flex: 75%;
}

.col-25,
.col-50,
.col-75
{
   padding: 0 16px;
}

.container
{
   background-color:rgb(228, 169, 93);
   padding: 10px 20px 10px 20px;
   border: 1px solid lightgrey;
   border-radius: 3px;
}

input[type=text]
{
   width: 100%;
   margin-bottom: 20px;
   padding: 12px;
   border: 1px solid #ccc;

 border-radius: 3px;
}

label
{
   margin-bottom: 10px;
```

```css
    display: block;
}

.icon-container
{
    margin-bottom: 20px;
    padding: 7px 0;
    font-size: 24px;
}

.btn
{
    background-color:rgba(245, 113, 6, 0.856) ;
    color: white;
    padding: 12px;
    margin: 10px 0;
    border: none;
    width: 20%;
    border-radius: 3px;
    cursor: pointer;
    font-size: 17px;
}

.btn:hover
{
    background-color:#a54006 ;
}

a
{
    color:rgb(202, 131, 38) ;
}

hr
{
    border: 1px solid black ;
}
span.price

{
    float: right;
```

```
    color:black ;
}
@media (max-width: 800px)
{
  .row
   {
      flex-direction: column-reverse;
   }
   .col-25
   {
      margin-bottom: 20px;
   }
}
```

CODE OF JS (PAYMENT PAGE) :

```
function myFunction()
{
    var txt;
    if (confirm("Press a ok to Submit!"))
    {
     txt = "Confirm!";
    }
    else
    {
     txt = "Cancel!";
    }
    document.getElementById("demo").innerHTML = txt;
}
```

OUTPUT OF PAYMENT PAGE :

CODE OF HTML (CONTACT US PAGE) :

```
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link href="Contact.css" rel="stylesheet" type="text/css">
</head>
<body>
<script src="Contact.js"></script>
<divclass="main">
<div style="width:70%" class="container">
  <form >
    <center><h1><U><B class="text">Contact Us</B></U></h1></center>
    <label for="fname">Full Name:</label>
    <input type="text" id="fname" name="fullname" placeholder="Enter your Name..."required>
    <label for="lname">Mobile No:</label>


 <input type="tel" id="lname" name="phone" patter="[7-9]{1} [0-9]" placeholder="Enter your mobile no..." required>
    <label for="State">State</label>
    <select id="country" name="State">
    <option value="Gujarat">--Select State--</option>
      <option value="Gujarat">Gujarat</option>
      <option value="Punjab">Punjab</option>
      <option value="Kerala">Kerala</option>
      <option value="Dehli">Delhi</option>
```

```html
        <option value="Uttar Pradesh">Uttar Pradesh</option>

<option value="Maharasthra">Maharasthra</option>
    </select>
    <label for="subject">Subject</label>

  <textarea id="subject" name="subject" placeholder="Write Your
Query...." style="height:100px" required></textarea>
    <input type="Submit" onclick="myFunction()" value="Submit">
  </form>
</div>

<div style="width:30%; height=100%" class="container1">
  <h4><center><U>E - BILL MANAGEMENT
SYSTEM</U></center></h4>


  <h4><U>Contact No. :</U>9675346782</h4>
  <h4><U>Email Id:</U>e_billquery@gmail.com</h4>
  <h4><U>Address:</U></h4>
  <h4>Ganesh Meridian ,Block A ,</h4>
  <h4>Ahmedabad,Gujarat .</h4>
  <h4>380060</h4>
</div>
</div>
</body>
</html>
```

CODE OF CSS (CONTACT US PAGE) :

```css
body
{
  font-family: Arial, Helvetica, sans-serif;
}
*
{
  box-sizing: border-box;

