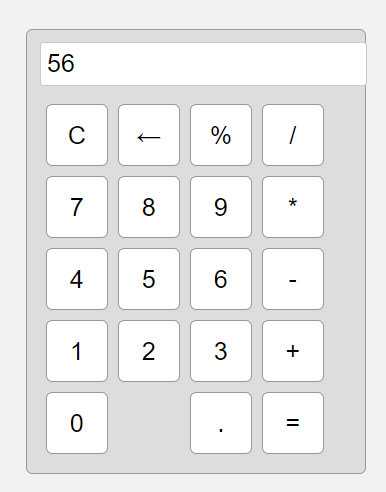
**Name – Sanskar Pravin Patel**

**Session – Foundation course**

**Sr no – 40**

## ASSIGNMENT 1 - Calculator using JavaScript HTML and CSS

****

**CODE :**

<!DOCTYPE html>

<html>

<head>

    <title>Calculator</title>

<style type="text/css">

body {

    background-color: #f2f2f2;

}

.calculator {

    margin: 50px auto;

    padding: 10px;

    width: 250px;

    background-color: #ddd;

    border: 1px solid #999;

    border-radius: 5px;

}

input[type="text"] {

    width: 100%;

    margin-bottom: 10px;

    padding: 5px;

    border-radius: 3px;

    border: 1px solid #ccc;

    font-size: 20px;

}

button {

    width: 50px;

    height: 50px;

    background-color: #fff;

    border: 1px solid #999;

    border-radius: 5px;

    font-size: 20px;

    margin: 2px;

    cursor: pointer;

}

button:hover {

    background-color: #eee;

}

</style>

</head>

<body>

    <div class="calculator">

        <input type="text" id="result" readonly>

        <table>

            <tr>

                <td><button onclick="clearResult()">C</button></td>

                <td><button onclick="backspace()">←</button></td>

                <td><button onclick="insert('%')">%</button></td>

                <td><button onclick="insert('/')">/</button></td>

            </tr>

            <tr>

                <td><button onclick="insert('7')">7</button></td>

                <td><button onclick="insert('8')">8</button></td>

                <td><button onclick="insert('9')">9</button></td>

                <td><button onclick="insert('\*')">\*</button></td>

            </tr>

            <tr>

                <td><button onclick="insert('4')">4</button></td>

                <td><button onclick="insert('5')">5</button></td>

                <td><button onclick="insert('6')">6</button></td>

                <td><button onclick="insert('-')">-</button></td>

            </tr>

            <tr>

                <td><button onclick="insert('1')">1</button></td>

                <td><button onclick="insert('2')">2</button></td>

                <td><button onclick="insert('3')">3</button></td>

                <td><button onclick="insert('+')">+</button></td>

            </tr>

            <tr>

                <td colspan="2"><button onclick="insert('0')">0</button></td>

                <td><button onclick="insert('.')">.</button></td>

                <td><button onclick="calculate()">=</button></td>

            </tr>

        </table>

    </div>

    <script>

        let result = document.getElementById('result');

        function insert(char) {

            result.value += char;

        }

        function clearResult() {

            result.value = '';

        }

        function backspace() {

            result.value = result.value.slice(0, -1);

        }

        function calculate() {

            try {

                result.value = eval(result.value);

            } catch (error) {

                result.value = 'Error';

            }

        }

    </script>

</body>

</html>

**ASSIGNMENT 2 - CLASS PROGRAMMING FROM UML DIAGRAM**

A diagram of a server

Description automatically generated

**CODE:**

public class User {

    private boolean role;

    private String loginID;

    private String password;

    // Constructor

    public User(boolean role, String loginID, String password) {

        this.role = role;

        this.loginID = loginID;

        this.password = password;

    }

    // Getters and Setters

    public boolean isRole() {

        return role;

    }

    public void setRole(boolean role) {

        this.role = role;

    }

    public String getLoginID() {

        return loginID;

    }

    public void setLoginID(String loginID) {

        this.loginID = loginID;

    }

    public String getPassword() {

        return password;

    }

    public void setPassword(String password) {

        this.password = password;

    }

    public void verifyUser() {

        // Code to verify user

        System.out.println("The user is verified successfully!!!");

    }

}

public class Customer extends User {

    private String id;

    private String address;

    private String phone;

    private String email;

