A
PROJECT
ON

"Electricity Consumption Calculator"

Submitted to
Rashtrasant Tukadoji Maharaj Nagpur University,
NAGPUR
In the Partial Fulfillment of

B.Com. (Computer Application) Final Year

Submitted by
Mr. Harsh Jain
Mr. Akshay Yadav
Under the Guidance of

Pravin J. Yadao

G. S. College of Commerce & Economics
Nagpur

2019-2020

G. S. COLLEGE OF COMMERCE & ECONOMICS

NAGPUR

CERTIFICATE

(2019 - 2020)

This is to certify that Mr. /Miss _____Harsh Jain__Akshay Yadav_____ _____ has completed their project on the topic of ___ Electricity Consumption Calculator_____ prescribed by the Rashtrasant Tukadoji Maharaj Nagpur University for B.Com. (Computer Application) - III course in G. S. College of Commerce & Economics, Nagpur.

Date:

Place: Nagpur

Pravin J. Yadao

Project Guide

External Examiner **Internal Examiner**

ACKNOWLEDGEMENT

We take this opportunity to express our deep gratitude and whole hearted thanks to project guide Prof. Pravin Yadao, Coordinator for his guidance throughout this work. We are very much thankful to him for his constant encouragement, support and kindness.

We are also grateful to our teachers Prof. Rahul Tiwari, Prof. Sushma Gawande, Prof. Preeti Rangari, Prof. Prajkta Deshpande and Prof. Haresh Naringe for their encouragement, help and support from time to time.

We also wish to express our sincere thanks to Principal Dr. N. Y. Khandait for providing us wide range of opportunities, facilities and inspiration to gather professional knowledge and material without which this project could not have been completed.

Student Names & Signature

Date: Harsh Jain

Akshay Yadav

Place: Nagpur

DECLARATION

We **(student names)** hereby honestly declare that the work entitled **"PROJECT NAME"** submitted by us at G.S. College of Commerce & Economics, Nagpur in partial fulfillment of requirement for the award of B.Com. (Computer Application) degree by Rashtrasant Tukadoji Maharaj, Nagpur University, Nagpur has not been submitted elsewhere for the award of any degree, during the academic session 2018-2019.

The project has been developed and completed by us independently under the supervision of the subject teacher and project guide.

Student Name & Signature

Harsh Jain

Akshay Yadav

Date:

Place: Nagpur

INDEX

Introduction

- The aim of our project is develop a system that is meant to partially computerized work performed in the electricity board like generating monthly electrical bill.

- Record of consuming unit of energy, store record of the customers and previous unpaid bill.

- Introduction to tools, design, coding, testing and debugging of the system are discussed in very detail.

- Let's face it, not every homeowner can afford solar panels, or has a home that is suitable for solar. Moreover, there are a lot of renters out there who would also like to find ways to reduce their electricity bill, help the environment, and make their lives simpler.

- That's where smart technologies for your home come into play, but the wide variety of technologies on the market can make deciding where to start somewhat overwhelming.

Objectives

- The main objective of the PHP project on Electricity Consuming Calculator to manage all the details of units, consumers, reading bills.

- It conducts all the information of units, connection, appliance, per day use. The project is totally at administrative end and thus only the adminstrator is guraanteed the access.

- The purpose of the project is to build an application program to reduce the manual work for contacting units, costumers, connections, consumption.

- It tracks all the details about the consumptions, reading bills.

- When it comes to reducing your electricity consumption, probably the two most popular technologies are energy efficient LED light bulbs and smart thermostats.

- There are other technologies available that can help you monitor which appliances and gadgets in your home are using the most electricity and others that can tackle your home's phantom or vampire load…

Preliminary System Analysis

Preliminary Investigation.

In this process the development teams visit the customer and studies their system they investigate the need for possible software automation in the given system by the end of preliminary investigation. The team furnishes a document that holds a different specific recommendation for the candidate system.

Main task of the preliminary investigation phase are:

- Investigate the present system and identify the function to be performed.
- Identify the objectives of the new system. In general, an information system benefits a business by increasing efficiency, improving effectives, or providing a competitive advantage.
- Identify problems and suggests few solution.

In lager environment , where formal procedures are the norm, The analyst first task is to prepare statement specifying the scope and objectives of the problem. It is necessary to investigate the paticluare system by considering that it should drive cost benefit analysis ans maintain the technical aspect of the organization. It helps to attain the desired objectives.

Common things in preliminary investigation and that is:

- It is organized combination of different components.
- They are independent and inter-related.
- They work for common objective.

With the help of preliminary investigation an accurate solution to the problem can be found out. At this stage only a rough estimate of the project may be reached.

Flaws in present system.

It is very necessary to know that what defects are present in the current system or problem occurring in the current system. And see the following things if happens time and again then we have to change the system.

- In this present system not recommended for work?
- Is the defect very serious one?

In existing manual system records are kept in various books, many times it happens that the book may be lost or destroyed in any accident. If records are not stored serially then manual sorting of the data is difficult task.

The existing system is manual system many flaws some of them are as follows:

- The present system required a lot of times to accomplished the task of complaining a report, and other updating or changing in the current information.

- Process of modifaction, updating and addition of new information data are very slow.

- It has been proved that the manual system of collecting and storing personal information is devoid of integrity.

- There is no backup and recovery facilities presented in manual system so important data may be lost.

- In this system for handling data and related information, several register are used i.e. The same data is stored at multiple location which wastes a lot of stationary.

Need Of New System

In order to carry out any project successfully the first and foremost requirement of any project is to identify the need to carry out the projec

To maintain the register and ledger is very though work. To reduce immoveable register or paper work we need it to be modifying on the computer. The most important things i.e. Security is not seen in a manual system.

With the help of this project we will be able to overcome all the problem. Hence, it is convenient and easily applicable method over the manual method…

There is a need of new system because of the following points:

- It is easy to accessible.
- It is accurate calculation.
- Reduce the manual work and get time consume.
- It is a short duration work.
- The paper work will be reduce.
- Modification and changes will allow in this system.

Feasibility Study

Feasibility study is preliminary study undertake before the work of the project start to ascertain the likehood of the project success. It analysis of possible solution to a problem and a recommendation on the level solution to use. It involves evaluating how the solutions will the comparative particular project.

The aim of a feasibility study is to see whether it is possible to develop a system at a reasonable cost. At the and of the feasibility study a decision is taken whether to proceed or not. Feasibility study is to determine various solution of the problem and then picking up one of the best soluation.

The major Purpose of feasibility study are following:

- Determine the objectives of the new system.
- Determine whether it is feasible to automate the system.
- How much cost will appare in this new system.

The feasibility study will contain executive data related to financial and will include advantage and disadvantage of the both current situation and the proposed plans.

The main objective of this study is to investigate the providing of the electric for low-cost housing unit using a photovoltaic system and solar collectors instead of using conventional fossil fuels.

2400 kWh of electrical energy is obtained annually in such a building. the average amount of radiation hours and the quality of the equipment. In the case of solar water heater, the obtained energy is 394.5 kWh annually, which the same factors affect its efficiency.

The main aim of this study is to investigate the feasibility of using solar energy to generate electricity and heat for a unit of four member in Aftab town, and also comparing the costs of electricity and heat produced by solar energy and fossil fuels.

Photovoltaic systems:

A photovoltaic (PV) system is composed of materials and devices that convert sunlight into electrical energy without the use of electrical propulsion.

Electronic AC/DC convertor:

Power transformers are used to convert electricity produced from photovoltaic arrays from DC to AC mode. Power converters generally have two categories: separate from the network and connected to the network (Masters, 2004).

Storage:

Storage in this system takes place through the battery bank. Typically, there are a number of 12-volt batteries that are connected in series and provide the required voltage for the system (Ghiabaklu, 2012). The battery is used both individually and network-connected, so that if the production of the photovoltaic system is greater than the load, the surplus energy will be saved, also if the sun is not available.

Maximum power tracker:

A device that makes photovoltaic panels focus on a point that has the highest possible efficiency, even in the cloudy weather (ASSMP, 2017).

Project Category

Platform/Language/Tools Used:

FRONTEND:- HTML, CSS
BACKEND:- PHP MYSQL

HTML CSS:-

- HTML is stands for Hyper Text Markup Language. It can be describes the structure of a web page.HTML consist of a series of element. In this element tell the browser how to display the content.HTML element are represented by the tages, label of content such as “Heading” , ”Paragraph” , ”Table”, and so on…
- CSS is stand for Cascading Style Sheets. They can be describe as how HTML elements are to be displayed on screen, paper, or in other media. CSS saves a lot of work. It can control the layout of multiple wed pages all at once. External stylesheet are stored in CSS files.

PHP MYSQL:-

- MYSQL is database system used on the wed. it is a database that runs on a server. It’s a very fast, reliable and easy to used. MYSQL is developed, distribute and supported but oracle corporation. MySql is name after co-founder monty widenius’s daughter.
- PHP is a recursive acronym for “PHP: Hypertext Preprocessor”. PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic contact, database, session tracking, even build entire E-commerce sites

Software And Hardware Requirement Specification

Hardware Required

This software is prepared keeping in mind the requirement of the government. To run this software properly without any problem we need to fulfill the following minimum hardware requires…

Processor - Intel Inside Core I3, 64-bit
RAM - 4GB
Hard Disk - 500GB
Input - Keyboard and Mouse

Software Required

There is no requirement for it but the minimum software requirement of any computer specified below…

Operating system:- Microsoft Windows Based On Operating System Windows 10Pro
Server:- XAMPP control Panel V3.2.4
Front End Tools :- HTML CSS
Back End Tools :- PHP MYSQL

Software/Hardware Requirement Spcification

- **FRONT END**
- **BACK END**

- **FORNT END :-**

- HTML is stands for Hyper Text Markup Language. It can be describes the structure of a web page.HTML consist of a series of

- element. In this element tell the browser how to display the content.HTML element are represented by the tages, label of content such as “Heading” , ”Paragraph” , ”Table”, and so on…
- CSS is stand for Cascading Style Sheets. They can be describe as how HTML elements are to be displayed on screen,paper,or in other media. CSS saves a lot of work. It can control the layout of multiple wed pages all at once.External stylesheet are stored in CSS files.

➢ **BACK END:-**

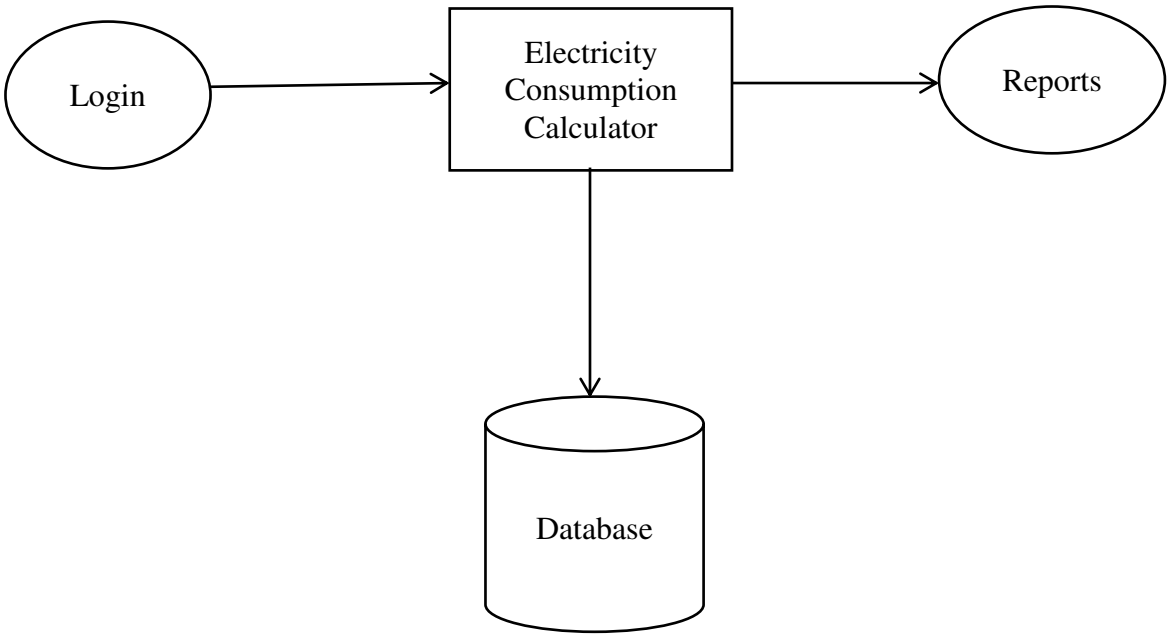
- MYSQL is database systemused on the wed. it is a database that runs on a server. It’s a very fast, reliable and easy to used. MYSQL is developed, distribute and supported bt oracle corporation. MySql is name after co-founder monty widenius’s daughter.
- PHP is a recursive acronym for “PHP: Hypertext Preprocessor”. PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic contact, database, session tracking, even build entire E-commerce sites.
- The PHP community provides some types of software server under GNU(General Public License.)