}
.text
{
  font-family: "Times New Roman", Times, serif;
  font-size:50px;
```

```css
}
input[type=text], select, textarea
{

width: 100%;
 padding: 12px;
 border: 1px solid rgba(3, 3, 3, 0.295);
 border-radius: 4px;

 box-sizing: border-box;
 margin-top: 6px;
 margin-bottom: 16px;
 resize: vertical;
}
input[type=tel], select, textarea
{
 width: 100%;
 padding: 12px;
 border: 1px solid rgba(3, 3, 3, 0.295);
 border-radius: 4px;
 box-sizing: border-box;
 margin-top: 6px;
 margin-bottom: 16px;
 resize: vertical;
}
input[type=submit]
{
 background-color:rgb(202, 131, 38) ;
 color: white;
 padding: 12px 20px;
 border: none;
 border-radius: 4px;
 cursor: pointer;
}

input[type=submit]:hover
{
 background-color: #a54006;
}
.container
{
```

```css
  width:70%;
  min-width: 20px;
  background-color:rgb(255, 206, 101);
  padding: 53px 25px 53px 25px;
  border:1px solid black;

float:left;
}
.container1
{
  background-color:rgb(255, 206, 101);

 padding:175px 25px 175px 25px;
 border:1px solid black;
 float:left;
}
```

CODE OF JS (CONTACT US PAGE) :

```javascript
function myFunction()
{
   var txt;
   if (confirm("Press a ok to Submit!"))
   {
    txt = "Confirm!";
   }
   else

 {
    txt = "Cancel!";
   }
   document.getElementById("demo").innerHTML = txt;
}
```

OUTPUT OF CONTACT US PAGE :

Contact Us

Full Name:

Enter your Name...

Mobile No:

Enter your mobile no...

State

--Select State--

Subject

Write Your Query....

Submit

E - BILL MANAGEMENT SYSTEM

Contact No. :9675346782

Email Id:e_billquery@gmail.com

Address:

Ganesh Meridian ,Block A ,

Ahmedabad,Gujarat .

380060

This page says

Press a ok to Submit!

OK   Cancel

Cont...

Full Name:

Saloni Doshi

Mobile No:

9874532590

State

Gujarat

Subject

I likes your service

Submit

E - BILL MANAGEMENT SYSTEM

Contact No. :9675346782

Email Id:e_billquery@gmail.com

Address:

Ganesh Meridian ,Block A ,

Ahmedabad,Gujarat .

380060

JAVA CODE:

```java
import java.util.*;
class ElectricityBill
 {
 float Service;
 String Name;
 String Category;
 String PType,Ch;
 float unit;
 float Amount,FixedC,EnergyC,EnergyT;
Scanner sc = new Scanner(System.in);
 void Bill()
```

```java
{

System.out.println("\t\t\t\t\t\t\t\tWELCOME TO THE
SUNPOWER");
System.out.println("-------------------------------------------------------------
---------------------------------------------------------------------------------
----");
System.out.print("Enter Customer's Service Number  :");

 Service=sc.nextFloat();

 System.out.print("Enter Customer Name : ");

Name=sc.next();
 System.out.print("Enter Customer's
Category(Industrial/Residential):");

Category = sc.next();
 System.out.print("Enter Customer's Phase Type(Single/Three) :");

PType= sc.next();
System.out.print("Enter Customer's units  :");

 unit=sc.nextFloat();
}
void Calculate()
{
boolean u=true;
boolean f=false;

if((Category.equals("Residential")==u) ||
(Category.equals("residential")==u))
{


    if(unit>0 && unit<=50)
      {
            Amount=(float)(unit*3.90);
            System.out.println("|\tAmount="+Amount);
      }
      else if(unit>=51 && unit<400)
```

```java
        {
                Amount=(float)(unit*4.90);
                System.out.println("|\tAmount="+Amount);

        }

        else if(unit>=400)
        {
                Amount=(float)(unit*5.90);
                System.out.println("|\tAmount="+Amount);
        }
        else
        {
                System.out.println("wrong input");
        }
}
else if((Category.equals("Industrial")==u) ||
(Category.equals("industrial")==u))
{
        if(unit>0 && unit<=50)
        {
                Amount=(float)(unit*3.10);
                System.out.println("\tAmount="+Amount);
        }
        else if(unit>=51 && unit<400)
        {
                Amount=(float)(unit*3.90);
                System.out.println("\tAmount="+Amount);
        }
        else if(unit>=400)
        {
                Amount=(float)(unit*4.50);
                System.out.println("\tAmount="+Amount);
        }
        else
        {
                System.out.println("wrong Input");
        }
}
        else
        {
```

