

Projeto exemplo, desenvolvido em sala de aula

XAML

```
<UserControl x:Class="SilverlightApplication4.MainPage"
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:SilverlightApplication4"
mc:Ignorable="d"
d:DesignHeight="300" d:DesignWidth="400">

    <UserControl.Resources>
        <local:ConversorDePreco
x:Key="ConvertePreco"></local:ConversorDePreco>
    </UserControl.Resources>

    <Grid x:Name="LayoutRoot" Background="White">
        <Grid.RowDefinitions>
            <RowDefinition Height="45"/>
            <RowDefinition Height="45"/>
            <RowDefinition Height="45"/>
            <RowDefinition Height="45"/>
        </Grid.RowDefinitions>
        <Grid.ColumnDefinitions>
            <ColumnDefinition Width="120"/>
            <ColumnDefinition Width="300"/>
        </Grid.ColumnDefinitions>
        <TextBlock Grid.Row="0"
            Grid.Column="0"
            Text="ProdutoID:"
            FontSize="14"
            HorizontalAlignment="Center"
            VerticalAlignment="Center">
        </TextBlock>
        <TextBox Grid.Row="0"
            Grid.Column="1"
            Width="50"
```

```

        Height="35"
        HorizontalAlignment="Left"
        Margin="5"
        Text="{Binding ProdutoID}"
        Name="txtProdutoID">
</TextBox>
<TextBlock Grid.Row="1"
        Grid.Column="0"
        Text="Descrição:"
        FontSize="14"
        HorizontalAlignment="Center"
        VerticalAlignment="Center">
</TextBlock>
<TextBox Grid.Row="1"
        Grid.Column="1"
        Width="250"
        Height="35"
        HorizontalAlignment="Left"
        Margin="5"
        Text="{Binding Descricao}"
        Name="txtDescricao">
</TextBox>
<TextBlock Grid.Row="2"
        Grid.Column="0"
        Text="Preço:"
        FontSize="14"
        HorizontalAlignment="Center"
        VerticalAlignment="Center">
</TextBlock>
<TextBox Grid.Row="2"
        Grid.Column="1"
        Width="150"
        Height="35"
        HorizontalAlignment="Left"
        Margin="5"
        Text="{Binding Preco,
Converter={StaticResource ConvertePreco}}"
        Name="txtPreco">
</TextBox>
<StackPanel Orientation="Horizontal" Grid.Row="3"
Grid.ColumnSpan="2">
    <Button
        Content="Localizar produto"
        Width="150"

```

```

        Height="35"
        Padding="5"
        Click="Button_Click_1">
    </Button>
    <Button
        Content="Salvar produto"
        Width="150"
        Height="35"
        Padding="5"
        Margin="5"
        Click="Button_Click_2">
    </Button>
</StackPanel>

</Grid>
</UserControl>

```

Classe Produto

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Runtime.Serialization;
using System.Web;

namespace SilverlightApplication4.Web
{
    [DataContract()]
    public class Produto
    {
        private int produtoID;
        [DataMember()]
        public int ProdutoID
        {
            get { return produtoID; }
            set { produtoID = value; }
        }

        private string descricao;
        [DataMember()]
        public string Descricao
        {
            get { return descricao; }
            set { descricao = value; }
        }
    }
}

```

```

    }

    private Double preco;
    [DataMember()]
    public Double Preco
    {
        get { return preco; }
        set { preco = value; }
    }
}
}

```

Web.Config

```

<?xml version="1.0"?>

<!--
  For more information on how to configure your ASP.NET
  application, please visit
  http://go.microsoft.com/fwlink/?LinkId=169433
-->

<configuration>
  <connectionStrings>
    <add name="LojaDB" connectionString="Data
Source=localhost;Initial Catalog=Loja;Integrated
Security=true;" />
  </connectionStrings>
  <system.web>
    <compilation debug="true" targetFramework="4.5" />
    <httpRuntime targetFramework="4.5" />
  </system.web>

  <system.serviceModel>
    <behaviors>
      <serviceBehaviors>
        <behavior name="">
          <serviceMetadata
httpGetEnabled="true" httpsGetEnabled="true" />
          <serviceDebug
includeExceptionDetailInFaults="false" />
        </behavior>
      </serviceBehaviors>
    </behaviors>
  </system.serviceModel>

```

```

        </serviceBehaviors>
    </behaviors>
    <bindings>
        <customBinding>
            <binding
name="SilverlightApplication4.Web.ServicoDeAcesso.customB
inding0">
                <binaryMessageEncoding />
                <httpTransport />
            </binding>
            <binding
name="SilverlightApplication4.Web.ServiceAcessoDados.cust
omBinding0">
                <binaryMessageEncoding />
                <httpTransport />
            </binding>
        </customBinding>
    </bindings>
    <serviceHostingEnvironment
aspNetCompatibilityEnabled="true"
multipleSiteBindingsEnabled="true" />
    <services>
        <service
name="SilverlightApplication4.Web.ServicoDeAcesso">
            <endpoint address=""
binding="customBinding"
bindingConfiguration="SilverlightApplication4.Web.Servico
DeAcesso.customBinding0"
contract="SilverlightApplication4.Web.ServicoDeAcesso" />
            <endpoint address="mex"
binding="mexHttpBinding" contract="IMetadataExchange" />
        </service>
        <service
name="SilverlightApplication4.Web.ServiceAcessoDados">
            <endpoint address=""
binding="customBinding"
bindingConfiguration="SilverlightApplication4.Web.Service
AcessoDados.customBinding0"
contract="SilverlightApplication4.Web.ServiceAcessoDados"
/>
            <endpoint address="mex"
binding="mexHttpBinding" contract="IMetadataExchange" />

```