These are the following:-

1. WAMP SERVER
2. LAMP SERVER
3. MAMP SERVER
4. XAMPP SERVER

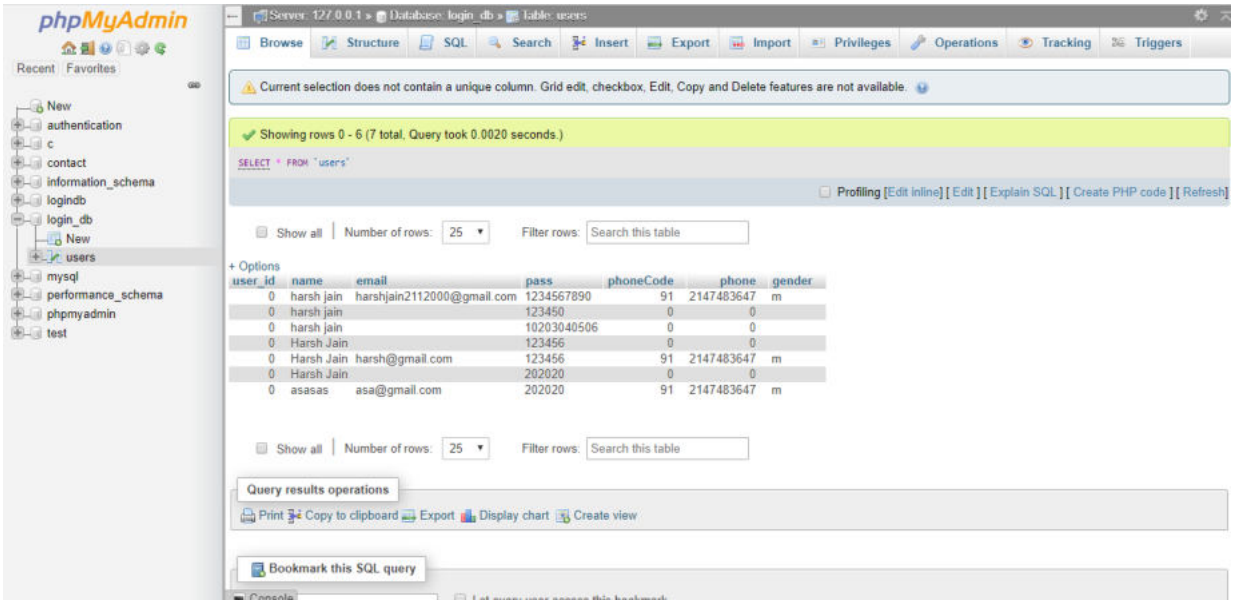
Detailed System Analysis

Data Flow Diagram

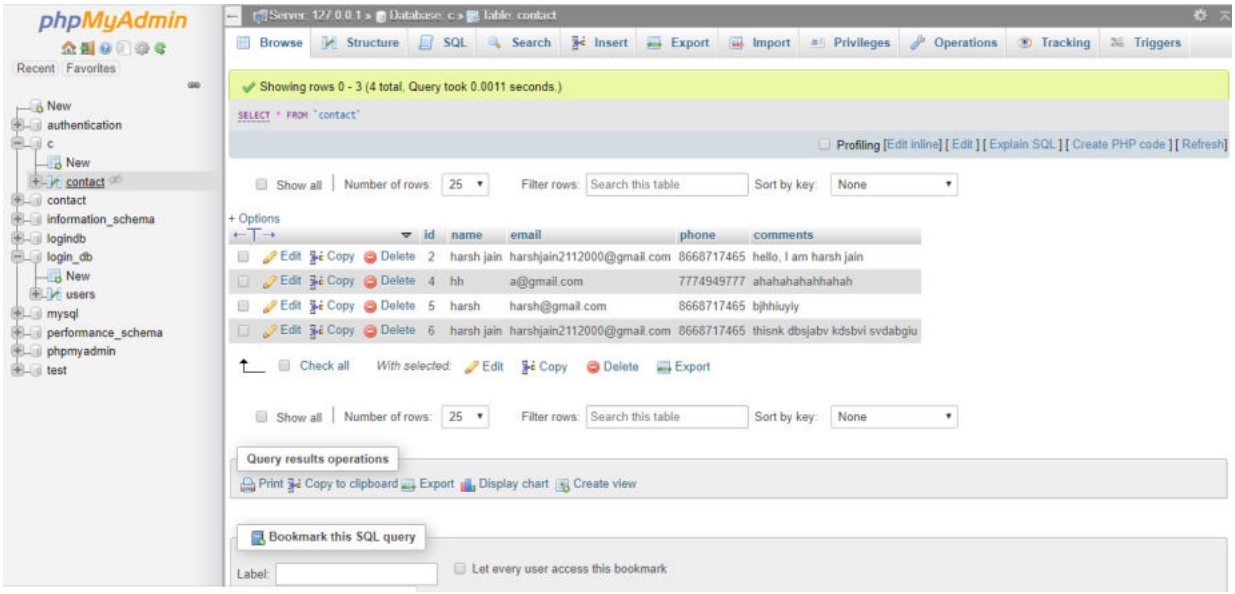


Data Structures And Tables

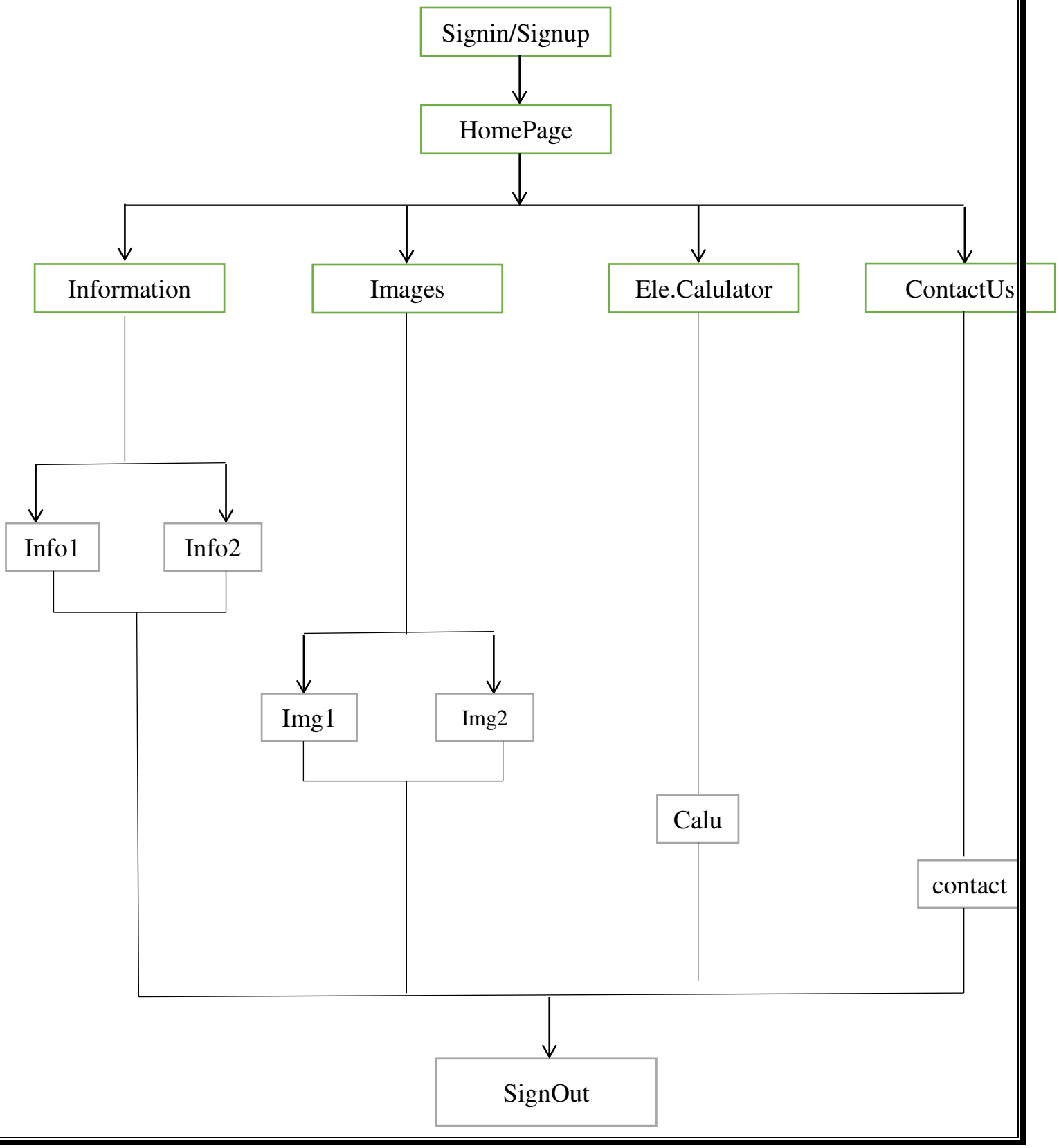
1. Login & Register



2. Contact-US



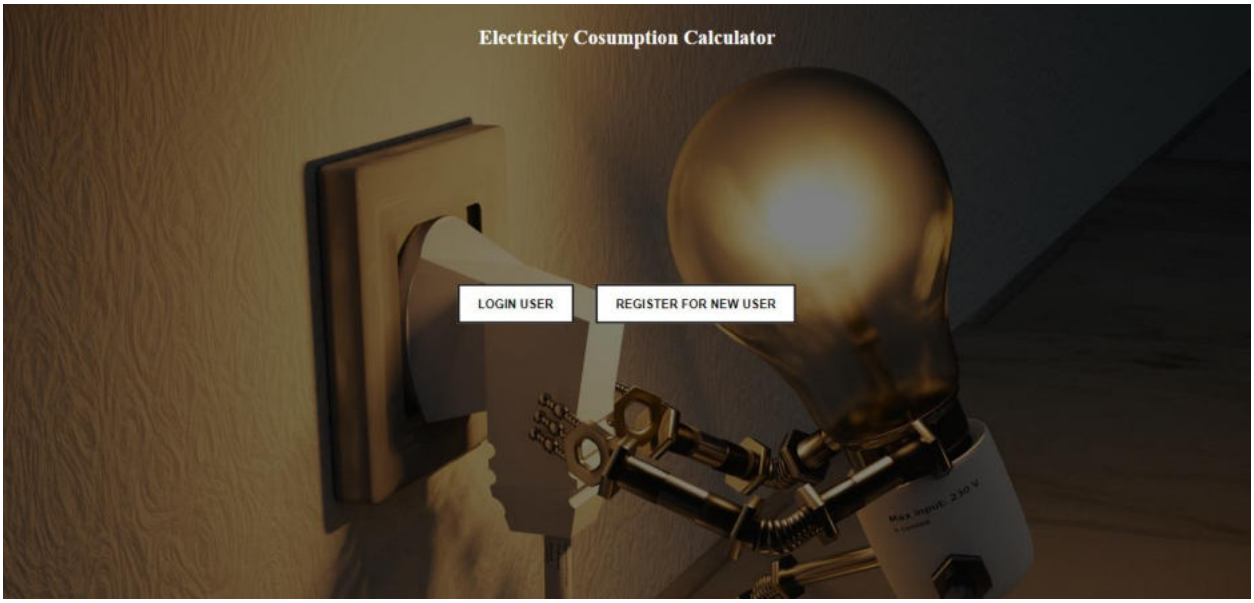
Data Flow Analysis



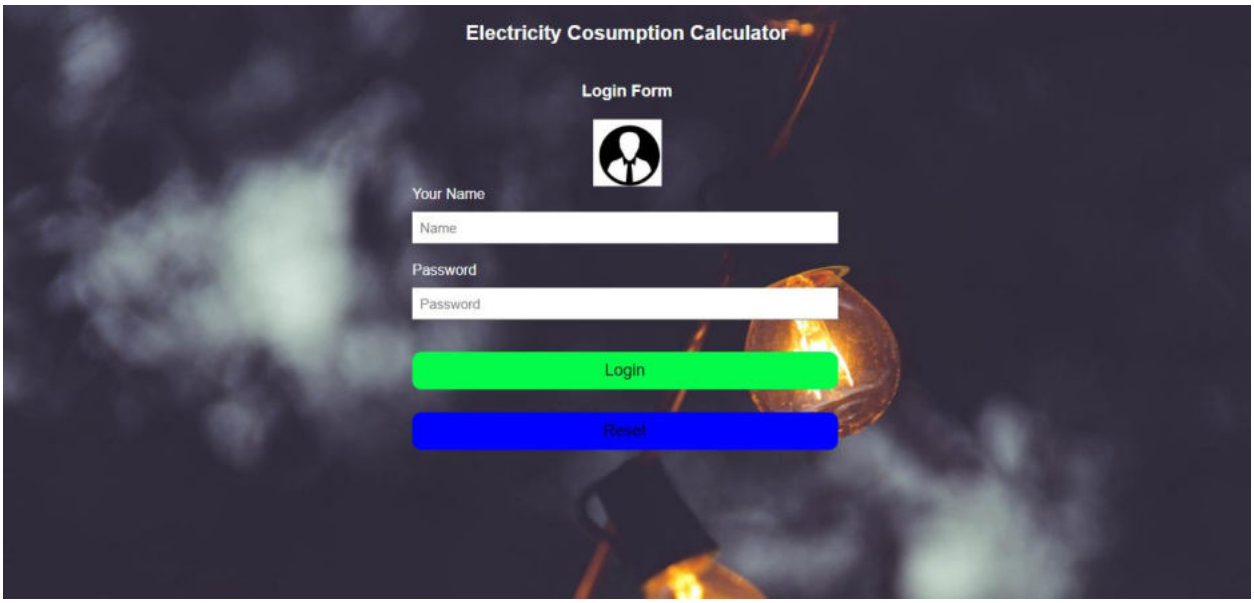
System Design

Form Design

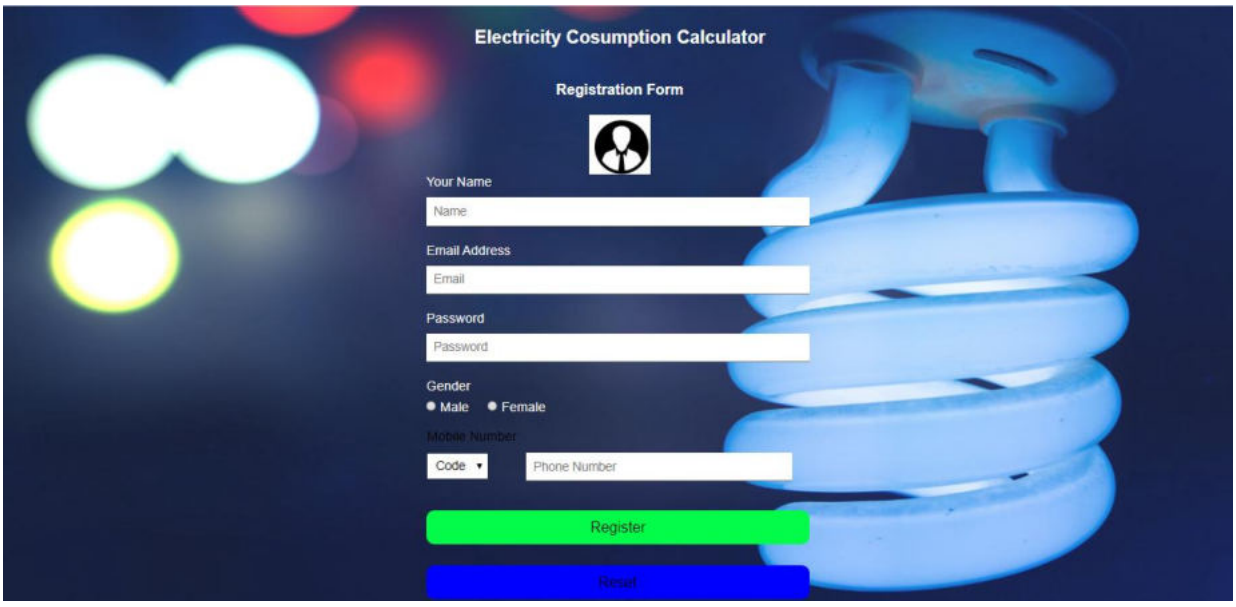
1. Welcome Form



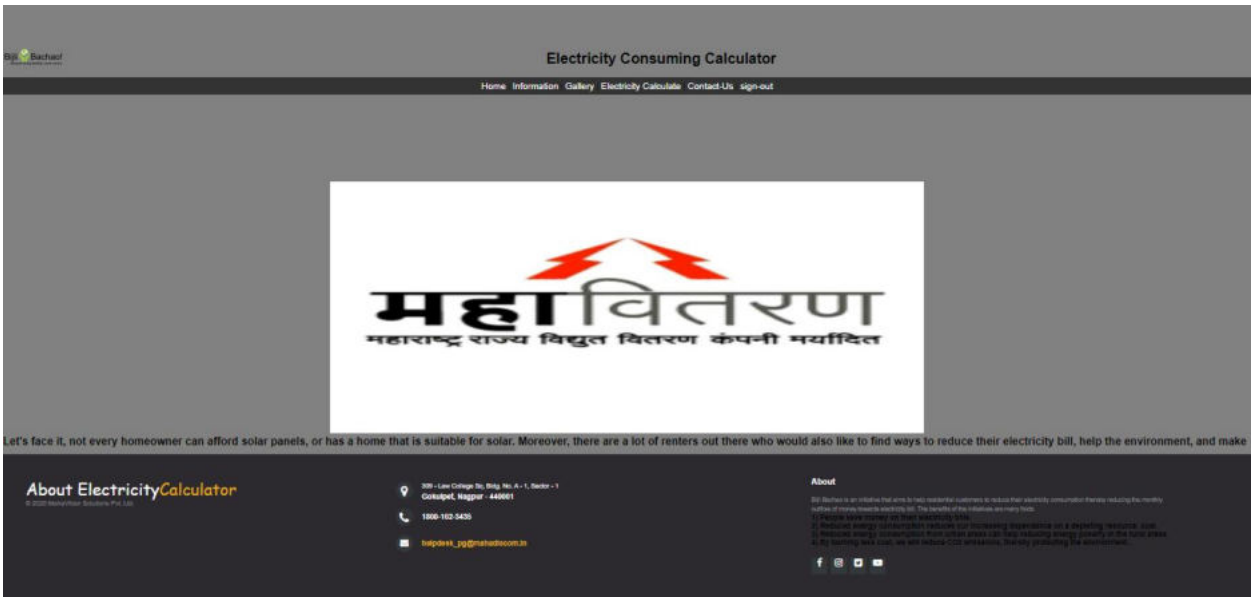
2. Login Form



3. Registartion Form



4. Home Page

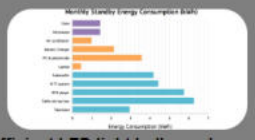


5.Information Form

Electricity Calculator Information

In this time electricity supply is most useful in the earth... In our india their are various types of electricity we are used some area need high electricity consume or low consume...In our domastic area electricity consume less power but in industry area high level power will be consume..... This power consume shown as below

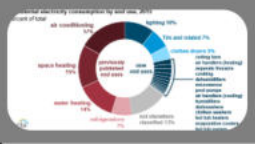
1) Smart Technologies for Home



Let's face it, not every homeowner can afford solar panels, or has a home that is suitable for solar. Moreover, there are a lot of renters out there who would also like to find ways to reduce their electricity bill, help the environment, and make their lives simpler. That's where smart technologies for your home come into play, but the wide variety of technologies on the market can make deciding where to start somewhat overwhelming.

When it comes to reducing your electricity consumption, probably the two most popular technologies are energy efficient LED light bulbs and smart thermostats. But there are other technologies available that can help you monitor which appliances and gadgets in your home are using the most electricity and others that can tackle your home's phantom or vampire load (electronic devices that are off but still drawing electricity).

2)Cost of Solar Panels

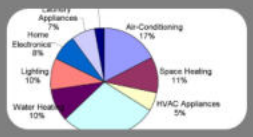


The cost of solar panels is about $15,000 - $25,000 depending on the size of your solar system. For a 7.5 kW system, the cost would be about $21,000. The cost of your solar panels (including other hardware and installation) is based on an average cost per watt of $2.80. Naturally, the cost is one of the major factors that homeowners consider when they think of going solar. One of the great things about solar energy is that the fuel cost is essentially zero. Nada. Zip. However, you still have to pay for the solar panels and other hardware, along with the cost of installing them on your property. Here is a complete guide to financing your solar power system.

Information1 Form:

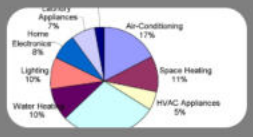
Electricity Calculator Information

3) Energy/Electricity and its units



A unit (as mentioned on the electricity bills) is represented in kWH or Kilowatt Hour. This is the actual electricity or energy used. If you use 1000 Watts or 1 Kilowatt of power for 1 hour then you consume 1 unit or 1 Kilowatt-Hour (kWH) of electricity. So the reading on the electricity meter represents the actual electricity used. Just like the odometer on your vehicle that shows the actual distance travelled by the vehicle, electricity meter shows the amount of electricity that is used. So a 100-Watt bulb if kept on for 10 hours will consume: 100 x 10 = 1000 Watt-Hour = 1 Kilowatt-Hour (kWH) = 1 units (on your meter).

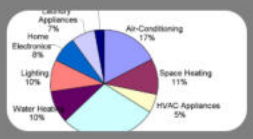
4) What are Power and Energy/Electricity



Power and Energy/Electricity are two words that are used so much for each other that many feel that they mean the same. Interestingly both of them have a very different meaning. Power is the rate at which electricity is used and energy/electricity is the actual consumption. To give an analogy, power is similar to speed but electricity/energy is the actual distance traveled.

