# Tema 2

## Code

**Webservice1.asmx (Tema2)**

using System;

using System.Data.SqlClient;

using System.Web.Services;

namespace Tema2

{

/// <summary>

/// Summary description for WebService1

/// </summary>

[WebService(Namespace = "http://tempuri.org/")]

[WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1\_1)]

[System.ComponentModel.ToolboxItem(false)]

// To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.

// [System.Web.Script.Services.ScriptService]

public class WebService1 : System.Web.Services.WebService

{

string connectionData = @"Data Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=F:\\Facultate\\y3-AIA\\Sem 2\\II\\Tema2\\Tema2Client\\Tema2Client\\Database.mdf;Integrated Security=True";

[WebMethod(Description = "A function that retrieves data from the database.")]

public string Get()

{

return null;

}

[WebMethod(Description = "A function that puts data into the database.")]

public int Post(int id, string song\_name, string song\_type, string artist, string album)

{

int rowsAffected = 0;

using (SqlConnection connection = new SqlConnection(connectionData))

{

SqlCommand command = new SqlCommand("INSERT INTO Songs VALUES (@id, @song\_name, @song\_type, @artist, @album)");

command.Parameters.AddWithValue("@id", id);

command.Parameters.AddWithValue("@song\_name", song\_name);

command.Parameters.AddWithValue("@song\_type", song\_type);

command.Parameters.AddWithValue("@artist", artist);

command.Parameters.AddWithValue("@album", album);

command.Connection = connection;

connection.Open();

rowsAffected = command.ExecuteNonQuery();

connection.Close();

}

return rowsAffected;

}

[WebMethod(Description = "A function that updates data.")]

public void Put(int id, string song\_name, string song\_type, string artist, string album)

{

using (SqlConnection connection = new SqlConnection(connectionData))

{

string query = "UPDATE Songs SET song\_name = @song\_name, song\_type = @song\_type, "

+ "artist = @artist, album = @album WHERE id = @id";

SqlCommand command = new SqlCommand(query, connection);

command.Parameters.AddWithValue("@id", id);

command.Parameters.AddWithValue("@song\_name", song\_name);

command.Parameters.AddWithValue("@song\_type", song\_type);

command.Parameters.AddWithValue("@artist", artist);

command.Parameters.AddWithValue("@album", album);

try

{

connection.Open();

command.ExecuteNonQuery();

}

catch (Exception ex)

{

throw new Exception("Following error occured:\t", ex);

}

finally

{

connection.Close();

}

}

}

[WebMethod]

public void Delete(int id)

{

using (SqlConnection connection = new SqlConnection(connectionData))

{

string query = "DELETE FROM Songs WHERE ID = @id";

SqlCommand command = new SqlCommand(query, connection);

command.Parameters.AddWithValue("@id", id);

connection.Open();

command.ExecuteNonQuery();

connection.Close();

}

}

}

}

**Form1.cs (Tema2Client)**

using System.Data;

using System.Data.SqlClient;

using ServiceReference1;

namespace Tema2Client

{

public partial class Form1 : Form

{

ServiceReference1.WebService1SoapClient service = new WebService1SoapClient(WebService1SoapClient.EndpointConfiguration.WebService1Soap);

SqlConnection myCon = new SqlConnection();

DataTable dataTable = new DataTable();

DataSet dsSongs;

private void Form1\_Load(object sender, EventArgs e)

{

}

public Form1()

{

InitializeComponent();

myCon.ConnectionString = "Data Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=F:\\Facultate\\y3-AIA\\Sem 2\\II\\Tema2\\Tema2Client\\Tema2Client\\Database.mdf;Integrated Security=True";

myCon.Open();

dsSongs = new DataSet();

SqlDataAdapter daUniv = new SqlDataAdapter("SELECT \* FROM Songs", myCon);

daUniv.Fill(dsSongs, "Songs");

foreach (DataRow dr in dsSongs.Tables["Songs"].Rows)

{

String name = dr.ItemArray.GetValue(1).ToString() + dr.ItemArray.GetValue(3).ToString();

dbData.Items.Add(name);

}

myCon.Close();

}

private void insertBttn\_Click(object sender, EventArgs e)

{

try

{

service.PostAsync(int.Parse(songIdTextBox.Text), songNameLabel.Text, songTypeTextBox.Text,

artistTextBox.Text, albumTextBox.Text);

}

catch (Exception ex)

{

MessageBox.Show(ex.Message);

}

String addedSong = songNameTextBox.Text + " - " + artistTextBox.Text;

dbData.Items.Add(addedSong);

dsSongs.Clear();