```java
        if(unit>0 && unit<50)
        {
                Amount=(float)(unit*4.10);
                System.out.println("\tAmount="+Amount);
        }

     else if(unit>=51 && unit<200)
       {
                Amount=(float)(unit*4.50);
                System.out.println("\tAmount="+Amount);
       }
       else if(unit>=400)
       {
                Amount=(float)(unit*5.10);
                System.out.println("\tAmount="+Amount);
       }
       else
       {
                System.out.println("wrong Input");
       }

       }
}


 void phase()
{
System.out.println("\t\t\tYour Bill Includes Taxes as shown Below:");
boolean i=true;
boolean j=false;
if((PType.equals("Single")==i) || (PType.equals("single")==i))
{

      FixedC=(float)(Amount*0.5442)/100;
      EnergyC=(float)(Amount*82.255)/100;
      EnergyT=(float)(Amount*17.122)/100;
      System.out.println("\tFixed Charge:"+FixedC);
      System.out.println("\tEnergy Charge:"+EnergyC);
      System.out.println("\tEnergy Tax:"+EnergyT);
}
else if((PType.equals("Three")==i) || (PType.equals("three")==i))
```

```java
{
    FixedC=(float)(Amount*1.1655)/100;
    EnergyC=(float)(Amount*82.1882)/100;
    EnergyT=(float)(Amount*16.6666)/100;
    System.out.println("\tFixed Charge:"+FixedC);
    System.out.println("\tEnergy Charge:"+EnergyC);
    System.out.println("\tEnergy Tax:"+EnergyT);

}
else
{
System.out.println("Wrong Input");
}


}

 void PutData()
 {

 System.out.println("\tService Number : "+Service);
 System.out.println("\tCustomer's Name : "+Name);
 System.out.println("\tCustomer's unit : "+unit);
 System.out.println("\tCustomer's Category : "+Category);
 System.out.println("\tCustomer's Phase Type : "+PType);
}