So Power x Time = Electricity (or energy)

5) Power and its units

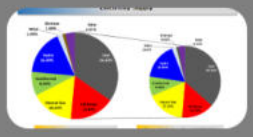


Power is always represented in watt (W) or kilowatt (kW). A thousand (1000) watts make one kilowatt. So if any appliance is rated as 1.2 kW then it means that it consumes electricity at a rate of 1200 W. Now as we discussed earlier that power is the rate at which electricity is consumed and not the actual electricity consumed, Watt or Kilowatt just represent the rate at which electricity is consumed per hour. Which means that when you buy a 100 W bulb, it does not consume 100 units of electricity but consumes at a rate of 100 W.

Information2 Form

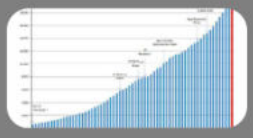
Electricity Calculator Information

6) Estimating units consumed by any appliance



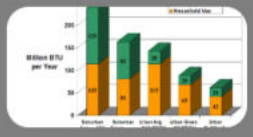
Now with most of the concepts explained we would like to make it easy for you to calculate how much units does any appliance consume. Most appliances have wattage written on them (either on their container box or somewhere on the appliance). Once you have the wattage, next you need to figure out how many hours a day do you use it. After that you can use the formula below: Daily Units = (Wattage x Usage hours per day) ◆ 1000 Monthly Units = Units x 30 (or 28,29,31 based on month)

7) The Power to Save



Once you know which devices consume the most energy, you can find ways to reduce consumption. The biggest saving is often simply removing a device that you no longer really need. The easiest savings may come from turning off devices that you are not really using, especially items like a media server or a light that operates all day. Computing equipment, such as printers, can be turned off. Power strips and timers (or home automation controllers) can power down items that are not in use. But be careful. Using a power strip to power down is just like unplugging the devices; some devices can fail or lose data if powered down often without using their power switch. In many cases, replacing older equipment can save you money. Consider all the electronic devices around you, and take a close look at the biggest power users. Then use the energy calculator to determine what a more energy-efficient replacement would save.

8) Calculating Energy Costs

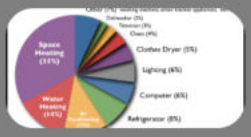


As every engineer knows, energy calculation is straightforward. The unit of electrical energy is the kilowatt-hour (kWh), found by multiplying the power use (in kilowatts, kW) by the number of hours during which the power is consumed. Multiply that value by the cost per kWh, and you have the total energy cost. Total energy cost = (Power in watts/1000) ◆ hours operating ◆ cost per kWh

Information3 Form

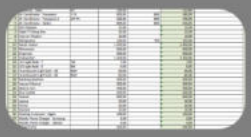
Electricity Calculator Information

9) Reducing Electricity Use and Costs



Reducing energy use in your home saves you money, increases our energy security, and reduces the pollution that is emitted from non-renewable sources of energy. If you are planning to install a small renewable energy system to make your own electricity, such as a solar electric system or small wind turbine, reducing your electricity loads is the first step◆saving you money by allowing you to purchase a smaller system.

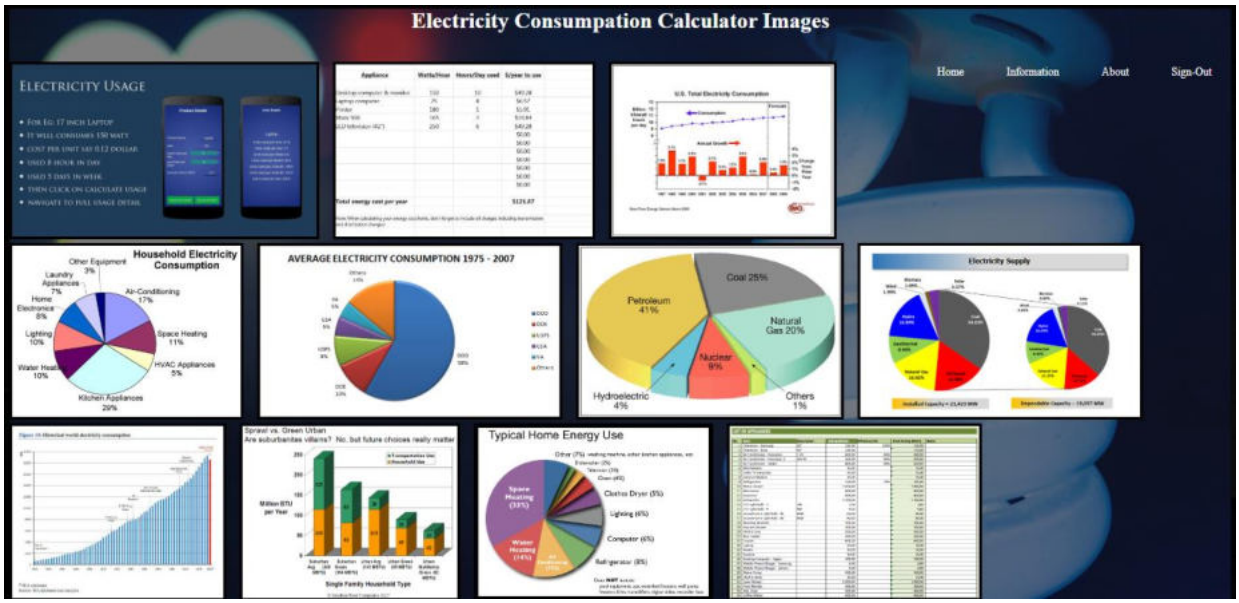
10) Electric Meters



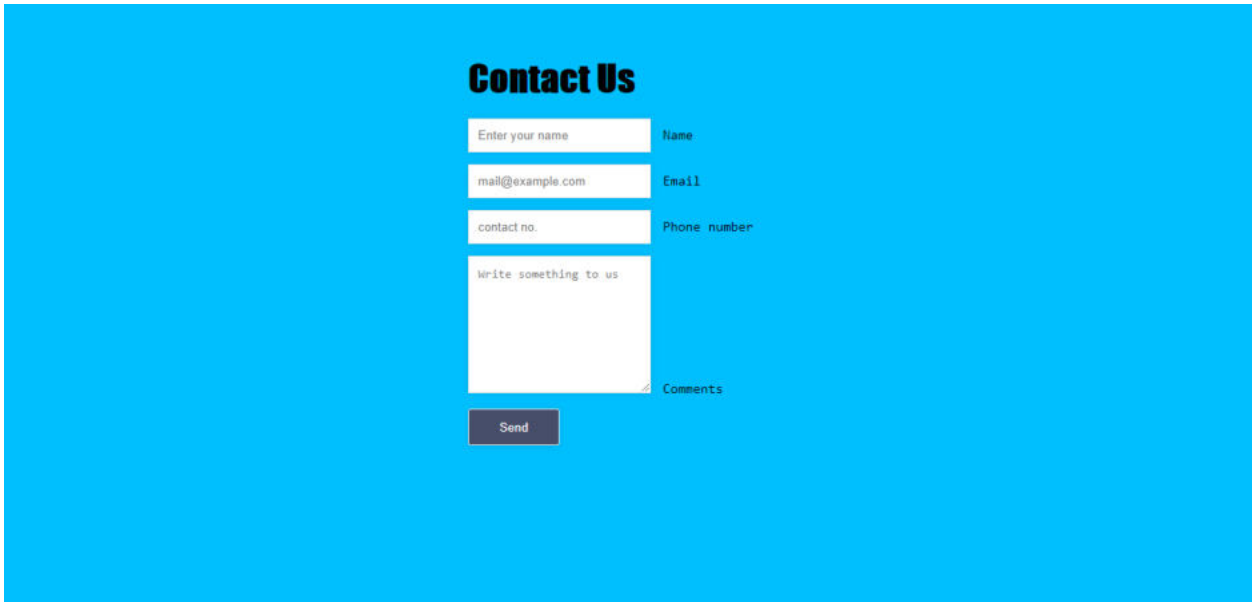
The basic unit of measure of electric power is the Watt. One thousand Watts are called a kilowatt. When you use electricity to power a 1000-watt vacuum for 1 hour, you use 1,000 watt-hours (1,000 Wh) of electricity. One thousand watt-hours equals 1 kilowatt-hour (kWh). Your utility bill usually shows what you are charged for the kilowatt-hours you use.

