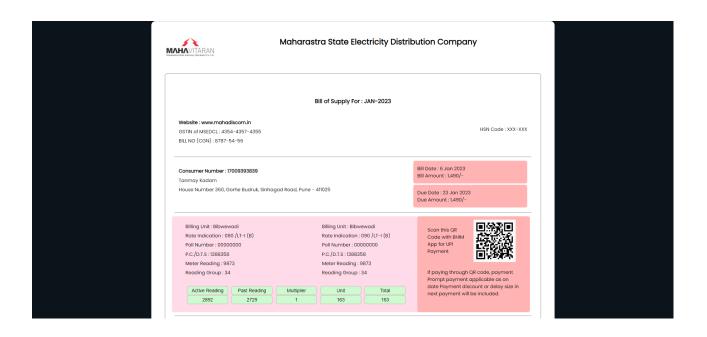
ASSIGNMENT - 4

Name: **Tanmay Kadam** Roll & Div: **TY CS-D 78**

Design and develop a responsive website to calculate Electricity bill using springboot. Condition for first 50 units – Rs. 3.50/unit, for next 100 units – Rs. 4.00/unit, for next 100 units – Rs. 5.20/unit and for units above 250 – Rs. 6.50/unit. You can make the use of bootstrap as well as jQuery.

Preview Screenshots



CODE

ElectricityBillController.html

```
package com.example.demo.controller;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.*;
@Controller
public class ElectricityBillController {
 @GetMapping("/")
 public String showElectricityBillForm(){
   return "index"; // this is the name of your HTML file
 }
 @PostMapping("/calculate")
 public String calculateElectricityBill(@RequestParam("unitsUsed") int unitsUsed, Model model) {
   double billAmount = 0;
   if (unitsUsed <= 50){</pre>
     billAmount = unitsUsed * 3.5;
   } else if (unitsUsed <= 150){
     billAmount = 50 * 3.5 + (unitsUsed - 50) * 4;
   } else if (unitsUsed <= 250){
     billAmount = 50 * 3.5 + 100 * 4 + (unitsUsed - 150) * 5.2;
   } else {
     billAmount = 50 * 3.5 + 100 * 4 + 100 * 5.2 + (unitsUsed - 250) * 6.5;
   model.addAttribute("billAmount", billAmount);
   return "result";
 }
}
```

User.java

```
package com.example.demo.model;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestParam;
public class User {
 private int units;
 @GetMapping("/")
 public String showElectricityBillForm(){
   return "index"; // this is the name of your HTML file
 }
 @PostMapping("/calculate")
 public String calculateElectricityBill(@ModelAttribute User user) {
   return "result";
 }
}
```

