CREATE TABLE Products (

ProductID INT PRIMARY KEY IDENTITY(1,1),

Type NVARCHAR(100) NOT NULL,

Name NVARCHAR(100) NOT NULL,

Article NVARCHAR(50) NOT NULL,

MinPartnerPrice DECIMAL(18,2) NOT NULL,

MainMaterial NVARCHAR(100) NOT NULL

);

CREATE TABLE ProductionTimes (

TimeID INT PRIMARY KEY IDENTITY(1,1),

ProductID INT NOT NULL,

WorkshopName NVARCHAR(100) NOT NULL,

WorkshopTimeMinutes INT NOT NULL,

FOREIGN KEY (ProductID) REFERENCES Products(ProductID) ON DELETE CASCADE

);

INSERT INTO Products (Type, Name, Article, MinPartnerPrice, MainMaterial)

VALUES

('Стол', 'Стол кухонный', 'ST001', 3500.00, 'ДСП'),

('Шкаф', 'Шкаф купе', 'SH002', 9800.00, 'ЛДСП');

-- Время изготовления

INSERT INTO ProductionTimes (ProductID, WorkshopName, WorkshopTimeMinutes)

VALUES

(1, 'Цех распила', 60),

(1, 'Цех сборки', 90),

(2, 'Цех распила', 80),

(2, 'Цех упаковки', 40);

namespace WpfApp1

{

public class ProductInfo

{

public int ProductID { get; set; }

public string Type { get; set; }

public string Name { get; set; }

public string Article { get; set; }

public decimal MinPartnerPrice { get; set; }

public string MainMaterial { get; set; }

public int TotalTimeMinutes { get; set; }

}

}

<Window x:Class="WpfApp1.MainWindow"

xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"

xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"

xmlns:d="http://schemas.microsoft.com/expression/blend/2008"

xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"

xmlns:local="clr-namespace:WpfApp1"

mc:Ignorable="d"

Title="MainWindow" Height="450" Width="800">

<Grid Margin="10">

<Grid.RowDefinitions>

<RowDefinition Height="\*"/>

<RowDefinition Height="Auto"/>

</Grid.RowDefinitions>

<!-- Список товаров -->

<ScrollViewer Grid.Row="0">

<ListBox x:Name="ProductList">

<ListBox.ItemTemplate>

<DataTemplate>

<Border BorderBrush="Gray" BorderThickness="1" Margin="5" Padding="5">

<StackPanel>

<TextBlock Text="{Binding Type}" FontWeight="Bold"/>

<TextBlock Text="{Binding Name}"/>

<TextBlock Text="{Binding IsImport, StringFormat=Импорт: {0}}"/>

<TextBlock Text="{Binding MinPartnerPrice, StringFormat=Мин. цена для партнёра: {0} руб.}"/>

<TextBlock Text="{Binding MainMaterial, StringFormat=Материал: {0}}"/>

<TextBlock Text="{Binding TotalTimeMinutes, StringFormat=Общее время: {0} мин.}"/>

</StackPanel>

</Border>

</DataTemplate>

</ListBox.ItemTemplate>

</ListBox>

</ScrollViewer>

<!-- Кнопки внизу -->

<StackPanel Grid.Row="1" Orientation="Horizontal" HorizontalAlignment="Right" Margin="5">

<Button Content="Добавить" Click="BtnAdd\_Click" Margin="5"/>

<Button Content="Редактировать" Click="BtnEdit\_Click" Margin="5"/>

<Button Content="Цехи" Click="BtnWorkshops\_Click" Margin="5" />

</StackPanel>

</Grid>

</Window>

using System;

using System.Linq;

using System.Windows;

using Unipluss.Sign.ExternalContract.Entities;

namespace WpfApp1

{

public partial class MainWindow : Window

{

// Замените MyDatabaseContext на реальное имя вашего контекста

private FurnitureBDEntities1 context = new FurnitureBDEntities1();

public MainWindow()

{

InitializeComponent();

LoadProducts();

}

private void LoadProducts()

{

var products = context.Products

.Select(p => new ProductInfo

{

ProductID = p.ProductID,

Type = p.Type,

Name = p.Name,

Article = p.Article,

MinPartnerPrice = p.MinPartnerPrice,

MainMaterial = p.MainMaterial,

TotalTimeMinutes = p.ProductionTimes.Sum(t => (int?)t.WorkshopTimeMinutes) ?? 0

})

.ToList();

ProductList.ItemsSource = products;

}

private void BtnAdd\_Click(object s, RoutedEventArgs e)