Electric meters use either digital displays or dials. The difference between one month's reading and the next is the amount of energy units that have been used for that billing period. You may wish to contact your local utility company for instructions on how to read your electric meter.

Gallery Form



Contact-Us Form



Source Code

Start Form:

HTML

```
<html>
<head>
<title>First Page</title>
<link rel="stylesheet" type="text/css" href="stylestart.css">
</head>
<body>
<div class="main-wrapper">
<center><h1>Electricity Cosumption Calculator</h1>
</center>
<form action="login.php" method="post" class="middle">
        <button class="btn btn1"><b>Login User</b></button>
      <button class="btn btn2" formaction="validation.php"><b>Register For New
User</b></button>

</form>
</div>
</body>
</html>
```

CSS

```
body{
margin: 0;
padding:0;
background-image: linear-gradient(rgba(0,0,0,0.5),rgba(0,0,0,0.5)),
url(lamp_outlet_idea_electricity_120422_1600x1200.jpg);}
.main-wrapper{
width: 400px;
margin: 0 auto;
background: transparent;
padding: 5px;
border-radius: 10px;
boder:2px solid #2c3e50;
color:#FFF;}
h1{
margin-top: 20px;
padding: 0 0 20px;
text-align: center;
font-size: 22px;}
```

```
.middle{
position:absolute;
top:50%;
left:50%;
transform:translate(-50%,-50%);
text-align:center;}
.btn{
background:white;
border:2px solid #000;
font-family:sans-serif;
text-transform:uppercase;
padding:12px 20px;
mid-width:200px;
margin:10px;
cursor:pointer;
position:relative;
transition:color 0.5s linear;
}
.btn:hover{
color:Green;
}
.btn::before{
content:"";
position:absolute;
top:0;
left:0;
width:100%;
height:100%;
background:#000;
z-index:-1;
transform-origin:0 0;
transition:transform 0.6s;
transition-timing-function:cublic-bezier(0.5,1.6,0.4,0.7);
}
.btn1::before{
transform:scalex(0);
}
.btn2::before{
transform:scalex(0);
}
.btn1:hover::before{
transform:scalex(0);
}
```

Login Form:

HTML

```
<html>
<head>
   <title>Login Form</title>
   <link rel="stylesheet" type="text/css" href="styleL.css">
<body>
<div id="main-wrapper">
    <center><h1>Electricity Cosumption Calculator</h1>
          <h2>Login Form </h2>
    <img src="user.png" class="user">
   </center>
      <form action="logindb.php" method="POST">
         <label for="">Your Name</label><br>
         <input type="text" placeholder="Name" name="username" required=""><br>
         <label for="">Password</label><br>
         <input type="password"  placeholder="Password" name="password" required ><br>
         <input type="submit" value="Login"  >
         <input type="reset" value="Reset"  >
      </form>
</div>
</body>
</html>
```

CSS

```
body
      {
         background-image: url('lamp_electricity_dark_128035_1920x1080.jpg');
         background-size:100% 111%;
         background-repeat: no-repeat;
      }
      *{
         margin:0;
         padding:0;
         box-sizing:border-box;
      }
      .container{
         width:420px;
         height:auto;
         margin:20px 60%;
         border-radius:10px;
         overflow:hidden;
      }
```

```
h1{
    margin-bottom:20px;
}
input[type="text"],input[type="password"]{
    border:none;
    border-bottom:1px solid gray;
    padding:8.5px;
    width:95%;
    margin:10px 0 20px 10px;
    font-size:15px;
}
input[type="submit"]{
    border:none;
    border-radius:10px;
    background-color:#03FB49;
    padding:10px;
    width:95%;
    margin:15px 0 10px 10px;
    font-size:18px;
    transition:0.5s
}
 input[type="reset"]{
    border:none;
    border-radius:10px;
    background-color:blue;
    padding:10px;
    width:95%;
    margin:15px 0 10px 10px;
    font-size:18px;
    transition:0.5s
}
input[type="submit"]:hover{
    background-color:#03A531;
    color:#fff;
}
input[type="reset"]:hover{
    background-color:blue;
    color:#fff;
}
label{
    margin-left:10px
}
select{
    border:none;
    border-bottom:1px solid gray;
```

```
        padding:7px;
        /*width:50%;*/
        margin:0 0 10px 10px;
        font-size:15px;
      }
```

Registartion Form:
HTML

```
<html>
<head>
   <title>Registration Form</title>
   <link rel="stylesheet" type="text/css" href="styleR.css">
<body>
<div id="main-wrapper">
    <center><h1>Electricity Cosumption Calculator</h1>
          <h2>Registration Form </h2>
    <img src="user.png" class="user">
   </center>
      <form action="valid-page.php" method="POST">
         <label for="">Your Name</label><br>
         <input type="text" placeholder="Name" name="username" required=""><br>
         <label for="">Email Address</label><br>
         <input type="email" placeholder="Email" required="" name="email"><br>
          <label for="">Password</label><br>
         <input type="password"  placeholder="Password" name="password" required ><br>
         <label for="">Gender</label><br>
         <input type="radio" name="gender" value="m"> Male  
         <input type="radio" name="gender" value="f" > Female
         <br>
<table>
      <tr>
         <td>
            <label>Mobile Number</label><br>
         </td>
      </tr>
      <tr>
         <td>
            <select name="phoneCode" required>
            <option selected hidden value=""> Code</option>
            <option value="+91">+91</option>
            <option value="+92">+92</option>
            </select>
         </td>
```

```
        <td>
            <input type="tel"  placeholder="Phone Number" required="" name="phone"
maxlength="10"/ ><br>
        </td>
      </tr>
</table>

        <input type="submit" value="Register"  >
        <input type="reset" value="Reset"  >
      </form>
</div>
</body>
</html>
```

CSS:

```
body
      {
        background-image: url('lamp_spiral_electricity_120795_3840x2400.jpg');
        background-size:100% 111%;
        background-repeat: no-repeat;
      }
      *{
        margin:0;
        padding:0;
        box-sizing:border-box;
      }
      .container{
        width:420px;
        height:auto;
        margin:20px 60%;
        border-radius:10px;
        overflow:hidden;
      }
      h1{
        margin-bottom:20px;
      }
      input[type="text"],input[type="email"],input[type="password"],input[type="tel"]{
        border:none;
        border-bottom:1px solid gray;
        padding:8.5px;
        width:95%;
        margin:10px 0 20px 10px;
        font-size:15px;
      }
      input[type="submit"]{
        border:none;
```

```
    border-radius:10px;
    background-color:#03FB49;
    padding:10px;
    width:95%;
    margin:15px 0 10px 10px;
    font-size:18px;
    transition:0.5s
}
 input[type="reset"]{
    border:none;
    border-radius:10px;
    background-color:blue;
    padding:10px;
    width:95%;
    margin:15px 0 10px 10px;
    font-size:18px;
    transition:0.5s
}
input[type="submit"]:hover{
    background-color:#03A531;
    color:#fff;
}
input[type="reset"]:hover{
    background-color:blue;
    color:#fff;
}
label{
    margin-left:10px
}
input[type="radio"]{
    margin:10px 0 20px 10px;
}
select{
    border:none;
    border-bottom:1px solid gray;
    padding:7px;
    /*width:50%;*/
    margin:0 0 10px 10px;
    font-size:15px;
}
input[type="tel"]
{
width: 150%;
}
```

Home Page Form:

HTML

```
<html>
<head>
    <title>New Home Page</title>
    <link rel="stylesheet" href="styleHH.css">
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/font-awesome/4.7.0/css/font-awesome.min.css"
    <link href="http://fonts.googleapis.com/css?family=Cookie" rel="stylesheet" type="text/css">
</head>
    <body>
        <header>
            <div class="logo">
                <img src="Logo-Big1.webp">
            </div>
            <h1><font color="black"><b> Electricity Consuming Calculator</font></b></h1>
        <div class="links">
            <ul>
                <li><a href="#">Home</a>
                <a href="information.php">Information</a>
                <a href="photo.php">Gallery</a>
                <a href="bill.php">Electricity Calculate</a>
                <a href="c.php">Contact-Us</a>
                <a href="login.php">sign-out</a></li></ul>
            </div>
</header>


  <div id="section">
  <div class="img1">
<center><img src="logo.png" width=1300px height=550px></center>
</div>
<h2>Let's face it, not every homeowner can afford solar panels, or has a home that is suitable for solar. Moreover, there are a lot of renters out there who would also like to find ways to reduce their electricity bill, help the environment, and make their lives simpler. That's where smart technologies for your home come into play, but the wide variety of technologies on the market can make deciding where to start somewhat overwhelming.</h2>
   <br><b>1) Smart Technologies for Home</b>
    <div class="image2"></div>
<h4>
Let's face it, not every homeowner can afford solar panels, or has a home that is suitable for solar. Moreover, there are a lot of renters out there who would also like to find ways to
```

reduce their electricity bill, help the environment, and make their lives simpler. That's where smart technologies for your home come into play, but the wide variety of technologies on the market can make deciding where to start somewhat overwhelming.
</h4>
<h3>
2)Cost of Solar Panels</h3>

<h5>
The cost of solar panels is about $15,000 - $25,000 depending on the size of your solar system. For a 7.5 kW system, the cost would be about $21,000. The cost of your solar panels (including other hardware and installation) is based on an average cost per watt of $2.80. Naturally, the cost is one of the major factors that homeowners consider when they think of going solar. One of the great things about solar energy is that the fuel cost is essentially zero. Nada. Zip. However, you still have to pay for the solar panels and other hardware, along with the cost of installing them on your property. Here is a complete guide to financing your solar power system.
</h5>

<footer class="footer-distributed">

<img src="logo_main.jpg">
<h3>About ElectricityCalculator</h3>
© 2020 MahaVitran Solutions Pvt. Ltd.

309 - Law College Sq,
Bldg. No. A - 1, Sector - 1
Gokulpet, Nagpur - 440001

1800-102-3435

helpdesk_pg@mahadiscom.in

About
Bijli Bachao is an initiative that aims to help residential customers to reduce their electricity consumption thereby reducing the monthly outflow of money towards electricity bill. The benefits of the initiatives are many folds:
<p2> 1) People save money on their electricity bills.</p2></br>
<p3> 2) Reduced energy consumption reduces our increasing dependence on a depleting

```
resource: coal.</p3></br>
  <p4> 3) Reduced energy consumption from urban areas can help reducing energy poverty in the rural areas.</p4></br>
 4) By burning less coal, we will reduce CO2 emissions, thereby protecting the environment..
      <div class="footer-icons">
         <a
   href="https://www.facebook.com/?stype=lo&jlou=AfcakwVXzFN29HeM1XSdMvG-t7C6fBrVt4n0GbUKZQRXvG-HhKoNWB1iDRItuwHVJGGzlatqRYzHkfBTMmJW859pAesF0ITZI5QRmzClgeHZHA&smuh=65386&lh=Ac93Vej_gtuSBJFM"><i class="fa fa-facebook" aria-hidden="true"></i></a>
      <a href="https://www.instagram.com/?hl=en"><i class="fa fa-instagram" aria-hidden="true"></i></a>
      <a href="https://twitter.com/login"><i class="fa fa-twitter-square" aria-hidden="true"></i></a>
   <a href="https://www.youtube.com/"><i class="fa fa-youtube-play" aria-hidden="true"></i></a>

                        </div>
                    </div>
               </footer>
      </body>
   </html>
```