 public static void main(String args[])
 {
   ElectricityBill ob = new ElectricityBill();
     System.out.println("-----------------------------------------------------
----------------------------------------------------------------------------
---------");
 ob.Bill();
System.out.println("-------------------------------------------------------------
----------------------------------------------------------------------------
----");
ob.PutData();
System.out.println("-------------------------------------------------------------
----------------------------------------------------------------------------
----");
ob.Calculate();
```
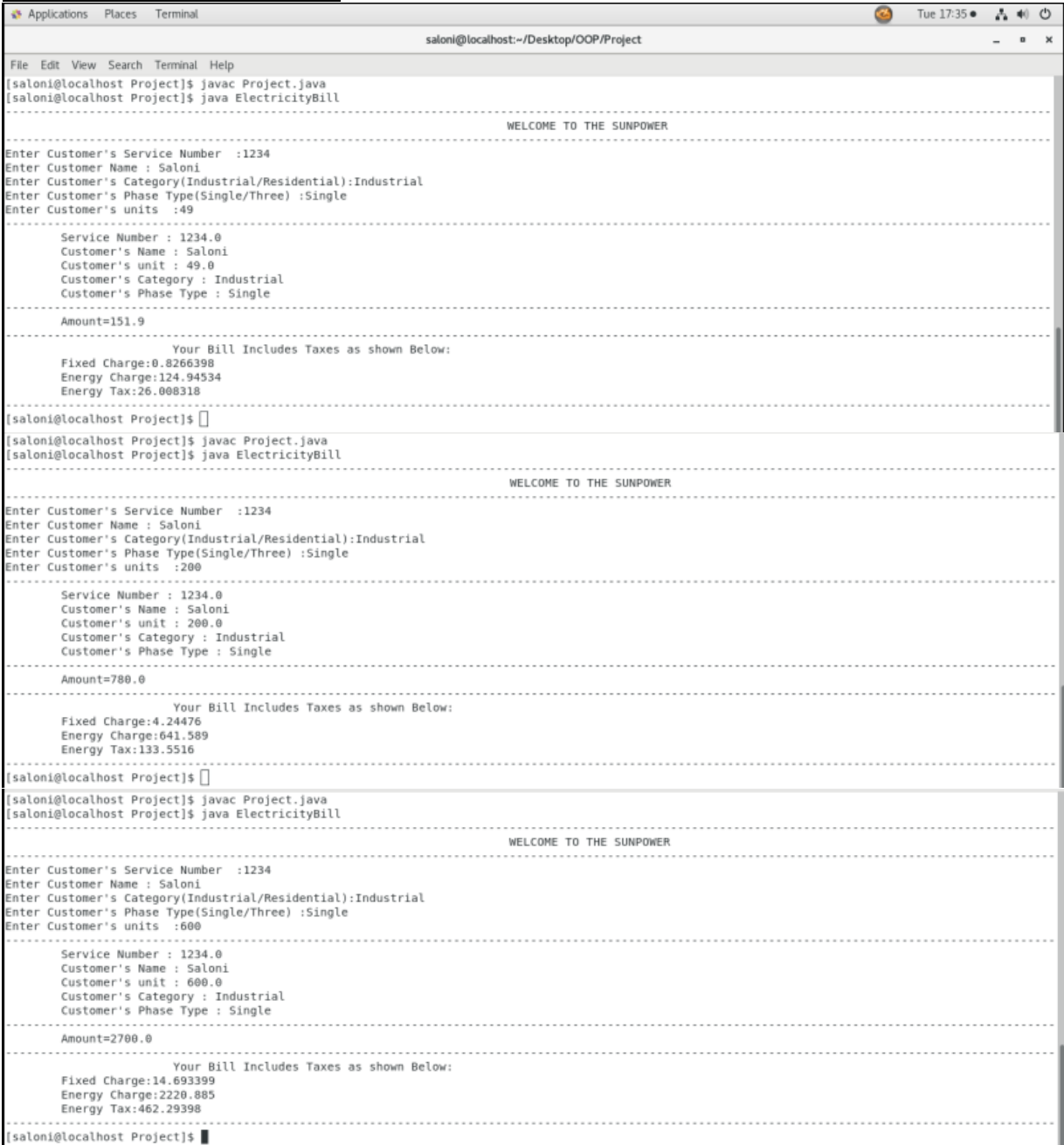
```
System.out.println("---------------------------------------------------------------------------------------------------------------------");
ob.phase();
System.out.println("---------------------------------------------------------------------------------------------------------------------");
}
}
```

OUTPUT OF JAVA:

```
[saloni@localhost Project]$ javac Project.java
[saloni@localhost Project]$ java ElectricityBill
----------------------------------------------------------------------------------------
                                    WELCOME TO THE SUNPOWER
----------------------------------------------------------------------------------------
Enter Customer's Service Number  :1234
Enter Customer Name : Saloni
Enter Customer's Category(Industrial/Residential):Residential
Enter Customer's Phase Type(Single/Three) :Three
Enter Customer's units  :49
----------------------------------------------------------------------------------------
        Service Number : 1234.0
        Customer's Name : Saloni
        Customer's unit : 49.0
        Customer's Category : Residential
        Customer's Phase Type : Three
----------------------------------------------------------------------------------------
|       Amount=191.1
----------------------------------------------------------------------------------------
                    Your Bill Includes Taxes as shown Below:
        Fixed Charge:2.2272706
        Energy Charge:157.06165
        Energy Tax:31.849873
----------------------------------------------------------------------------------------
[saloni@localhost Project]$ 
[saloni@localhost Project]$ javac Project.java
[saloni@localhost Project]$ java ElectricityBill
----------------------------------------------------------------------------------------
                                    WELCOME TO THE SUNPOWER
----------------------------------------------------------------------------------------
Enter Customer's Service Number  :1234
Enter Customer Name : Saloni
Enter Customer's Category(Industrial/Residential):Resindential
Enter Customer's Phase Type(Single/Three) :Three
Enter Customer's units  :200
----------------------------------------------------------------------------------------
        Service Number : 1234.0
        Customer's Name : Saloni
        Customer's unit : 200.0
        Customer's Category : Resindential
        Customer's Phase Type : Three
----------------------------------------------------------------------------------------
wrong Input
----------------------------------------------------------------------------------------
                    Your Bill Includes Taxes as shown Below:
        Fixed Charge:0.0
        Energy Charge:0.0
        Energy Tax:0.0
----------------------------------------------------------------------------------------
[saloni@localhost Project]$ 
[saloni@localhost Project]$ javac Project.java
[saloni@localhost Project]$ java ElectricityBill
----------------------------------------------------------------------------------------
                                    WELCOME TO THE SUNPOWER
----------------------------------------------------------------------------------------
Enter Customer's Service Number  :1234
Enter Customer Name : Saloni
Enter Customer's Category(Industrial/Residential):Residential
Enter Customer's Phase Type(Single/Three) :Three
Enter Customer's units  :600
----------------------------------------------------------------------------------------
        Service Number : 1234.0
        Customer's Name : Saloni
        Customer's unit : 600.0
        Customer's Category : Residential
        Customer's Phase Type : Three
----------------------------------------------------------------------------------------
|       Amount=3540.0
----------------------------------------------------------------------------------------
                    Your Bill Includes Taxes as shown Below:
        Fixed Charge:41.2587
        Energy Charge:2909.4622
        Energy Tax:589.9977
----------------------------------------------------------------------------------------
[saloni@localhost Project]$ 
```

EXPLANATION ABOUT PROJECT:

This system is named as Electricity Bill Management System. This system is made to keep the records about the bills of the customers. The admin can manage all the accounts and the registered users like employees and customers can only manage their own accounts. This system helps in maintaining the bills and the payments.

The system would be having two logins admin and user login. Admin can view user account details and can even add or updates things in their account. Admin has to feed the system with electricity usage data into respective users account. The system then calculates the electricity bill for every user and updates the information into their account every month. User can then view their electricity bill and pay on the spot before month end. If user is incapable of paying the bill before month end, it then calculates fine for each subsequent day.

Like a customer can only manage his account and cannot see any details of other customers, employees can see the details of all the customer's accounts and admin can manage all the accounts including the customers and employees account.

In this, new customers can be added, monthly bills can be sent to customers account, any particular customer can be found using unique meter id and the remaining balance of a customer can be checked.

The customer can also pay the bill by cash by going to the particular branch. Customers can also see their payment status after paying their bill. In the employee's module, there is no option to pay the bill, they can only see the monthly salary status after deducting their leaves.

This system also has the option for customers to pay their electricity bills by online mode. Either through internet banking or by debit card.

REFERENCES:

➢ https://www.ripublication.com/ijaer18/ijaerv13n5_134.pdf

➢ https://nevonprojects.com/electricity-online-bill-payment-project/

➢ https://sushindiawriters.wordpress.com/2012/12/24/the-advantages-and-disadvantages-of-electronic-billing/

➢ https://paypax.net/blog/disadvantages-electronic-payment-system/

➢ https://www.google.com/search?q=w3schools&rlz=1C1CHBD_en IN852IN853&oq=w3&aqs=chrome.1.69i57j0l2j69i60l3.8603j1j7 &sourceid=chrome&ie=UTF-8

CONCLUSION:

Thus, Administrative staff can view all the details of consumer bill details and can search for any result .Different types of reports can be obtained from report menu. All manual and paper works in the billing branch can be avoided by implementing this program at certain extend. Since this program is build in **Java , HTML, CSS, JS** . **About The Project:1**)It is simple and user friendly**.2)**Wide scope for future expansion.**3)**Manual as well as paper works can be fully eliminated in the billing brach.**4)**Accuracy and reliability are surely increased.**5)**It make sure that unauthorized personal cannot execute this program.

Though every task is never said to be perfect in this Computer Science Field even more improvement is possible in this Program.