SqlDataAdapter daSongs = new SqlDataAdapter("SELECT \* FROM Songs", myCon);

}

private void updateBttn\_Click(object sender, EventArgs e)

{

try

{

service.PutAsync(int.Parse(songIdTextBox.Text), songNameLabel.Text, songTypeTextBox.Text,

artistTextBox.Text, albumTextBox.Text);

MessageBox.Show("Song updated succesfully!");

}

catch (Exception ex)

{

MessageBox.Show(ex.Message);

}

dsSongs.Clear();

SqlDataAdapter daSongs = new SqlDataAdapter("SELECT \* FROM Songs", myCon);

daSongs.Fill(dsSongs, "Songs");

dbData.Items.Clear();

foreach (DataRow dr in dsSongs.Tables["Songs"].Rows)

{

dbData.Items.Add(dr.ItemArray.GetValue(1).ToString() + " - " + dr.ItemArray.GetValue(3).ToString());

}

}

private void deleteBttn\_Click(object sender, EventArgs e)

{

if (songIdTextBox.Text != null)

{

try

{

service.DeleteAsync(int.Parse(songIdTextBox.Text));

MessageBox.Show("Song with id " + songIdTextBox.Text + " deleted succesfully.");

}

catch (Exception ex)

{

MessageBox.Show("Song couldn't be deleted because " + ex.Message);

}

}

dsSongs.Clear();

SqlDataAdapter daSongs = new SqlDataAdapter("SELECT \* FROM Songs", myCon);

daSongs.Fill(dsSongs, "Songs");

String deletedSong = songNameTextBox.Text + " - " + artistTextBox.Text;

dbData.Items.Remove(deletedSong);

}

private void dbData\_SelectedIndexChanged(object sender, EventArgs e)

{

if (dbData.SelectedItem != null)

{

String selection = dbData.SelectedItem.ToString();

foreach (DataRow dr in dsSongs.Tables["Songs"].Rows)

{

if (selection == dr.ItemArray.GetValue(1).ToString() + " - " + dr.ItemArray.GetValue(3))

{

songIdTextBox.Text = dr.ItemArray.GetValue(0).ToString();

songNameTextBox.Text = dr.ItemArray.GetValue(1).ToString();

songTypeTextBox.Text = dr.ItemArray.GetValue(2).ToString();

artistTextBox.Text = dr.ItemArray.GetValue(3).ToString();

albumTextBox.Text = dr.ItemArray.GetValue(4).ToString();

}

}

}

}

}

}

**Form1.Designer.cs (Tema2Client)**

Database namespace Tema2Client

{

partial class Form1

{

/// <summary>

/// Required designer variable.

/// </summary>

private System.ComponentModel.IContainer components = null;

/// <summary>

/// Clean up any resources being used.

/// </summary>

/// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>

protected override void Dispose(bool disposing)

{

if (disposing && (components != null))

{

components.Dispose();

}

base.Dispose(disposing);

}

#region Windows Form Designer generated code

/// <summary>

/// Required method for Designer support - do not modify

/// the contents of this method with the code editor.

/// </summary>

private void InitializeComponent()

{

dbData = new ListBox();

currentSongs = new Label();

idLabel = new Label();

songNameLabel = new Label();

songTypeLabel = new Label();

artistLabel = new Label();

insertBttn = new Button();

updateBttn = new Button();

deleteBttn = new Button();

songIdTextBox = new TextBox();

songNameTextBox = new TextBox();

songTypeTextBox = new TextBox();

artistTextBox = new TextBox();

albumTextBox = new TextBox();

albumLabel = new Label();

SuspendLayout();

//

// dbData

//

dbData.FormattingEnabled = true;

dbData.ItemHeight = 20;

dbData.Location = new Point(50, 56);

dbData.Name = "dbData";

dbData.Size = new Size(361, 404);

dbData.TabIndex = 0;

dbData.SelectedIndexChanged += dbData\_SelectedIndexChanged;

//

// currentSongs

//

currentSongs.AutoSize = true;

currentSongs.Font = new Font("SWComp", 16.2F, FontStyle.Bold | FontStyle.Italic, GraphicsUnit.Point);

currentSongs.Location = new Point(49, 18);

currentSongs.Name = "currentSongs";

currentSongs.Size = new Size(273, 36);

currentSongs.TabIndex = 1;

currentSongs.Text = "Current songs";