```
        </service>
    </services>
</system.serviceModel>
</configuration>
```

Serviço

```
using System;
using System.Linq;
using System.Runtime.Serialization;
using System.ServiceModel;
using System.ServiceModel.Activation;
using System.Web.Configuration;
using System.Data.SqlClient;
using System.Data;

namespace SilverlightApplication4.Web
{
    [ServiceContract(Namespace = "")]
    [AspNetCompatibilityRequirements(RequirementsMode =
AspNetCompatibilityRequirementsMode.Allowed)]
    public class ServiceAcessoDados
    {
        private static String connectionString =
WebConfigurationManager.ConnectionStrings["LojaDB"].Conne
ctionString;
        Produto produto = new Produto();
        SqlConnection con = new
SqlConnection(connectionString);

        [OperationContract]
        public Produto GetProductBYID (int produtoID)
        {
            SqlCommand cmd = new
SqlCommand("GetProductBYID", con);
            cmd.CommandType =
System.Data.CommandType.StoredProcedure;
            cmd.Parameters.AddWithValue("@produtoID",
produtoID);

            con.Open();
            try
```

```

        {
            SqlDataReader reader =
cmd.ExecuteReader(CommandBehavior.SingleRow);
            if (reader.Read())
            {
                produto.ProdutoID = Convert.ToInt16(
reader["produtoID"] );
                produto.Descricao =
reader["descricao"].ToString();
                produto.Preco = Convert.ToDouble(
reader["preco"]);

                return produto;
            }
            else
            {
                return null;
            }
        }
        catch(SqlException ex)
        {
            throw new Exception("Erro=" +
ex.Message);
        }
        finally
        {
            con.Close();
        }
    }

    [OperationContract()]
    public void InserirProduto(int produtoID, string
descricao, Double preco)
    {
        SqlCommand cmd = new
SqlCommand("Inserir", con);
        cmd.CommandType =
CommandType.StoredProcedure;
        cmd.Parameters.AddWithValue("@produtoID",
produtoID);
        cmd.Parameters.AddWithValue("@descricao",
descricao);
        cmd.Parameters.AddWithValue("@preco", preco);
    }
}

```

```

        con.Open();
        try
        {
            cmd.ExecuteNonQuery();
        }
        catch (SqlException ex)
        {
            throw new Exception("Erro=" +
ex.Message);
        }
        finally
        {
            con.Close();
        }
    }
}

```

Chamando os serviços e eventos clicks

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Net;
using System.Windows;
using System.Windows.Controls;
using System.Windows.Documents;
using System.Windows.Input;
using System.Windows.Media;
using System.Windows.Media.Animation;
using System.Windows.Shapes;

namespace SilverlightApplication4
{
    public partial class MainPage : UserControl
    {
        LojaDBReferencia.ServiceAcessoDadosClient cliente
= new LojaDBReferencia.ServiceAcessoDadosClient();

        public MainPage()
        {
            InitializeComponent();
        }
    }
}

```



```

        private void Button_Click_1(object sender,
RoutedEventArgs e)
        {
            cliente.GetProductBYIDCompleted +=
cliente_GetProductBYIDCompleted;
            cliente.GetProductBYIDAsync(Convert.ToInt16(
txtProdutoID.Text));
        }

        void cliente_GetProductBYIDCompleted(object
sender, LojaDBReferencia.GetProductBYIDCompletedEventArgs
e)
        {
            DataContext = e.Result;

            //throw new NotImplementedException();
        }

        private void Button_Click_2(object sender,
RoutedEventArgs e)
        {
            cliente.InserirProdutoCompleted +=
cliente_InserirProdutoCompleted;

            cliente.InserirProdutoAsync(Convert.ToInt16(txtProdutoID.
Text),
                txtDescricao.Text,
Convert.ToDouble(txtPreco.Text));
        }

        void cliente_InserirProdutoCompleted(object
sender, System.ComponentModel.AsyncCompletedEventArgs e)
        {
            try
            {
                MessageBox.Show("Produto inserido com
sucesso!");
            }
            catch (Exception ex)
            {
                throw new Exception("Erro=" + ex.Message );
            }
        }

```

```
}  
}
```

Banco de dados do exemplo

```
CREATE DATABASE Loja  
GO
```

```
USE Loja  
GO
```

```
CREATE TABLE Produto (  
    produtoID int not null primary key,  
    descricao varchar(50) not null,  
    preco decimal (12,2) not null  
)  
GO
```

```
CREATE PROCEDURE GetProductBYID  
@produtoID int  
AS
```

```
    SELECT * from Produto where  
produtoID=@produtoID
```

```
INSERT INTO Produto values (1, 'Notebook', 3500.00)
```

```
exec GetProductById 1
```

```
create procedure Inserir  
@produtoID int,  
@descricao varchar(50),  
@preco decimal(12,2)  
AS
```

```
    INSERT INTO Produto VALUES  
(@produtoID,@descricao,@preco)
```

```
GO
```

```
exec Inserir 2, 'Micro computador de mesa', 2500.00
```