    // Constructor

    public Customer(String id, String address, String phone, String email) {

        this.id = id;

        this.address = address;

        this.phone = phone;

        this.email = email;

    }

    // Getters and Setters

    public String getId() {

        return id;

    }

  public void setId(String id) {

        this.id = id;

    }

    public String getAddress() {

        return address;

    }

    public void setAddress(String address) {

        this.address = address;

    }

    public String getPhone() {

        return phone;

    }

    public void setPhone(String phone) {

        this.phone = phone;

    }

    public String getEmail() {

        return email;

    }

    public void setEmail(String email) {

        this.email = email;

    }

    public void login() {

        // Code for customer login functionality

        System.out.println("Logged in successfully!");

    }

    public void register() {

        // Code for customer registration functionality

        System.out.println("User registered Successfully!");

    }

    public void updateProfile() {

        // Code for updating customer profile

        System.out.println("Profile updated successfully!");

    }

}

public class Seller extends User {

    private String id;

    private String address;

    private String phone;

    private String email;

    private int sellerRating;

    // Constructor

    public Seller(String id, String address, String phone, String email, int sellerRating) {

        this.id = id;

        this.address = address;

        this.phone = phone;

        this.email = email;

        this.sellerRating = sellerRating;

    }

    // Getters and Setters

    public String getId() {

        return id;

    }

    public void setId(String id) {

        this.id = id;

    }

    public String getAddress() {

        return address;

    }

    public void setAddress(String address) {

        this.address = address;

    }

    public String getPhone() {

        return phone;

    }

    public void setPhone(String phone) {

        this.phone = phone;

    }

    public String getEmail() {

        return email;

    }

   public void setEmail(String email) {

        this.email = email;

    }

    public int getSellerRating() {

        return sellerRating;

    }

    public void setSellerRating(int sellerRating) {

        this.sellerRating = sellerRating;

    }

    public void login() {

        // Code for customer login functionality

        System.out.println("Logged in successfully!");

    }

    public void register() {

        // Code for customer registration functionality

        System.out.println("User registered Successfully!");

    }

    public void updateProfile() {

        // Code for updating customer profile

        System.out.println("Profile updated successfully!");

    }

}

import.java.util.Date;

class ShoppingCart extends Customer {

    public void c() {

        Customer c = new Customer();   // Composition

        c.login();

    }

    private Date created;

    public Date getCreated() {

        return created;

    }

    public void setCreated(Date created) {

        this.created = created;

    }

    public void addCartItem() {

        // Code to add an item to the shopping cart

        System.out.println("Item added successfully!");

    }

    public void checkOut() {

        // Code to process the checkout of the shopping cart

        System.out.println("Let's checkout!");

    }

    public void viewCartDetails() {

        // Code to display the details of the shopping cart

        System.out.println("Let's view the cart details!");

    }

    public void updateQuantity() {

        // Code to update the quantity of an item in the shopping cart

        System.out.println("Let's update the quantity!");

    }

}

import.java.util.Date;

class Product extends Seller {

    public void l() {

        Seller l = new Seller();   // Composition

        l.login();

    }

    private String productID;

    private String productName;

    private int productCost;

    private String sellerID;

    private Date postedDate;

    // Getters and Setters

    public String getProductID() {

        return productID;

    }

    public void setProductID(String productID) {

        this.productID = productID;

    }

   public String getProductName() {

        return productName;

    }

    public void setProductName(String productName) {

        this.productName = productName;

    }

    public int getProductCost() {

        return productCost;

    }

    public void setProductCost(int productCost) {

        this.productCost = productCost;

    }

    public String getSellerID() {

        return sellerID;

    }

    public void setSellerID(String sellerID) {

        this.sellerID = sellerID;

    }

    public Date getPostedDate() {

        return postedDate;

    }

    public void setPostedDate(Date postedDate) {

        this.postedDate = postedDate;

    }

    public void addToCart() {

        // Add the product to the cart

        System.out.println("Added to cart successfully!");

    }

    public void sellProduct() {

        // Sell the product

        System.out.println("The product is being sold successfully!");

    }

    public void getProductDetails() {

        // Retrieve and display the product details

        System.out.println("Product details fetched successfully!");

    }

public void buyProduct() {

        // Buy the product

        System.out.println("Product bought successfully!");

