**Name : Shraddha Shrenikkumar Shaha Roll No : 73**

**Class : TY CS-D Batch : D1**

**Experiment Number: 05**

**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.**

**Html code**

|  |
| --- |
| <!DOCTYPE html> |
| <html xmlns:th="http://www.thymeleaf.org"> |
| <head> |
| <title>Electricity Bill Calculator</title> |
| <link rel="stylesheet" |
|  |
| href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min. |
| css" |
| integrity="sha384- |
| ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T" |
| crossorigin="anonymous"/> |
| <link rel="stylesheet" th:href="@{/style.css}"/> |
| <style> |
|  |
| </style> |
| </head> |
| <body> |
| <div class="container"> |
| <h2>Electricity Bill Generator</h2> |
| <h4 class="my-4">Generate your bill here</h4> |
| <form method="post" th:action="@{/}"> |
| <div class="form-group my-3"> |
| <label for="units">Enter Total Units Consumed:</label> |
| <input type="number" class="form-control my-3" id="units" |
| name="units" required> |
| </div> |
| <button type="submit" class="btn btn-primary" id = |
| "calculate-btn">Calculate</button> |
|  |
| </form> |
| <br> |
| </div> |
| <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script> |
| <script> |
| $(document).ready(function() { |
| $('#billForm').submit(function(event) { |
| event.preventDefault(); |
| var units = parseInt($('#units').val()); |
| if (units <= 0 || isNaN(units)) { |
| alert('Please enter a valid number of units consumed.'); |
| return; |
| } |
| this.submit(); |
| }); |
| }); |
| </script> |
| </body> |
| </html> |

|  |
| --- |
| <!DOCTYPE html> |
| <html xmlns:th="http://www.thymeleaf.org"> |
| <head> |
| <title>Electricity Bill Calculator</title> |
| <link rel="stylesheet" |

|  |
| --- |
| href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min. |
| css" |

**Output.html**

|  |
| --- |
| integrity="sha384- |
| ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T" |
| crossorigin="anonymous"> |
| </head> |
| <body> |
| <div class="container"> |
| <div class="row mt-5"> |
| <div class="col-md-6 offset-md-3"> |
| <h1 class="text-center mb-4">Electricity Bill</h1> |
| <div class="card"> |
| <div class="card-body"> |
| <div class="alert alert-success" id = |
| "alerticon"><strong>Electricity Bill: </strong>Rs <span |
| th:text="${bill}"></span></div> |
| </div> |
| </div> |
| </div> |
| </div> |
| </div> |
| </body> |
| </html> |

**Electricity Calculator**

|  |
| --- |
| package com.example.demo3.Controller; |
| import org.springframework.stereotype.Controller; |
| import org.springframework.ui.Model; |
| import org.springframework.web.bind.annotation.GetMapping; |
| import org.springframework.web.bind.annotation.PostMapping; |
| import org.springframework.web.bind.annotation.RequestParam; |
| @Controller |
| public class ElectricityController { |
| public class ElectricityController { |
| @GetMapping("/") |
| public String showForm() { |
| return "input"; |
| } |
| @PostMapping("/") |
| public String calculateBill(@RequestParam("units") int units, Model |
| model) { |
| double bill = 0; |
| if (units <= 50) { |
| bill = units \* 3.5; |
| } else if (units <= 150) { |
| bill = 50 \* 3.5 + (units - 50) \* 4.0; |
| } else if (units <= 250) { |
| bill = 50 \* 3.5 + 100 \* 4.0 + (units - 150) \* 5.2; |
| } else { |
| bill = 50 \* 3.5 + 100 \* 4.0 + 100 \* 5.2 + (units - 250) \* 6.5; |
| } |
| model.addAttribute("bill", bill); |
| return "output"; |
| } |
| } |

**Output:**





