

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace CarLoanContinuation {
   class Car {
        string brand;
        string model;
        double price;
        int terms;
        double interestRate;
        double interest;
        double downpayment;
        double monthlyAmortization;
        double grossAmount;
        double netPrice;
        public Car() {
            brand = "";
            model = "";
            price = 0;
            terms = 0;
            interestRate = 0;
            interest = 0;
            downpayment = 0;
            monthlyAmortization = 0;
            grossAmount = 0;
            netPrice = 0;
        }
        public void SetBrand(string brd) {
            brand = brd;
        public string GetBrand() {
            return brand;
        public void SetModel(string mdl) {
            model = mdl;
        public string GetModel() {
            return model;
        public void SetPrice(double p) {
            price = p;
        public double GetPrice() {
            return price;
        public void SetTerms(int trms) {
            terms = trms;
       public int GetTerms() {
            return terms;
        public void SetInterestRate() {
            if (terms == 24)
```

```
interestRate = 0.15;
            if (terms == 36)
                interestRate = 0.10;
            if (terms == 48)
                interestRate = 0.05;
            if (terms == 60)
                interestRate = 0.03;
        }
        public double GetInterestRate() {
            return interestRate;
        public void SetDownpayment(double dp) {
            downpayment = dp;
        public double GetDownpayment() {
            return downpayment;
        public void ComputeNetPrice() {
            netPrice = price - downpayment;
        public double GetNetPrice() {
            return netPrice;
        public void ComputeInterest() {
            interest = netPrice * interestRate;
        public double GetInterest() {
            return interest;
        public void ComputeGrossAmount() {
            grossAmount = netPrice + interest;
        public double GetGrossAmount() {
            return grossAmount;
        public void ComputeMonthlyAmortization() {
            monthlyAmortization = grossAmount / terms;
        public double GetMontlyAmortization() {
            return monthlyAmortization;
    }
}
```

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace CarLoanContinuation {
    public partial class MainForm : Form {
        static string[] CarBrands = { "Toyota", "Nissan" };
        static string[] ToyotaModels = { "Raize", "Veloz", "Wigo", "Vios",};
        static double[] ToyotaModelPrices = { 1000000, 1250000, 700000, 1035000 };
        static string[] NissanModels = { "Kicks", "NV350", "Livina", "Z" };
        static double[] NissanModelPrices = { 1500000, 2000000, 1200000, 2500000 };
        static string[][] CarModels = { ToyotaModels, NissanModels };
        static double[][] CarModelsPrices = { NissanModelPrices, ToyotaModelPrices };
        static int[] Terms = { 24, 36, 48, 60 };
        static double[] InterestRates = { 0.15, 0.10, 0.05, 0.03 };
        Car loanClient = new Car();
        public MainForm() {
            InitializeComponent();
        private void MainForm_load(object sender, EventArgs e) {
            LoadCarBrands();
            LoadTerms();
        private void cmbCarBrand_SelectedIndexChanged(object sender, EventArgs e) {
            cmbCarModel.ResetText();
            cmbCarModel.Items.Clear();
            LoadCarModels();
            loanClient.SetBrand(cmbCarBrand.Text);
        }
        private void cmbCarModel_SelectedIndexChanged(object sender, EventArgs e) {
            txtCarPrice.ResetText();
            LoadPrice();
            loanClient.SetModel(cmbCarModel.Text);
            loanClient.SetPrice(double.Parse(txtCarPrice.Text));
        }
        private void cmbLoanTerm SelectedIndexChanged(object sender, EventArgs e) {
            loanClient.SetTerms(int.Parse(cmbLoanTerm.Text));
            loanClient.SetInterestRate();
        private void btnCompute_Click(object sender, EventArgs e) {
            loanClient.SetDownpayment(double.Parse(txtDownPayment.Text));
            loanClient.ComputeNetPrice();
```

```
loanClient.ComputeInterest();
            loanClient.ComputeGrossAmount();
            loanClient.ComputeMonthlyAmortization();
            txtInterest.Text = loanClient.GetInterest().ToString();
            txtGrossAmount.Text = loanClient.GetGrossAmount().ToString();
            txtMonthlyAmortization.Text = loanClient.GetMontlyAmortization().ToString();
        }
        private void btnClear_Click(object sender, EventArgs e) {
            cmbCarBrand.ResetText();
            cmbCarModel.ResetText();
            txtCarPrice.ResetText();
            cmbLoanTerm.ResetText();
            txtDownPayment.ResetText();
            txtInterest.ResetText();
            txtGrossAmount.ResetText();
            txtMonthlyAmortization.ResetText();
        }
        // Form loading methods
        private void LoadCarBrands() {
            for (int i = 0; i < CarBrands.Length; i++) {</pre>
                cmbCarBrand.Items.Add(CarBrands[i]);
            }
        }
        private void LoadCarModels() {
            int brandIndex = cmbCarBrand.SelectedIndex;
            string[] modelArrayToUse = CarModels[brandIndex];
            for (int i = 0; i < modelArrayToUse.Length; i++) {</pre>
                cmbCarModel.Items.Add(modelArrayToUse[i]);
            }
        }
        private void LoadPrice() {
            int brandIndex = cmbCarBrand.SelectedIndex;
            int modelIndex = cmbCarModel.SelectedIndex;
            double[] modelPriceArrayToUse = CarModelsPrices[brandIndex];
            txtCarPrice.Text = modelPriceArrayToUse[modelIndex].ToString();
        }
        private void LoadTerms() {
            for (int i = 0; i < Terms.Length; i++) {</pre>
                cmbLoanTerm.Items.Add(Terms[i]);
        }
    }
}
```