templates/index.html

```
<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Electricity Bill</title>
```

```
k rel="stylesheet" href="" th:href="@{style.css}"/>
 </head>
 <body>
   <header>
     <h1 style="text-align: center; color: white; padding: 10px">
      Electricity Bill
     </h1>
     <hr width="40%" style="margin: auto" />
   </header>
   <!- Billi ->
   <section class="bill">
     <div class="container">
      <div class="mahav-header">
        <imq
src="https://www.mahadiscom.in/wp-content/uploads/2021/03/msedcl_hs_logo_transparent_bg.pn
g"
          alt=""
        />
        <h3 id="head-name">
          Maharastra State Electricity Distribution Company
        </h3>
        <img
src="https://upload.wikimedia.org/wikipedia/commons/thumb/1/13/Azadi_Ka_Amrit_Mahotsav_%28
English%29_logo.svg/1200px-Azadi_Ka_Amrit_Mahotsav_%28English%29_logo.svg.png"
          alt=""
          id="head-75"
        />
      </div>
      <div class="mahav-desc">
        <div class="date">
          <div class="head-date">
           <h5 id="date-head">Bill of Supply For: JAN-2023</h5>
          </div>
        </div>
        <div class="code">
          <div class="gst">
           Website : www.mahadiscom.in
```

```
GSTIN of MSEDCL: 4354-4357-4355
   >BILL NO (CGN): 8787-54-56
 </div>
 <div class="code-code">HSN Code : XXX-XXX</div>
</div>
<hr style="width: 95%"/>
<!- Div 2 ->
<div class="code">
 <div class="gst grahak">
   Consumer Number : 17009393839
   Tanmay Kadam
   >
    House Number 360, Gorhe Budruk, Sinhagad Road, Pune - 411025
   </div>
 <div class="code2">
   <div class="due-date">
    Bill Date: 6 Jan 2023 <br />
    Bill Amount: 1,490/-
   </div>
   <div class="due-date">
    Due Date: 23 Jan 2023 <br />
    Due Amount: 1,490/-
   </div>
 </div>
</div>
<hr style="width: 95%; margin-left: auto; margin-right: auto" />
<!- Div 3 ->
<div class="section-3">
 <div class="section-3-info">
   <div class="units">
    <div class="unit1">
      Billing Unit : Bibwewadi
      Rate Indication: 090 /LT-I(B)
      Poll Number : 00000000
      P.C./D.T.S: 1388358
      Meter Reading: 9873
      Reading Group: 34
```

```
<div class="unit2">
               Billing Unit : Bibwewadi
               Rate Indication: 090 /LT-I(B)
               Poll Number : 00000000
               P.C./D.T.S: 1388358
               Meter Reading: 9873
               Reading Group: 34
             </div>
           </div>
           <div class="daywise-reading">
             <button>Active Reading</button>
             <button>Past Reading/button>
             <button>Multiplier</button>
             <button>Unit</button>
             <button>Total</button>
             <br />
             <button>2892</button>
             <button>2729</button>
             <button>1</button>
             <button>163</button>
             <button>163</button>
           </div>
         </div>
         <div class="qr-section">
           <div class="gr-info">
             Scan this QR Code with BHIM App for UPI Payment
             <img
src="https://www.citypng.com/public/uploads/preview/black-qr-code-barcode-transparent-backgr
ound-31632177587er1xxdtdtx.png"
              alt=""
             />
           </div>
           >
             If paying through QR code, payment Prompt payment applicable as
             on date Payment discount or delay size in next payment will be
             included.
           </div>
        </div>
        <hr style="width: 95%" />
```

</div>

```
<!- Section - 4 ->
<div class="section-4">
 <div class="section-4-info">
   <canvas
     id="myChart"
     style="width: 100%; max-width: 530px"
   ></canvas>
 </div>
 <div class="helpline-section">
   24*7 Helpline Number
   >
     MSEDCL Call Center: <br />
     18002333435 <br />
     18002123435 <br />
     1912
   www.mahadiscom.in > ConsumerPortal > CGRF
 </div>
</div>
<!- Section - 5 ->
<hr style="width: 95%"/>
<div class="instrn-section">
 Important
 >
   1. Register for e-bill instead of printed bill and get Rs.10
   Go-Green discount on every bill. To register:-
   https://pro.mahadiscom.in/GoGreen/gogreen.jsp (GGN number on your
   printed bill (available in the upper left corner.)
   <br />
   2. Pay electricity bill digitally and get 0.25% (up to Rs.500/-)
   discount (excluding taxes and duties) <br/> />
   3. If your mobile number and email address are incorrect, visit
   here - https://consumerinfo.mahadiscom.in/ <br/> <br/> />
   4. The next month's reading will usually be on 30-01-2023.
 www.mahadiscom.in > ConsumerPortal > CGRF
</div>
<hr style="width: 95%" />
```

```
<!- Section 5 ->
     <div class="section-5">
       <form>
         <label for="units">Enter Number of Units :</label>
         <input type="number" id="units" name="units" />
         <button type="button" onclick="calculateBill()">
           Calculate Bill
         </button>
       </form>
       <button id="result"></button>
     </div>
     <hr style="width: 95%" />
     <!- Section 6 ->
     <div class="section-6">
       >
         * For queries related to your online payment transactions, please
         contact helpdesk_pg@mahadiscom.in
         <br />
         Any unauthorised changes made in this bill will lead to
         non-acceptance of the bill.
       </div>
   </div>
 </div>
</section>
<footer>
 <h5
   style="
     color: white;
     text-align: center;
     justify-content: center;
     height: 100%;
     font-size: 14px;
     margin-top: 50px;
     padding-top: 10px;
   © Tanmay Kadam
```

```
</h5>
</footer>
</link rel="stylesheet" href="CSS/styles.css" />

<script src="./script.js"></script>
</body>
</html>
```

templates/result.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Electricity Bill Calculator</title>
</head>
<body>
    <h1>Electricity Bill Calculator</h1>
    Your bill amount is: <b th:text="{$result}"></b>
</body>
</html>
```

OUTPUT

