/\* Chapter No. 11 - Exercise No. 2

File Name: PizzaTester.java

Programmer: Broderick Higby

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Problem Statement: (what you want the code to do)

Create a program that displays a pizza menu and takes a pizza order

using the UML diagram

Overall Plan (Algorithm - step-by-step plan to make it happen):

1. Menu is displayed to user

2. User inputs pizza size and if they want selected toppings

3. In the Pizza class have the size and number of toppings set

4. Get the toppings and return the private boolean

5. In the order class have the calcCost take in all the toppings and the total cost

6. Return the calculated cost to the user after they're done inputting pizzas

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import java.util.Scanner;

public class PizzaTester

{

public static void main(String[] args)

{

System.out.println("Welcome to Broderick's Fine Italian Pizza restaurant\n");

PizzaOrder order = new PizzaOrder();

order.pizzaMenu();

order.customPizza();

}

}

public class Pizza

{

private boolean pepperoni;

private boolean sausage;

private boolean mushrooms;

private char size;

public Pizza(char pizzaSize, boolean pepBool, boolean sausBool, boolean mushBool)

{

size = pizzaSize;

pepperoni = pepBool;

mushrooms = mushBool;

sausage = sausBool;

}

public char getSize()

{

return size;

}

public int getNumToppings()

{

int numToppings = 0;

if (pepperoni)

{

numToppings++;

}

if (sausage)

{

numToppings++;

}

if (mushrooms)

{

numToppings++;

}

return numToppings;

}

public boolean getPepperoni()

{

return pepperoni;

}

public boolean getSausage()

{

return sausage;

}

public boolean getMushrooms()

{

return mushrooms;

}

}

import java.util.Scanner;

public class PizzaOrder

{

private final int SMALLPIZZA = 8;

private final int MEDIUMPIZZA = 10;

private final int LARGEPIZZA = 12;

private final int MAXPIZZAS = 10;

private int numPizzas = 0;

private Pizza[] p = new Pizza[MAXPIZZAS];

public void addPizzaToOrder(char size, boolean pepperoni, boolean sausage, boolean mushrooms)

{

Pizza pizzaCons = new Pizza(size, pepperoni, sausage, mushrooms);

p[numPizzas] = pizzaCons;

numPizzas++;

}

public double calcCost()

{

double totalCost = 0;

for(int i = 0 ; i < p.length; i++)

{

if (p[i] == null)

{

break;

}

char size = p[i].getSize();

if(size == 's' || size == 'S')

{

totalCost += SMALLPIZZA;

}

if(size == 'm' || size == 'M')

{

totalCost += MEDIUMPIZZA;

}

if(size == 'l' || size == 'L')

{

totalCost += LARGEPIZZA;

}

totalCost += p[i].getNumToppings();

}

return totalCost;

}

public void pizzaMenu()

{

System.out.println("A small pizza would cost: " + SMALLPIZZA);

System.out.println("A medium pizza would cost: " + MEDIUMPIZZA);

System.out.println("A large pizza would cost: " + LARGEPIZZA);

System.out.println("Each additional topping: Pepperoni, Sausage, and Mushrooms is $1 per topping\n");

}

public void customPizza()

{

boolean orderCount = true;

Scanner keyboard = new Scanner(System.in);

do

{

System.out.println("Please enter 's', 'm', 'l' for the size of the pizza");

char pSize = keyboard.next().charAt(0);

System.out.println("Do you want pepperoni on it?");

boolean pPep = keyboard.nextBoolean();

System.out.println("Do you want sausage on it?");

boolean pSau = keyboard.nextBoolean();

System.out.println("Do you want mushrooms on it?");

boolean pMush = keyboard.nextBoolean();

//Takes the pizza size,pep, mush, and saus values from the Pizza class

Pizza myPizza = new Pizza(pSize, pPep, pSau, pMush);

addPizzaToOrder(myPizza.getSize(), myPizza.getPepperoni(),myPizza.getSausage(),myPizza.getMushrooms());

//Order again?

System.out.println("Would you like to order another pizza?");

orderCount =keyboard.nextBoolean();

if(false)

{

orderCount = false;

}

}while(orderCount);

System.out.println("Your total cost");

System.out.println(calcCost());

}

}