CSS:

```
@import url('http://fonts.googleapis.com/css?family=Open+Sans:400,700');
 *{
     padding:0;
     margin:0;}
 .section .image2
 {
    background-image:url(IMG-20200204-WA0031.jpg);
    background-position: center;
    background-size:cover;
    height:20%;
    width:20%;
    margin-top: 0px;
    margin-left: 20px;
    float:left;
    margin-right:20px;
 }
 .section .image3
 {
    background-image:url(IMG-20200204-WA0034.jpg);
    background-position: center;
    background-size:cover;
```

```
    height:20%;
    width:20%;
    margin-top: 0px;
    margin-left: 20px;
    float:left;
    margin-right:25px;
}

body{
     font:16px/1.6 Arial,  sans-serif;
     background-color: grey;
}
header{
     text-align: center;
     padding-top: 100px;
     margin-bottom:190px;
}
header h1{
     font: normal 32px/1.5 'Open Sans', sans-serif;
     color: #3F71AE;
     padding-bottom: 16px;
}
header h2{
     color: #F05283;
}
header span{
     color: #3F71EA;
}
.logo img{
     float: left;
     width: 150px;
     height: auto;
}
.links{
     background-color: #333;
}
.links a{
     display:inline-block;
     line-height: 1.8;
     text-decoration: none;
     color:  white;
     font-size: 20px;
     border: 1px solid transparent;
}
footer{
```



```
     position: fixed;
```

```
    bottom: 0;
}
@media (max-height:800px){
    footer { position: static; }
    header { padding-top:40px; }
}
.footer-distributed{
    background-color: #2c292f;
    box-sizing: border-box;
    width: 100%;
    text-align: left;
    font: bold 16px sans-serif;
    padding: 50px 50px 60px 50px;
    margin-top: 80px;
}
.footer-distributed .footer-left,
.footer-distributed .footer-center,
.footer-distributed .footer-right{
    display: inline-block;
    vertical-align: top;}
.footer-distributed .footer-left{
    width: 30%;
}
.footer-distributed h3{
    color:  #ffffff;
    font: normal 36px 'Cookie', cursive;
    margin: 0;
}
.footer-distributed .footer-left img{
    width: 40%;
    height: 20%;
}
.footer-distributed h3 span{
    color:  #e0ac1c;
}
.footer-distributed .footer-company-name{
    color:  #8f9296;
    font-size: 14px;
    font-weight: normal;
    margin: 0;
}
.footer-distributed .footer-center{
    width: 35%;
}
.footer-distributed .footer-center i{
```

```
    background-color:  #33383b;
    color: #ffffff;
    font-size: 25px;
    width: 38px;
    height: 38px;
    border-radius: 50%;
    text-align: center;
    line-height: 42px;
    margin: 10px 15px;
    vertical-align: middle;
}
.footer-distributed .footer-center i.fa-envelope{
    font-size: 17px;
    line-height: 38px;
}
.footer-distributed .footer-center p{
    display: inline-block;
    color: #ffffff;
    vertical-align: middle;
    margin:0;
}
.footer-distributed .footer-center p span{
    display:block;
    font-weight: normal;
    font-size:14px;
    line-height:2;
}
.footer-distributed .footer-center p a{
    color:  #e0ac1c;
    text-decoration: none;;
}
.footer-distributed .footer-right{
    width: 30%;
}
.footer-distributed .footer-company-about{
    line-height: 20px;
    color:  #92999f;
    font-size: 13px;
    font-weight: normal;
    margin: 0;
}
.footer-distributed .footer-company-about span{
    display: block;
    color:  #ffffff;
    font-size: 18px;
```

```
    font-weight: bold;
    margin-bottom: 20px;
}
.footer-distributed .footer-icons{
    margin-top: 25px;
}
.footer-distributed .footer-icons a{
    display: inline-block;
    width: 35px;
    height: 35px;
    cursor: pointer;
    background-color:  #33383b;
    border-radius: 2px;
    font-size: 20px;
    color: #ffffff;
    text-align: center;
    line-height: 35px;
    margin-right: 3px;
    margin-bottom: 5px;
}
@media (max-width: 880px) {
.footer-distributed .footer-left,
.footer-distributed .footer-center,
.footer-distributed .footer-right{
            display: block;
            width: 100%;
            margin-bottom: 40px;
            text-align: center;
    }
    .footer-distributed .footer-center i{
            margin-left: 0;}}
```

Information Form:

HTML

```
<html>
<head>
<title>Information</title>
<link type="text/css" rel="stylesheet" href="styleinformation.css"/>
</head>
<body>
<div class="info">
   <h1>Electricity Calculator Information</h1>
    <ul>
      <div class="section">
```

```
        <div class="image1"></div>
      <div class="about"><h2>
 In this time electricity supply is most useful in the earth... In our india their are various types of electricity we are used some area need high electricity consume or low consume...In our domastic area electricity consume less power but in industry area high level power will be consume..... This power consume shown as below</h2>
<h3><br>1) Smart Technologies for Home</h3>
<div class="image2"></div>
<h4>
Let's face it, not every homeowner can afford solar panels, or has a home that is suitable for solar. Moreover, there are a lot of renters out there who would also like to find ways to reduce their electricity bill, help the environment, and make their lives simpler. That's where smart technologies for your home come into play, but the wide variety of technologies on the market can make deciding where to start somewhat overwhelming.
</h4>
<h5>
When it comes to reducing your electricity consumption, probably the two most popular technologies are energy efficient LED light bulbs and smart thermostats. But there are other technologies available that can help you monitor which appliances and gadgets in your home are using the most electricity and others that can tackle your home's phantom or vampire load (electronic devices that are off but still drawing electricity).
</h5>
<h3><br>2)Cost of Solar Panels</h3>
<div class="image3"></div>
<h4>
The cost of solar panels is about $15,000 - $25,000 depending on the size of your solar system. For a 7.5 kW system, the cost would be about $21,000. The cost of your solar panels (including other hardware and installation) is based on an average cost per watt of $2.80. Naturally, the cost is one of the major factors that homeowners consider when they think of going solar. One of the great things about solar energy is that the fuel cost is essentially zero. Nada. Zip. However, you still have to pay for the solar panels and other hardware, along with the cost of installing them on your property. Here is a complete guide to financing your solar power system.
</h4>
</div></div></div>
<div class="npbutton">
            <a href="HH.php" class="btn">&laquo;Previous</a>
            <a href="information1.php" class="btn">Next&raquo;</a>
            </div>
</div>
</body>
</html>
```

CSS

```
body{
   margin: 0;
```

```
    padding: 0;
    background-image: linear-gradient(rgba(0,0,0,0.5),rgba(0,0,0,0.5)), url( ak.jpg);
    background-size: cover;
    background-position: center;
    font-family: sans-serif;
}
.info h1{
font-size:30;
text-align:center;
color:white;}
.info h2{
font-size:20;}
.info h3{
font-size:24;}
.info h4{
font-size:20;
}
.info h5{
font-size:20;
}
.info .section .image2
{
    background-image:url(img12.png);
    background-position: center;
    background-size:cover;
    height:20%;
    width:20%;
    border-radius:30px;
    float:left;
    left:70%;
    margin-top: 0px;
    margin-left: 20px;
    margin-right:25px;
}
.info .section .image3
{
    background-image:url(img13.png);
    background-position: center;
    background-size:cover;
    height:20%;
    width:20%;
    border-radius:30px;
    float:left;
    left:70%;
    margin-top: 0px;
    margin-left: 20px;
```

```
   margin-right:25px;
}
.npbutton
{
   position:absolute;
   top:140%;
   left:50%;
   transform:translate(-50% , -50%);
}
.btn
{
   border:1px solid #fff;
   padding:10px 30px;
   color:#fff;
   text-decoration: none;
   transition:0.6s ease;}
```

Information1 Form:

HTML

```
<html>

<head>
<title>Information</title>
<link type="text/css" rel="stylesheet" href="styleinformation1.css"/>
</head>
<body>
<div class="info">
   <h1>Electricity Calculator Information</h1>
    <ul>
      <div class="section">
<h3><br>3) Energy/Electricity and its units</h3>
        <div class="image1"></div>
      <div class="about"><h2>
```

A unit (as mentioned on the electricity bills) is represented in kWH or Kilowatt Hour. This is the actual electricity or energy used. If you use 1000 Watts or 1 Kilowatt of power for 1 hour then you consume 1 unit or 1 Kilowatt-Hour (kWH) of electricity. So the reading on the electricity meter represents the actual electricity used. Just like the odometer on your vehicle that shows the actual distance travelled by the vehicle, electricity meter shows the amount of electricity that is used. So a 100-Watt bulb if kept on for 10 hours will consume:

```
100 x 10 = 1000 Watt-Hour = 1 Kilowatt-Hour (kWH) = 1 units (on your meter).</h2>
<h3><br>4) What are Power and Energy/Electricity</h3>
<div class="image2"></div>
<h4>
```

Power and Energy/Electricity are two words that are used so much for each other that many feel that they mean the same. Interestingly both of them have a very different meaning.

Power is the rate at which electricity is used and energy/electricity is the actual consumption. To give an analogy, power is similar to speed but electricity/energy is the actual distance traveled.</h4>
<h5 So Power x Time = Electricity (or energy)</h5>
<h3>
5) Power and its units</h3>

<h4>
Power is always represented in watt (W) or kilowatt (kW). A thousand (1000) watts make one kilowatt. So if any appliance is rated as 1.2 kW then it means that it consumes electricity at a rate of 1200 W. Now as we discussed earlier that power is the rate at which electricity is consumed and not the actual electricity consumed, Watt or Kilowatt just represent the rate at which electricity is consumed per hour. Which means that when you buy a 100 W bulb, it does not consume 100 units of electricity but consumes at a rate of 100 W.</h4>

a href="information.php" class="btn">«Previous
Next»

</body>
</html>

CSS

```
body{
   margin: 0;
   padding: 0;
   background-image: linear-gradient(rgba(0,0,0,0.5),rgba(0,0,0,0.5)), url( ak.jpg);
   background-size: cover;
   background-position: center;
   font-family: sans-serif;
}
.info .section .image1
{
   background-image:url(img4.jpg);
   background-position: center;
   background-size:cover;
   height:20%;
   width:20%;
   border-radius:30px;
   float:left;
   left:70%;
   margin-top: 0px;
   margin-left: 20px;
   margin-right:25px;
}
.info .section .image2
```

```
{
   background-image:url(img4.jpg);
   background-position: center;
   background-size:cover;
   height:20%;
   width:20%;
   border-radius:30px;
   float:left;
   left:70%;
   margin-top: 0px;
   margin-left: 20px;
   margin-right:25px;
}
.info .section .image3
{
   background-image:url(img4.jpg);
   background-position: center;
   background-size:cover;
   height:20%;
   width:20%;
   border-radius:30px;
   float:left;
   left:70%;
   margin-top: 0px;
   margin-left: 20px;
   margin-right:25px;
}
.info h1{
font-size:30;
text-align:center;
color:white;
}
.info h2{
font-size:20;
}
.info h3{
font-size:24;
}
.info h4{
font-size:20;
}
.info h5{
font-size:20;

}
```

```
.npbutton
{
   position:absolute;
   top:140%;
   left:50%;
   transform:translate(-50% , -50%);
}
.btn
{
   border:1px solid #fff;
   padding:10px 30px;
   color:#fff;
   text-decoration: none;
   transition:0.6s ease;
}
```

Information2 Form

HTML

```
<html>
<head>
<title>Information</title>
<link type="text/css" rel="stylesheet" href="styleinformation2.css"/>
</head>
<body>
<div class="info">
   <h1>Electricity Calculator Information</h1>
    <ul>
      <div class="section">
<h3><br>6) Estimating units consumed by any appliance</h3>
       <div class="image1"></div>
      <div class="about"><h2>
```

Now with most of the concepts explained we would like to make it easy for you to calculate how much units does any appliance consume. Most appliances have wattage written on them (either on their container box or somewhere on the appliance). Once you have the wattage, next you need to figure out how many hours a day do you use it. After that you can use the formula below:

Daily Units = (Wattage x Usage hours per day) ÷ 1000

Monthly Units = Units x 30 (or 28,29,31 based on month)

```
</h2>
<h3><br>7) The Power to Save</h3>
<div class="image2"></div>
<h4>
```

Once you know which devices consume the most energy, you can find ways to reduce consumption. The biggest saving is often simply removing a device that you no longer really need.
The easiest savings may come from turning off devices that you are not really using, especially items like a media server or a light that operates all day. Computing equipment, such as printers, can be turned off. Power strips and timers (or home automation controllers) can power down items that are not in use. But be careful. Using a power strip to power down is just like unplugging the devices; some devices can fail or lose data if powered down often without using their power switch.
In many cases, replacing older equipment can save you money. Consider all the electronic devices around you, and take a close look at the biggest power users. Then use the energy calculator to determine what a more energy-efficient replacement would save.</h4>
<h3>
8) Calculating Energy Costs</h3>

<h4>
As every engineer knows, energy calculation is straightforward. The unit of electrical energy is the kilowatt-hour (kWh), found by multiplying the power use (in kilowatts, kW) by the number of hours during which the power is consumed. Multiply that value by the cost per kWh, and you have the total energy cost.
Total energy cost = (Power in watts/1000) × hours operating × cost per kWh</h4>

«Previous
Next»

</body>
</html>

CSS

```
body{
   margin: 0;
   padding: 0;
   background-image: linear-gradient(rgba(0,0,0,0.5),rgba(0,0,0,0.5)), url( ak.jpg);
   background-size: cover;
   background-position: center;
   font-family: sans-serif;
}
.info .section .image1
{
   background-image:url(img7.png);
   background-position: center;
   background-size:cover;
   height:20%;
   width:20%;
   border-radius:30px;
```

```
    left:70%;
   margin-top: 0px;
   margin-left: 20px;
   float:left;
   margin-right:20px;
}
.info .section .image2
{
   background-image:url(img8.jpg);
   background-position: center;
   background-size:cover;
   height:20%;
   width:20%;
   border-radius:30px;
    left:70%;
   margin-top: 0px;
   margin-left: 20px;
   float:left;
   margin-right:20px;
}
.info .section .image3
{
   background-image:url(img9.gif);
   background-position: center;
   background-size:cover;
   height:20%;
   width:20%;
   border-radius:30px;
    left:70%;
   margin-top: 0px;
   margin-left: 20px;
   float:left;
   margin-right:20px;
}
.info h1{
font-size:30;
text-align:center;
color:white;
}
.info h2{
font-size:20;
}
.info h3{
font-size:24;
}
```

```
.info h4{
font-size:20;
}
.info h5{
font-size:20;
}
.npbutton
{
   position:absolute;
   top:140%;
   left:50%;
   transform:translate(-50% , -50%);
}
.btn
{
   border:1px solid #fff;
   padding:10px 30px;
   color:#fff;
   text-decoration: none;
   transition:0.6s ease;
}
```

Information3 Form

HTML

```
<html>
<head>
<title>Information</title>
<link type="text/css" rel="stylesheet" href="styleinformation3.css"/>
</head>
<body>
<div class="info">
   <h1>Electricity Calculator Information</h1>
    <ul>
    <div class="section">
<h3><br>9) Reducing Electricity Use and Costs</h3>
      <div class="image1"></div>
      <div class="about"><h2>
```

