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**WEEK 1: CALCULATOR CODE**

<!DOCTYPE html>

<html>

<head>

    <title>Centered Calculator with Backspace</title>

    <style>

        body {

            margin: 0;

            display: flex;

            justify-content: center;

            align-items: center;

            min-height: 100vh;

            background-color: #f0f0f0;

            font-family: Arial, sans-serif;

        }

        #calculator {

            width: 200px;

            border: 2px solid #ccc;

            padding: 10px;

            background-color: #a8d0dc;

            box-shadow: 0 0 10px #ce3b3b1a;

            border-radius: 5px;

            text-align: center;

        }

        input[type="text"] {

            width: 80%;

            padding: 6px;

            font-size: 15px;

            margin-bottom: 10px;

            text-align: right;

        }

        button {

            width: 35px;

            height: 35px;

            font-size: 19px;

            margin: 3px;

        }

    </style>

</head>

<body>

    <div id="calculator">

        <h2>CALCULATOR</h2>

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

        <button onclick="clearExpression()">C</button>

        <button onclick="clearExpression('%')">%</button>

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

        <button onclick="appendToExpression('/')">/</button>

        <br>

        <button onclick="appendToExpression('9')">9</button>

        <button onclick="appendToExpression('8')">8</button>

        <button onclick="appendToExpression('7')">7</button>

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

        <br>

        <button onclick="appendToExpression('6')">6</button>

        <button onclick="appendToExpression('5')">5</button>

        <button onclick="appendToExpression('4')">4</button>

        <button onclick="appendToExpression('-')">-</button>

        <br>

        <button onclick="appendToExpression('3')">3</button>

        <button onclick="appendToExpression('2')">2</button>

        <button onclick="appendToExpression('1')">1</button>

        <button onclick="appendToExpression('+')">+</button>

        <br>

        <button onclick="appendToExpression('0')">0</button>

        <button onclick="appendToExpression('00')">00</button>

        <button onclick="appendToExpression('.')">.</button>

        <button onclick="evaluateExpression()">=</button>

    </div>

    <script>

          let expression = '';

function appendToExpression(value) {

    expression += value;

    document.getElementById('expression').value = expression;

}

function evaluateExpression() {

    try {

        const result = eval(expression);

        document.getElementById('expression').value = result;

        expression = result.toString();

    } catch (error) {

        document.getElementById('expression').value = 'Error';

        expression = '';

    }

}

function clearExpression() {

    expression = '';

    document.getElementById('expression').value = expression;

}

function backspace() {

    expression = expression.slice(0, -1);

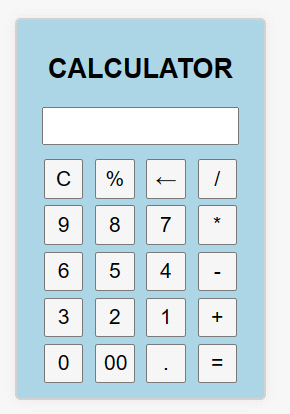
    document.getElementById('expression').value = expression;

}

    </script>

</body>

</html>



**WEEK 2 : CLASS DIAGRAM TO JAVA CODE**

**User.java**

public class User{

private boolean role;

private string loginID;

private string password;

// Constructors

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 () {

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

}

}

**customer.java**

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!");

}

}

**seller.java**

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) {

id = id;

}

public String getaddress() {

return address;

}

public void setAddress(String address) {

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) {

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!");

}

}

**ShoppingCart.java**

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!");

}

}

**Product.java**

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!");

}

}

**Reviews.java**

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!");

}

}

**Payment.java**

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!");

}

}

**Orders.java**

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!");

}

}