{

var window = new EditProductWindow(new ProductInfo());

window.ShowDialog();

LoadProducts();

}

private void BtnEdit\_Click(object s, RoutedEventArgs e)

{

if (ProductList.SelectedItem is ProductInfo pi)

{

var window = new EditProductWindow(pi);

window.ShowDialog();

LoadProducts();

}

}

private void BtnWorkshops\_Click(object sender, RoutedEventArgs e)

{

if (ProductList.SelectedItem is ProductInfo p)

{

var wnd = new WorkshopsWindow(p.ProductID);

wnd.ShowDialog();

}

else

{

MessageBox.Show("Выберите товар из списка.");

}

}

private int CalculateRawMaterials(int materialTypeId, int quantity, double param1, double param2)

{

var productCoef = 1.2;

var lossPercent = 5;

if (materialTypeId <= 0 || quantity <= 0) return -1;

double needed = param1 \* param2 \* productCoef \* quantity;

needed \*= (1 + lossPercent / 100.0);

return (int)Math.Ceiling(needed);

}

}

}

<Window x:Class="WpfApp1.EditProductWindow"

xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"

xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"

Title="Редактировать" Height="300" Width="300">

<StackPanel Margin="10">

<TextBlock Text="Тип"/>

<TextBox x:Name="txtType" Margin="5"/>

<TextBlock Text="Наименование"/>

<TextBox x:Name="txtName" Margin="5"/>

<TextBlock Text="Артикул"/>

<TextBox x:Name="txtArticle" Margin="5"/>

<TextBlock Text="Мин. цена"/>

<TextBox x:Name="txtPrice" Margin="5"/>

<TextBlock Text="Материал"/>

<TextBox x:Name="txtMaterial" Margin="5"/>

<Button Content="Сохранить" Click="BtnSave\_Click" Margin="5"/>

</StackPanel>

</Window>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows;

using System.Windows.Controls;

using System.Windows.Data;

using System.Windows.Documents;

using System.Windows.Input;

using System.Windows.Media;

using System.Windows.Media.Imaging;

using System.Windows.Shapes;

namespace WpfApp1

{

/// <summary>

/// Логика взаимодействия для EditProductWindow.xaml

/// </summary>

public partial class EditProductWindow : Window

{

private ProductInfo \_product;

public EditProductWindow(ProductInfo p)

{

InitializeComponent(); \_product = p;

txtType.Text = p.Type; txtName.Text = p.Name;

txtArticle.Text = p.Article; txtPrice.Text = p.MinPartnerPrice.ToString();

txtMaterial.Text = p.MainMaterial;

}

private void BtnSave\_Click(object sender, RoutedEventArgs e)

{

try

{

using (var ctx = new FurnitureBDEntities1())

{

var pr = ctx.Products.Find(\_product.ProductID);

pr.Type = txtType.Text;

pr.Name = txtName.Text;

pr.Article = txtArticle.Text;

pr.MinPartnerPrice = decimal.Parse(txtPrice.Text);

pr.MainMaterial = txtMaterial.Text;

ctx.SaveChanges();

}

MessageBox.Show("Сохранено", "OK", MessageBoxButton.OK, MessageBoxImage.Information);

this.Close();

}

catch (Exception ex)

{

MessageBox.Show("Ошибка: " + ex.Message, "Ошибка", MessageBoxButton.OK, MessageBoxImage.Error);

}

}

}

}

<Window x:Class="WpfApp1.WorkshopsWindow"

xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"

xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"

Title="Цехи" Height="300" Width="300">

<Grid>

<ListBox x:Name="lb" Margin="10"/>

</Grid>

</Window>using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows;

using System.Windows.Controls;

using System.Windows.Data;

using System.Windows.Documents;

using System.Windows.Input;

using System.Windows.Media;

using System.Windows.Media.Imaging;

using System.Windows.Shapes;

namespace WpfApp1

{

/// <summary>

/// Логика взаимодействия для WorkshopsWindow.xaml

/// </summary>

public partial class WorkshopsWindow : Window

{

public WorkshopsWindow(int productId)

{

InitializeComponent();

using (var c = new FurnitureBDEntities1())

{

// Сначала выбираем объекты без форматирования

var rawData = c.ProductionTimes

.Where(t => t.ProductID == productId)

.Select(t => new { t.WorkshopName, t.WorkshopTimeMinutes })

.ToList();

// Теперь форматируем строки уже в памяти

var formatted = rawData

.Select(t => $"{t.WorkshopName}: {t.WorkshopTimeMinutes} мин")

.ToList();

lb.ItemsSource = formatted;

}

}

}

}