Reducing energy use in your home saves you money, increases our energy security, and reduces the pollution that is emitted from non-renewable sources of energy. If you are planning to install a small renewable energy system to make your own electricity, such as a solar electric system or small wind turbine, reducing your electricity loads is the first step—saving you money by allowing you to purchase a smaller system.</h2>

```
<h3><br>10) Electric Meters</h3>
 <div class="image2"></div>
<h4>
```

The basic unit of measure of electric power is the Watt. One thousand Watts are called a

kilowatt. When you use electricity to power a 1000-watt vacuum for 1 hour, you use 1,000 watt-hours (1,000 Wh) of electricity. One thousand watt-hours equals 1 kilowatt-hour (kWh). Your utility bill usually shows what you are charged for the kilowatt-hours you use.
</h4>
<h5>
Electric meters use either digital displays or dials. The difference between one month's reading and the next is the amount of energy units that have been used for that billing period. You may wish to contact your local utility company for instructions on how to read your electric meter.</h5>

«Previous

</body>
</html>

CSS

```
body{
   margin: 0;
   padding: 0;
   background-image: linear-gradient(rgba(0,0,0,0.5),rgba(0,0,0,0.5)), url( ak.jpg);
   background-size: cover;
   background-position: center;
   font-family: sans-serif;
}
.info .section .image1
{
   background-image:url(img10.gif);
   background-position: center;
   background-size:cover;
   height:20%;
   width:20%;
   border-radius:30px;
    left:70%;
   margin-top: 0px;
   margin-left: 20px;
   float:left;
   margin-right:20px;
}
.info .section .image2
{
   background-image:url(img11.png);
   background-position: center;
   background-size:cover;
   height:20%;
```

```
    width:20%;
    border-radius:30px;
     left:70%;
    margin-top: 0px;
    margin-left: 20px;
    float:left;
    margin-right:20px;
}
.info h1{
font-size:30;
text-align:center;
color:white;
}
.info h2{
font-size:20;
}
.info h3{
font-size:24;
}
.info h4{
font-size:20;
}
.info h5{
font-size:20;
}
.npbutton
{
    position:absolute;
    top:140%;
    left:50%;
    transform:translate(-50% , -50%);
}
.btn
{
    border:1px solid #fff;
    padding:10px 30px;
    color:#fff;
    text-decoration: none;
    transition:0.6s ease;
}
```

Gallery Form:

HTML

```
<html>
```

```
<head>
    <title>images</title>
</head>
<body background="IMG-20200204-WA0034.jpg">
    <header>
    <center><h1><font color="white">Electricity Consumpation Calculator Images</h1></font></center>
  <div class="main">
    <ul>
      <li class="Home">
    <a href="HH.php">Home</a></li>
      <li><a href="information.php">Information</a></li>
      <li><a href="#">About</a></li>
    <li><a href="L.php">Sign-Out</a></li></ul>
  </div></br>


    <img src="img1.jpg" style="height:250px; width:350px margin-left:1px; border-style:solid">    
    <img src="img2.jpg" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img3.jpg" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img4.jpg" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img5.png" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img6.jpg" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img7.png" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img8.jpg" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img9.gif" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img10.gif" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img11.png" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img12.png" style="height:250px; width:350px margin-left:10px; border-style:solid">    
    <img src="img13.png" style="height:250px; width:350px margin-left:10px; border-style:solid">    
</body>
</html>
```

CSS

```
header{
background-image:linear-gradient(rgba(0,0,0,0.5),rgba(0,0,0,0.5)),
url(lamp_spiral_electricity_120795_3840x2400.jpg);
height: 100vh;
background-size: cover;
Font-color:white;
background-position: center;}
ul{
float: right;
list-style-type: none;
margin-top: 25px;}
ul li{
display: inline-block;}
ul li a{
text-decoration: none;
color: white;
border: 1px solid #fff;
padding:#fff;
padding: 8px 28px;
border: 1px solid transparent;
transition: 0.6s ease;
}
ul li a:hover{
background-color: #fff;
color: #000;
}
ul li.main a{
background-color: #fff;
color: black;
}
```

Electricity Calculate

HTML

```
<html>
<head>
    <title>Calculate Electricity Bill</title>
</head>
<body background="IMG-20200204-WA0032.jpg"></body>
<?php
$result_str = $result = '';
if (isset($_POST['unit-submit'])) {
   $units = $_POST['units'];
   if (!empty($units)) {
```

```
        $result = calculate_bill($units);
        $result_str = 'Total amount of ' . $units . ' - ' . $result;
    }}
function calculate_bill($units) {
    $unit_cost_first = 3.50;
    $unit_cost_second = 4.00;
    $unit_cost_third = 5.20;
    $unit_cost_fourth = 6.50;
    if($units <= 50) {
        $bill = $units * $unit_cost_first;
    }
    else if($units > 50 && $units <= 100) {
        $temp = 50 * $unit_cost_first;
        $remaining_units = $units - 50;
        $bill = $temp + ($remaining_units * $unit_cost_second);
    }
    else if($units > 100 && $units <= 200) {
        $temp = (50 * 3.5) + (100 * $unit_cost_second);
        $remaining_units = $units - 150;
        $bill = $temp + ($remaining_units * $unit_cost_third);
    }
    else {
        $temp = (50 * 3.5) + (100 * $unit_cost_second) + (100 * $unit_cost_third);
        $remaining_units = $units - 250;
        $bill = $temp + ($remaining_units * $unit_cost_fourth);
    }
    return number_format((float)$bill, 2, '.', '');
}?>
<body>
<div id="page-wrap">
                <h1><font color="White"><b>Calculate Electricity Bill</font></b></h1>
                <form action="" method="post" id="form">
        <input type="number" name="units" id="units" placeholder="Please enter no. of
Units" /><br>
        <input type="submit" name="unit-submit" id="unit-submit" value="Submit" /><br>
        <input type="Reset" name="unit-submit" id="unit-submit" value="Reset" />
       <script language="JavaScript" type="text/JavaScript">
function lookupIdByTagId(id, tag)
{
  var idScope = lookupIdScope(tag,".");
  return (idScope == "") ? id : idScope + id;
}
function lookupIdScope(tag,sep)
{
  var val = "";
```

```
  if (sep == null) sep = "";
  while (tag != null && tag.getAttribute != null) {
    try {
      var attrVal = tag.getAttribute("netui:idScope");
    } catch (e) { /* ignore, in IE6 calling on a table results in an exception */ }
    if (attrVal != null)
      val = attrVal + sep + val;
    tag = tag.parentNode;
  }
  return val;
}
if (netui_tagIdNameMap == null)
  var netui_tagIdNameMap = new Object();
netui_tagIdNameMap.frm="frm"
function lookupNameByTagId(id, tag)
{
  var idScope = lookupIdScope(tag,"_");
  if (idScope == "")
    return netui_tagIdNameMap[id];
  else
    return netui_tagIdNameMap[idScope  + "__" + id];
}
--></script></form>
            <div>
              <?php echo '<br />' . $result_str; ?>
            </div>  </div></body></html>
```

CSS

```
*{
        margin:0;
        padding:0;
        box-sizing:border-box;
       }
    #form input{
        border:none;
        border-bottom:1px solid gray;
        padding:8.5px;
        width:20%;
        margin:10px 0 20px 10px;
        font-size:15px;
     }
     input[type="submit"]:hover{
        background-color:#03A531;
        color:black;
     }
      input[type="reset"]:hover{
```

```
        background-color:blue;
        color:black;
      }
```

Contact-Us Form

HTML

```
<html>
<head>
<link rel="stylesheet" href="style.css" type="text/css" media="all" />
</head>
<body>
<h2>Contact Us</h2>
 <form class="form" action="cdb.php" method="POST">
   <p class="username">
    <input type="text" name="name" id="name" placeholder="Enter your name" >
    <label for="name">Name</label>
   </p>
   <p class="useremail">
    <input type="text" name="email" id="email" placeholder="mail@example.com" >
    <label for="email">Email</label>
   </p>
   <p class="usercontact">
    <input type="text" name="contact" id="contact" placeholder="contact no." >
    <label for="contact">Phone number</label>
   </p>
   <p class="usertext">
    <textarea name="text" placeholder="Write something to us" ></textarea>
     <label for="text">Comments</label  </p>
   <p class="usersubmit">
    <input type="submit" name="submit" value="Send" > </p>
 </form></body></html>
```

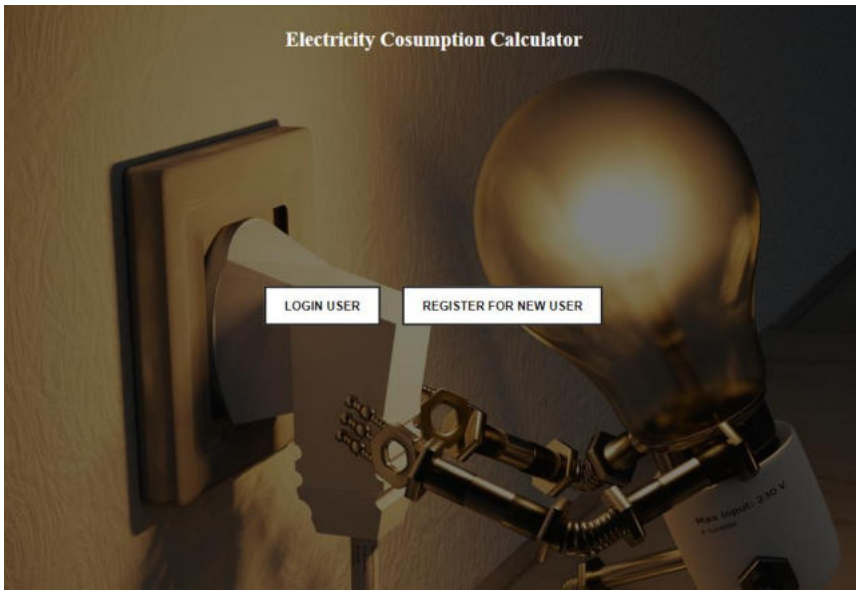
CSS

```
body {
 padding: 50px 500px;
 font-size: 13px;
   background-color: deepskyblue;
}
h2 {
 margin-bottom: 20px;
 font-family: fantasy;
   font-size: 40px;
}
input, textarea {
 padding: 10px;
 border: 1px solid #E5E5E5;
```

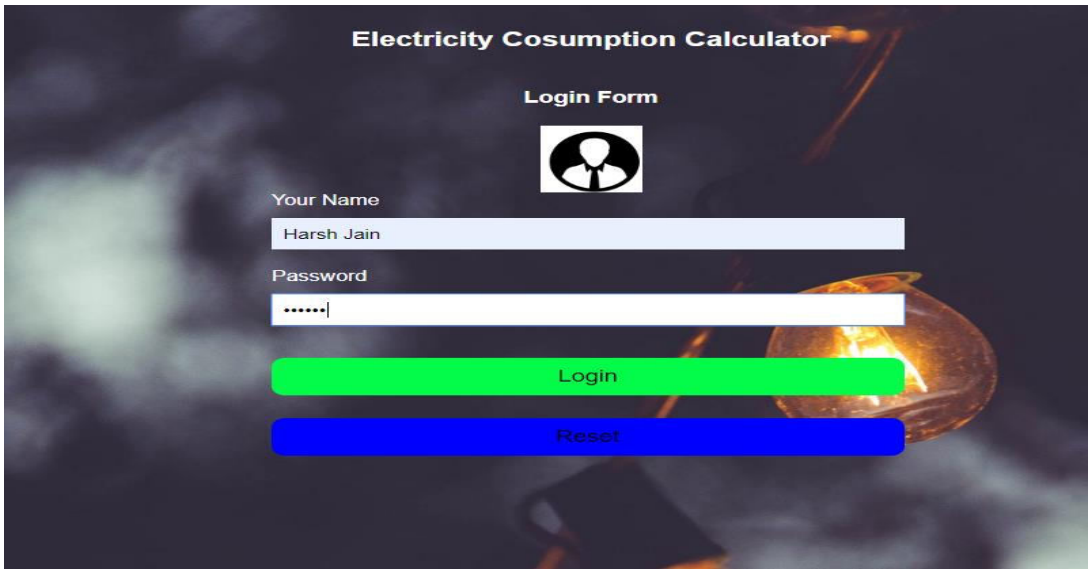
```
  width: 200px;

  color: #999999;
  box-shadow: rgba(0, 0, 0, 0.1) 0px 0px 8px;
}
textarea {
  width: 200px;
  height: 150px;
  max-width: 400px;
  line-height: 18px;
}
input:hover, textarea:hover,
input:focus, textarea:focus {
  border-color: 1px solid #C9C9C9;
  box-shadow: rgba(0, 0, 0, 0.2) 0px 0px 8px;
}
.form label {
  margin-left: 10px;
  font-family:monospace;
    font-size: 15px;
}
.usersubmit input {
  width: 100px;
  height: 40px;
  background-color: #474E69;
  color: #FFF;
  border-radius: 3px;}
```

