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import java.text.NumberFormat;
import java.util.ArrayList;

public class Order
{
    // class variables
    private String orderID;
    private Customer orderCustomer;
    private Clerk orderClerk;
    private ArrayList<LineItem> lineItems;

    // store totals
    private double subtotal;
    private double tax;
    private double total;

    // constant defining tax
    private static double TAX_RATE = 0.0825;

    private int productCount;

    public Order(String anID)
    {
        lineItems = new ArrayList<LineItem>();

        orderID = anID;
        subtotal = 0;
        tax = 0;
        total = 0;
    }

    public void setOrderID(String anID)
    {
        orderID = anID;
    }

    public void setOrderCustomer(Customer aCustomer)
    {
        orderCustomer = aCustomer;
    }

    public void setOrderClerk(Clerk aClerk)
    {
        orderClerk = aClerk;
    }

    public void setOrderProduct(Product aProduct, int aQty)
    {
        productCount++;

        LineItem aLineItem = new LineItem(aProduct, aQty);
        lineItems.add(aLineItem);

        // TODO
        // Write the code to create a new line item
        // based on the variables aProduct and aQty that are passed
        // add that line item to the LineItems arraylist
    }

    public String getOrderProduct(int iLine)
    {

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        LineItem selectedItem = lineItems.get(iLine);
        String result = selectedItem.getJvzProduct().getDescription();
        return result;
    }

    public int getOrderQuantity(int iLine)
    {
        LineItem selectedItem = lineItems.get(iLine);
        int result = selectedItem.getJvzQuantity();
        return result;
    }

    public int getNumberOfLineItems()
    {
        return lineItems.size();
    }

    public String getOrderID()
    {
        return orderID;
    }

    public double calcSubtotal()
    {
        for(int i = 0; i < lineItems.size(); i++)
        {
            subtotal += lineItems.get(i).getJvzLineTotal();
        }

        // TODO
        // Write the code to calculate the subtotal for all items
        // Loop through the lineItems arraylist
        // add up the total from each line to the subtotal variable
        return subtotal;
    }

    public void calcTax()
    {
        // calculate the tax by multiplying subtotal by tax rate
        tax = subtotal * TAX_RATE;
    }

    public void calcTotal()
    {
        // calculates the total by adding subtotal and tax
        total = subtotal + tax;
    }

    public String toString()
    {
        NumberFormat nf = NumberFormat.getCurrencyInstance();

        String result = "";

        result += "CASHIER @ REGISTER\n " + orderClerk.getFirstName() + " " + orderClerk.getRegisterNbr() + "\n\n";

        result += "Order # " + orderID + "\n\n";
    }

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        result += "CUSTOMER INFO\n" + orderCustomer.toString() + "";

        result += "\nNUMBER OF ITEMS SOLD = " + getNumberItemsSold() + "\n\n";

        for (LineItem li : lineItems)
        {
            result += li.getJvzQuantity() + " @ " + nf.format(li.getJvzProduct()...
                + nf.format(li.getJvzQuantity() * li.getJvzProduct().g...
            result += "      " + li.getJvzProduct().getDescription() + "\n\n";
        }

        result += "TOTALS\n";
        result += "Subtotal: " + nf.format(subtotal) + "\n";
        result += "Tax: " + nf.format(tax) + "\n";
        result += "Total: " + nf.format(total);

        return result;
    }

    // Returns the number of items sold
    public int getNumberItemsSold()
    {
        int totalQty = 0;
        for (LineItem li : lineItems)
        {
            totalQty += li.getJvzQuantity();
        }

        return totalQty;
    }

    public double getTotal()
    {
        return total;
    }

    public double getSubTotal()
    {
        return subtotal;
    }

    public double getTax()
    {
        return tax;
    }

    public Customer getCustomer()
    {
        return orderCustomer;
    }

    public double getLineTotal(int iLine)
    {
        // Select the LineItem from the ArrayList
        LineItem selectedItem = lineItems.get(iLine);
        double LineTotal = 0;

        // Get the total for that item
        LineTotal = selectedItem.getJvzLineTotal();
        return LineTotal;
    }
}

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