    }

}

class Reviews extends Customer {

    public void u() {

        Customer u = new Customer();   // Composition

        u.updateProfile();

    }

    private String reviewID;

    private String customerID;

    private String reviewContent;

    private int rating;

    private String parentID;

    private String productID;

    // Getters and Setters

    public String getReviewID() {

        return reviewID;

    }

    public void setReviewID(String reviewID) {

    this.ReviewID = reviewID;

    }

    public String getCustomerID() {

    return customerID;

    }

    public void setCustomerID(String customerID) {

    this.customerID = customerID;

    }

    public String getReviewContent() {

    return reviewContent;

    }

    public void setReviewContent(String reviewContent) {

    this.reviewContent = reviewContent;

    }

   public int getRating() {

    return rating;

    }

    public void setRating(int rating) {

    this.rating = rating;

    }

    public String getParentID() {

    return parentID;

    }

    public void setParentID(String parentID) {

    this.parentID = parentID;

    }

    public String getProductID() {

    return productID;

    }

    public void setProductID(String productID) {

    this.productID = productID;

    }

    public void addReview() {

        // Code to add a review

        System.out.println("Review added successfully!");

    }

    public void deleteReview() {

        // Code to delete a review

        System.out.println("Review deleted successfully!");

    }

    public void editReview() {

        // Code to edit a review

        System.out.println("Review edited successfully!");

    }

}

class Payment extends Orders {

    public void u() {

        Customer u = new Customer();   // Composition

        u.updateProfile();

    }

    private String id;

    private String orderID;

    private boolean paid;

    private int total;

    private String details;

    // Getters and Setters

    public String getId() {

        return id;

    }

    public void setId(String id) {

        this.id = id;

    }

    public String getOrderID() {

    return orderID;

    }

    public void setOrderID(String orderID) {

    this.orderID = orderID;

    }

    public boolean isPaid() {

        return paid;

    }

    public void setPaid(boolean paid) {

        this.paid = paid;

    }

    public int getTotal() {

    return total;

    }

    public void setTotal(int total) {

    this.total = total;

    }

    public String getDetails() {

    return details;

    }

    public void setDetails(String details) {

    this.details = details;

    }

    public void sendOTP() {

        // Code for sending OTP

        System.out.println("OTP sent successfully!");

    }

    public void confirmTransaction() {

        // Code for confirming the transaction

        System.out.println("Transaction confirmed!");

    }

    public void getPaymentDetails() {

        // Code for retrieving payment details

        System.out.println("Payment details fetched successfully!");

    }

    public void makeTransaction() {

        // Code for making the transaction

        System.out.println("Transaction done successfully!");

    }

}

class Orders extends Customer {

    public void p() {

        Payment p = new Payment();   // Composition

        p.placeOrder();

    }

    private String id;

    private String sellerID;

    private String customerID;

    private String productID;

    private String totalAmount;

    private Date orderDate;

    private String address;

    private Date deliveredDate;

    private String deliveryStatus;

    // Getters and Setters

    public String getId() {

        return id;

    }

    public void setId(String id) {

        this.id = id;

    }

    public String getSellerID() {

    return sellerID;

    }

    public void setSellerID(String sellerID) {

    this.sellerID = sellerID;

    }

    public String getCustomerID() {

    return customerID;

    }

    public void setCustomerID(String customerID) {

    this.customerID = customerID;

    }

    public String getProductID() {

    return productID;

    }

    public void setProductID(String productID) {

    this.productID = productID;

    }

    public String getTotalAmount() {

    return totalAmount;

    }

    public void setTotalAmount(String totalAmount) {

    this.totalAmount = totalAmount;

    }

    public Date getOrderDate() {

    return orderDate;

    }

    public void setOrderDate(Date orderDate) {

    this.orderDate = orderDate;

    }

    public String getAddress() {

    return address;

    }

    public void setAddress(String address) {

    this.address = address;

    }

    public Date getDeliveredDate() {

    return deliveredDate;

    }

    public void setDeliveredDate(Date deliveredDate) {

    this.deliveredDate = deliveredDate;

    }

    public String getDeliveryStatus() {

    return deliveryStatus;

    }

    public void setDeliveryStatus(String deliveryStatus) {

    this.deliveryStatus = deliveryStatus;

    }

    public void placeOrder() {

        // Code to place an order

        System.out.println("Order placed successfully!");

    }

}