Input Screen And Output Screen

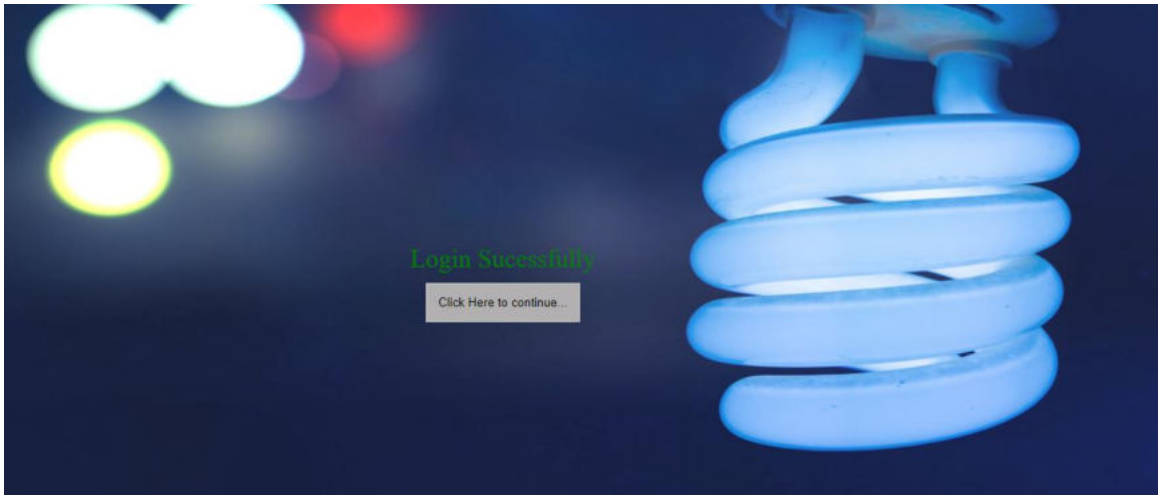
Input Welcome Form:



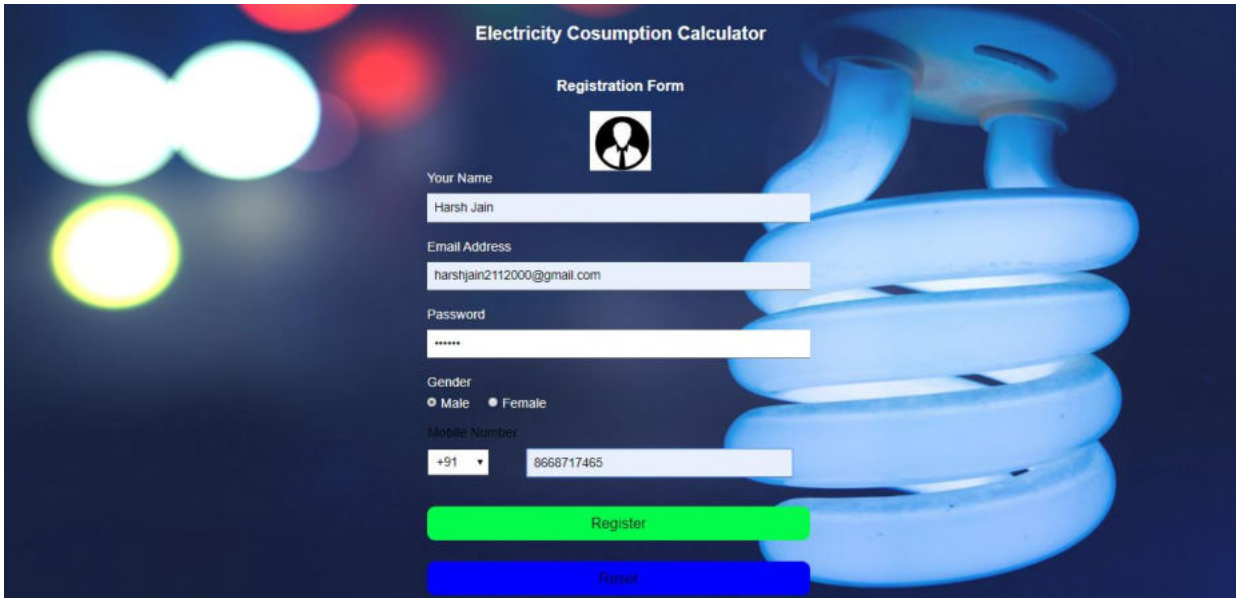
Input Login Form:



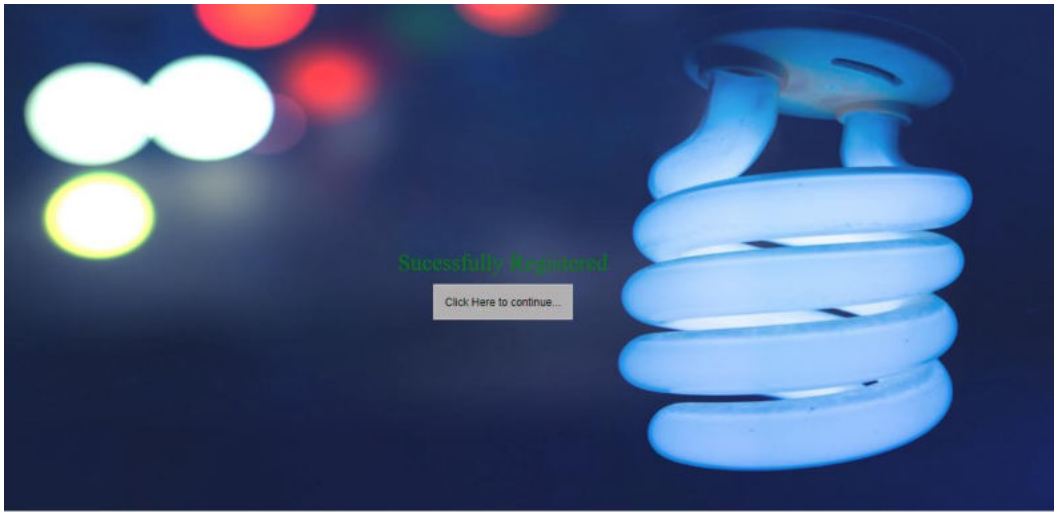
Output Login Form:



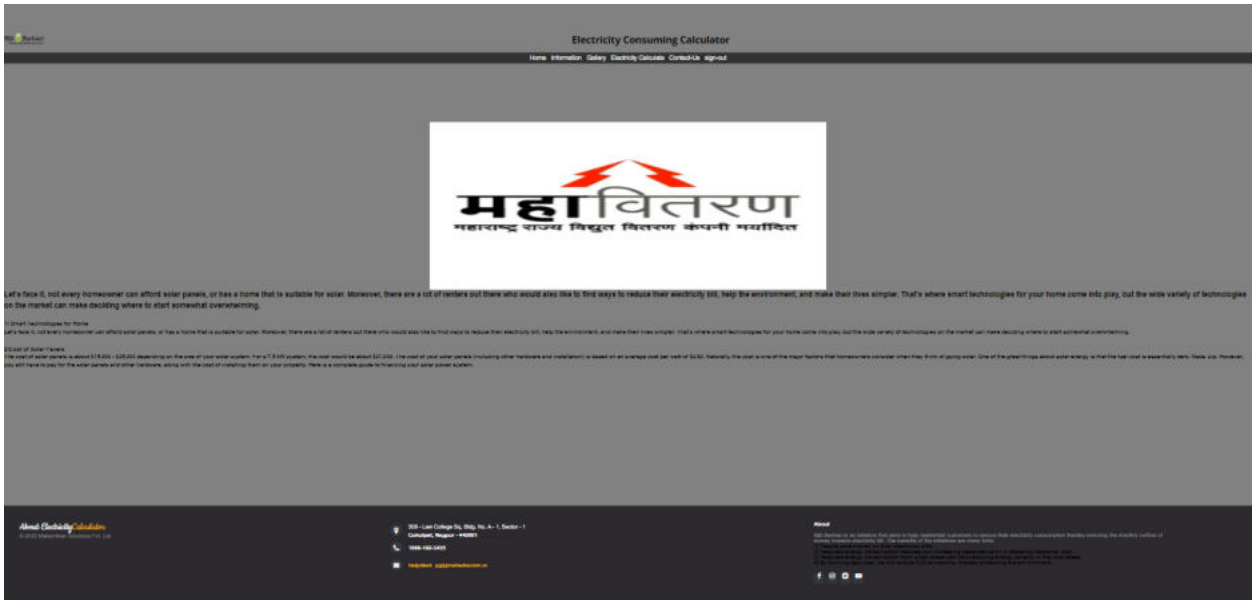
Input Registration Form:



Output Registration Form:



Input Home Page Form:

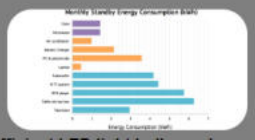


Input Information Form:

Electricity Calculator Information

In this time electricity supply is most useful in the earth... In our india their are various types of electricity we are used some area need high electricity consume or low consume...In our domastic area electricity consume less power but in industry area high level power will be consume..... This power consume shown as below

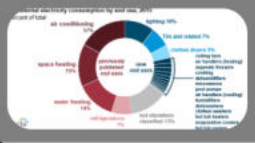
1) Smart Technologies for Home



Let's face it, not every homeowner can afford solar panels, or has a home that is suitable for solar. Moreover, there are a lot of renters out there who would also like to find ways to reduce their electricity bill, help the environment, and make their lives simpler. That's where smart technologies for your home come into play, but the wide variety of technologies on the market can make deciding where to start somewhat overwhelming.

When it comes to reducing your electricity consumption, probably the two most popular technologies are energy efficient LED light bulbs and smart thermostats. But there are other technologies available that can help you monitor which appliances and gadgets in your home are using the most electricity and others that can tackle your home's phantom or vampire load (electronic devices that are off but still drawing electricity).

2)Cost of Solar Panels

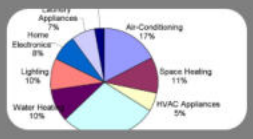


The cost of solar panels is about $15,000 - $25,000 depending on the size of your solar system. For a 7.5 kW system, the cost would be about $21,000. The cost of your solar panels (including other hardware and installation) is based on an average cost per watt of $2.80. Naturally, the cost is one of the major factors that homeowners consider when they think of going solar. One of the great things about solar energy is that the fuel cost is essentially zero. Nada. Zip. However, you still have to pay for the solar panels and other hardware, along with the cost of installing them on your property. Here is a complete guide to financing your solar power system.

Input Information1 Form:

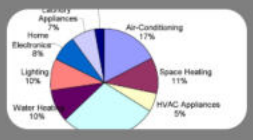
Electricity Calculator Information

3) Energy/Electricity and its units



A unit (as mentioned on the electricity bills) is represented in kWH or Kilowatt Hour. This is the actual electricity or energy used. If you use 1000 Watts or 1 Kilowatt of power for 1 hour then you consume 1 unit or 1 Kilowatt-Hour (kWH) of electricity. So the reading on the electricity meter represents the actual electricity used. Just like the odometer on your vehicle that shows the actual distance travelled by the vehicle, electricity meter shows the amount of electricity that is used. So a 100-Watt bulb if kept on for 10 hours will consume: 100 x 10 = 1000 Watt-Hour = 1 Kilowatt-Hour (kWH) = 1 units (on your meter).

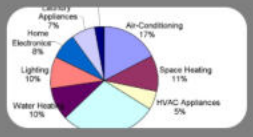
4) What are Power and Energy/Electricity



Power and Energy/Electricity are two words that are used so much for each other that many feel that they mean the same. Interestingly both of them have a very different meaning. Power is the rate at which electricity is used and energy/electricity is the actual consumption. To give an analogy, power is similar to speed but electricity/energy is the actual distance traveled.

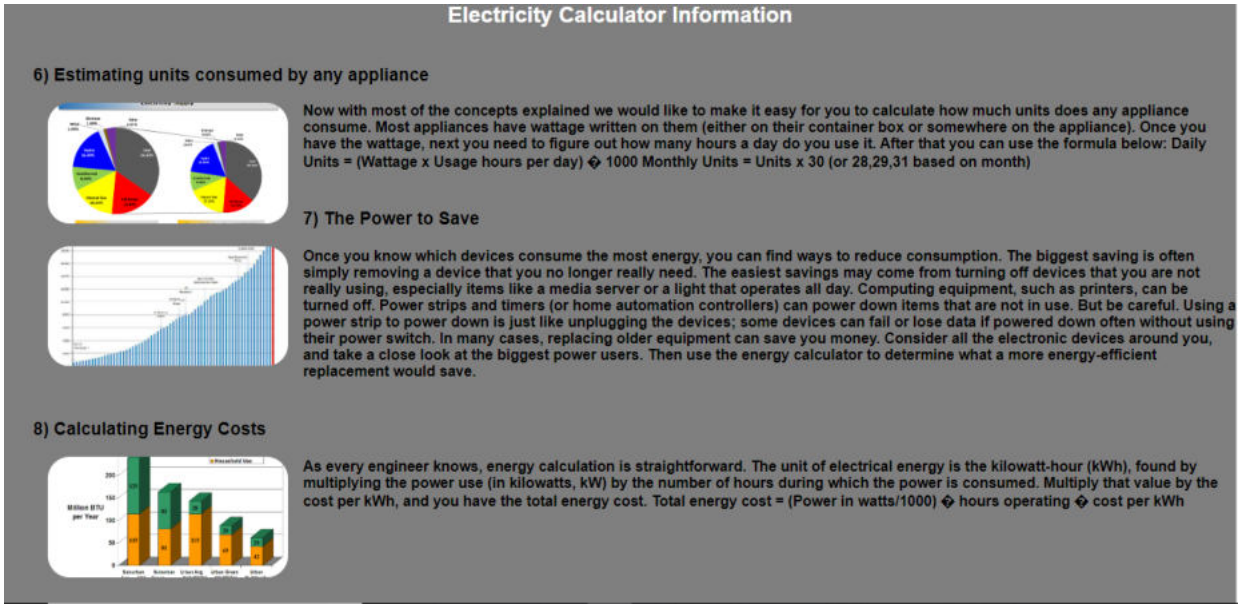
So Power x Time = Electricity (or energy)

5) Power and its units

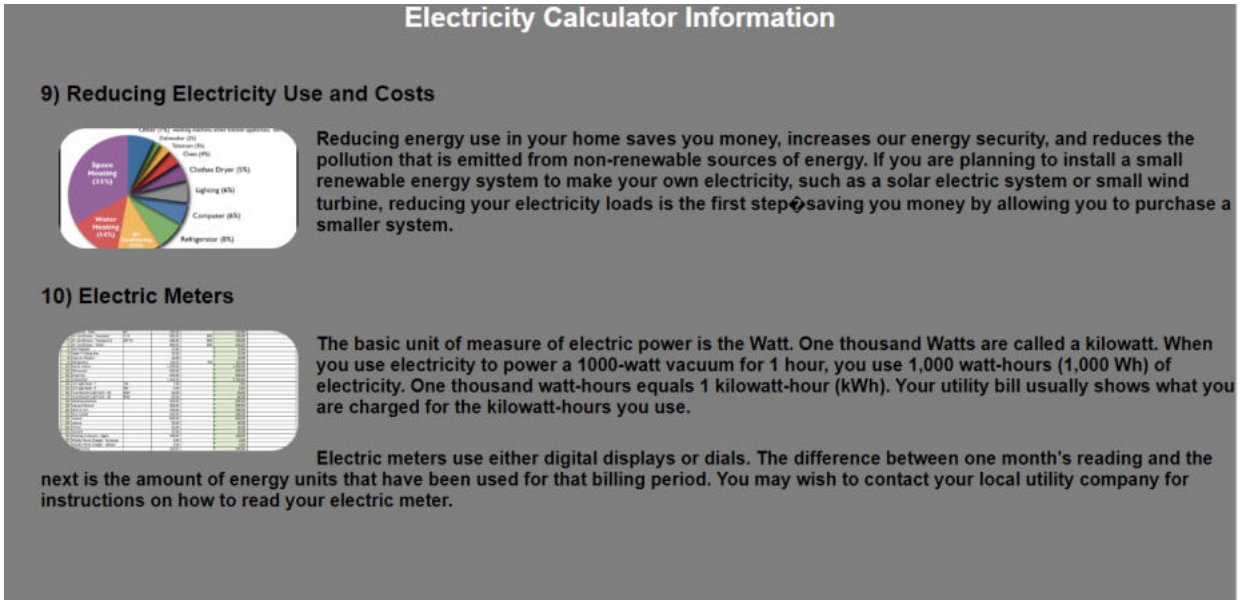


Power is always represented in watt (W) or kilowatt (kW). A thousand (1000) watts make one kilowatt. So if any appliance is rated as 1.2 kW then it means that it consumes electricity at a rate of 1200 W. Now as we discussed earlier that power is the rate at which electricity is consumed and not the actual electricity consumed, Watt or Kilowatt just represent the rate at which electricity is consumed per hour. Which means that when you buy a 100 W bulb, it does not consume 100 units of electricity but consumes at a rate of 100 W.

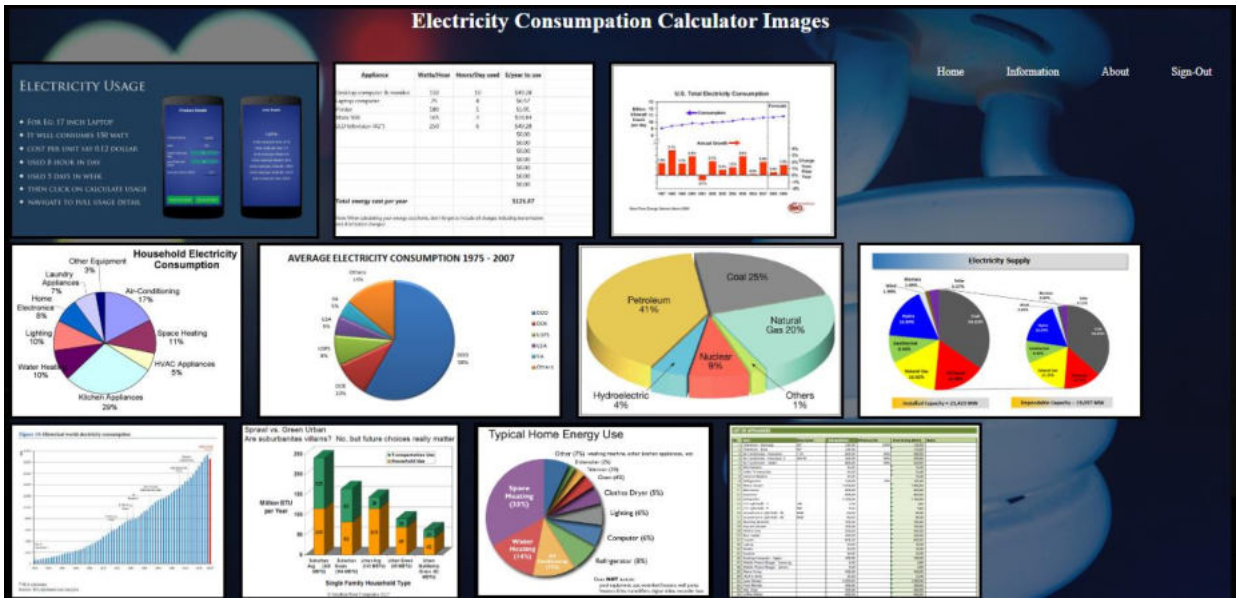
Input Information2 Form:



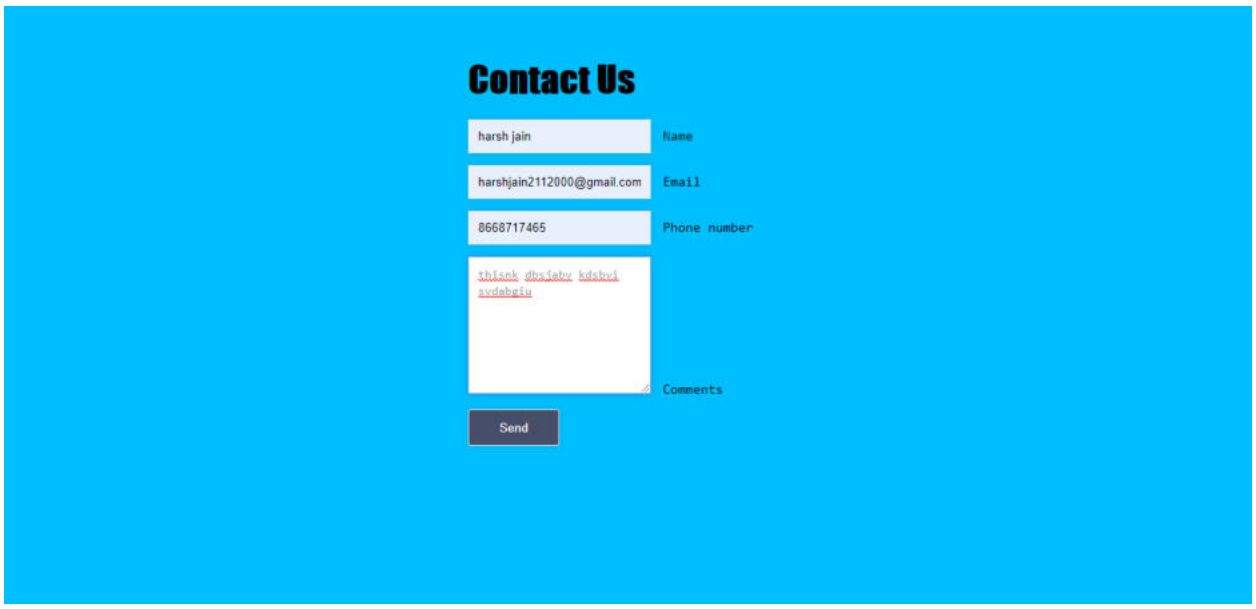
Input Information3 Form:



Input Gallery Form:



Input Contact-Us Form:



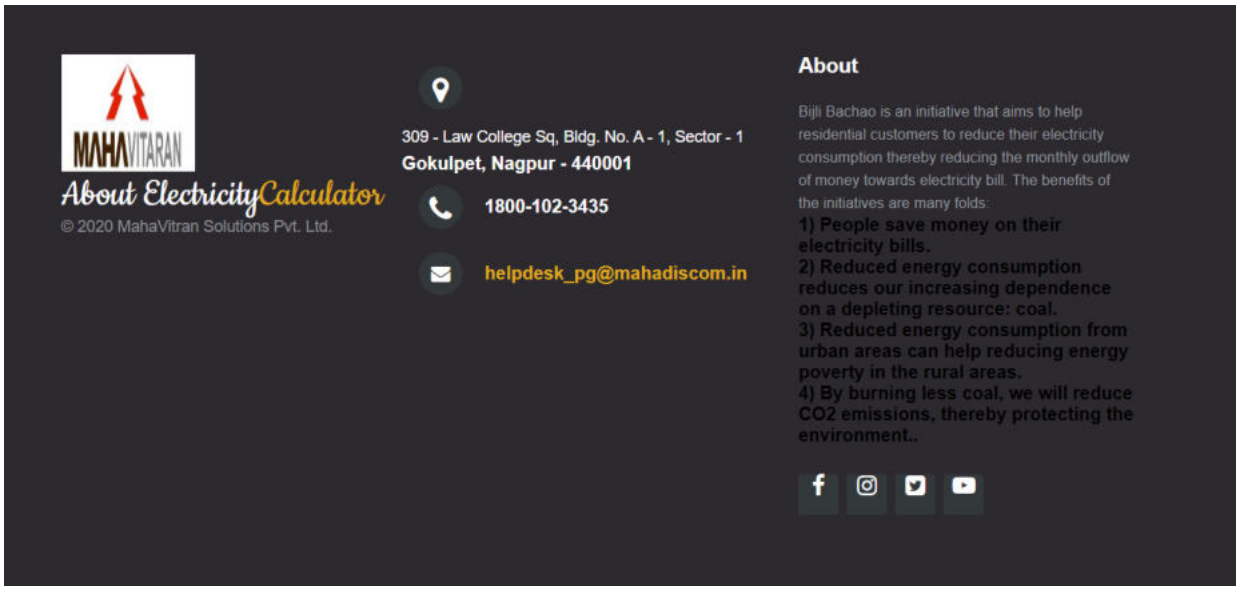
Output Contact-Us Form:

Thank you! We will get in touch with you soon
Sucessfully
Click Here to continue...

Input Electricity Calculate Form:

Output Electricity Calculate Form:

Input About Form:



\

Testing and validation check

Validation checks ensure that the valid data should be entered into the in system so that there should not be any multifunctioning in the system. The user validation of data puts less pressure on the Back-End tools. The validation applied on the maintains the data integrity.
There are various ways to check the valid data:

- Auto generation of ID in the database.
- Validation for entering numeric or string values into a database.
- Handling errors to resume the next execution from the next time.
- Disallowing null values.

This type of validation is useful for entering the validate data in the database and assures that the correct data is supplied to and ny the user. They can be classified into two types they are:

- **Validating Input Transaction:** In this validation there are mainly Three types of problem occure they are:

1. Submitted the wrong data to system.
2. Submission the data by an unauthorized person or
3. Asking the system to perform an unacceptable funcation.

- **Validating Input Data:** It is an essential that the input data themselves along with the transaction requested are value several text can be incorporated into software to ensure the validity. We consider that the possible ways to validate input and they as follows:

1. Test for mission data.
2. Test for the correct field length.
3. Test for comparison with stored data.

System Security Measures.

Security is an important term of any project development. Security provides a protection to the computer, database, and project from unauthorized user. Security of the computer stored data and the information generated is a part of successful conversion.

In our project the measure decided on the following criteria:

1. Password Facility
2. Database Security
3. Backup Facility

- **Password Facility:** This project must have a password utility. That means no one can enter into the project without using password. The project should be unique an known only to the user of the system.
- **Database Security:** Database has the high level security. If the database is oracle then the oracle its own security but we use in the php mysql database connectivity. That means the database is secure through the operating system.
- **Backup Facility:** Every database has the backup facility. That means some data is corrupt then you can take quick backup form the database to retrieve the correct data.

When you run this software very first from which you find a password frame consisting of text boxes for password. As soon as frame open and ask for password from the user. User enter the correct password and name and will move on the next from otherwise move will not be allowed until and unless user type the correct password. And this password will write a user is directly store in the database.

Implementation Evaluation And Maintainace

❖ Implimentation:

Implementation is the process of converting a new system design in to operations. After system is designed it has to be installed and placed in it operation. Implementation is concerned 0 accurate hardware and system from an external vendor once the information system has been designed. A number of tasks must be completed before the system in installed and ready to operate. This process is called system implementation. It include hardware and software acquisition.

❖ Maintenance:

Maintenance is necessary to eliminate errors in the system during its life ans to tune up the system, if any variation occurs in the working environment programmer spends more times on maintenance of the program when compared with coding time.

This software requires proper examining so that so that the bug or unexpected results doesn't lead to system clash. When the system will be implemented there may be a condition which might have been over looked by the user during testing.

❖ Evaluation:

It also satisfied the primary requirement of the user the system is evaluated on basic of.

1. System Availability
2. Compatibility
3. Cost
4. Performance
5. Usability

Future Scope Of The Project

- In this modification, update can be done as per the need.
- As this project is highly flexible and it can be modified as per requirement.
- This project will reduce the time and human efforts.
- Provides the searching facilities based on various factors. Such as customers, bills, units, customer connections.
- Show the information and description of customers, bills, units etc…
- It deals with monitoring the information and transaction of meter reading.
- Integration of all records of units.
- This project is user friendly so that a person who is an end user in computer world can also easily access through this project.
- It is easy to handle to access this project and easy to understand.
- It stored the accurate information.

Suggestion And Conclusion

After completing this project on the topic of **Electricity Consumption Calculator**. This project include The aim of our project is develop a system that is meant to partially computerized work performed in the electricity board like generating monthly electrical bill. Record of consuming unit of energy, store record of the customers and previous unpaid bill. Which increase its realibility. Now I am talk any issue related with **Electricity Consumption Calculator.** The whole credit goes to my subject teacher and my project partner, they refined my ideas and make this project Good…

Thank You….

Bibliography And References

Website:

https://www.w3schools.com/
https://www.fontawesome.com/

www.wikipedia.com
www.google.com