//

// idLabel

//

idLabel.AutoSize = true;

idLabel.Font = new Font("SWComp", 9F, FontStyle.Regular, GraphicsUnit.Point);

idLabel.Location = new Point(461, 92);

idLabel.Name = "idLabel";

idLabel.Size = new Size(87, 19);

idLabel.TabIndex = 2;

idLabel.Text = "Song id:";

//

// songNameLabel

//

songNameLabel.AutoSize = true;

songNameLabel.Font = new Font("SWComp", 9F, FontStyle.Regular, GraphicsUnit.Point);

songNameLabel.Location = new Point(461, 145);

songNameLabel.Name = "songNameLabel";

songNameLabel.Size = new Size(119, 19);

songNameLabel.TabIndex = 3;

songNameLabel.Text = "Song name:";

//

// songTypeLabel

//

songTypeLabel.AutoSize = true;

songTypeLabel.Font = new Font("SWComp", 9F, FontStyle.Regular, GraphicsUnit.Point);

songTypeLabel.Location = new Point(461, 198);

songTypeLabel.Name = "songTypeLabel";

songTypeLabel.Size = new Size(109, 19);

songTypeLabel.TabIndex = 4;

songTypeLabel.Text = "Song type:";

//

// artistLabel

//

artistLabel.AutoSize = true;

artistLabel.Font = new Font("SWComp", 9F, FontStyle.Regular, GraphicsUnit.Point);

artistLabel.Location = new Point(461, 251);

artistLabel.Name = "artistLabel";

artistLabel.Size = new Size(68, 19);

artistLabel.TabIndex = 5;

artistLabel.Text = "Artist:";

//

// insertBttn

//

insertBttn.BackColor = Color.RosyBrown;

insertBttn.Font = new Font("SWComp", 9F, FontStyle.Bold | FontStyle.Italic, GraphicsUnit.Point);

insertBttn.Location = new Point(430, 379);

insertBttn.Name = "insertBttn";

insertBttn.Size = new Size(101, 64);

insertBttn.TabIndex = 6;

insertBttn.Text = "Insert song";

insertBttn.UseVisualStyleBackColor = false;

insertBttn.Click += insertBttn\_Click;

//

// updateBttn

//

updateBttn.BackColor = Color.RosyBrown;

updateBttn.Font = new Font("SWComp", 9F, FontStyle.Bold | FontStyle.Italic, GraphicsUnit.Point);

updateBttn.Location = new Point(537, 379);

updateBttn.Name = "updateBttn";

updateBttn.Size = new Size(101, 64);

updateBttn.TabIndex = 7;

updateBttn.Text = "Update song";

updateBttn.UseVisualStyleBackColor = false;

updateBttn.Click += updateBttn\_Click;

//

// deleteBttn

//

deleteBttn.BackColor = Color.RosyBrown;

deleteBttn.Font = new Font("SWComp", 9F, FontStyle.Bold | FontStyle.Italic, GraphicsUnit.Point);

deleteBttn.Location = new Point(644, 379);

deleteBttn.Name = "deleteBttn";

deleteBttn.Size = new Size(103, 64);

deleteBttn.TabIndex = 8;

deleteBttn.Text = "Delete song";

deleteBttn.UseVisualStyleBackColor = false;

deleteBttn.Click += deleteBttn\_Click;

//

// songIdTextBox

//

songIdTextBox.Location = new Point(461, 115);

songIdTextBox.Name = "songIdTextBox";

songIdTextBox.Size = new Size(233, 27);

songIdTextBox.TabIndex = 9;

//

// songNameTextBox

//

songNameTextBox.Location = new Point(461, 168);

songNameTextBox.Name = "songNameTextBox";

songNameTextBox.Size = new Size(233, 27);

songNameTextBox.TabIndex = 10;

//

// songTypeTextBox

//

songTypeTextBox.Location = new Point(461, 221);

songTypeTextBox.Name = "songTypeTextBox";

songTypeTextBox.Size = new Size(233, 27);

songTypeTextBox.TabIndex = 11;

//

// artistTextBox

//

artistTextBox.Location = new Point(461, 274);

artistTextBox.Name = "artistTextBox";

artistTextBox.Size = new Size(233, 27);

artistTextBox.TabIndex = 12;

//

// albumTextBox

//

albumTextBox.Location = new Point(461, 327);

albumTextBox.Name = "albumTextBox";

albumTextBox.Size = new Size(233, 27);

albumTextBox.TabIndex = 13;

//

// albumLabel

//

albumLabel.AutoSize = true;

albumLabel.Font = new Font("SWComp", 9F, FontStyle.Regular, GraphicsUnit.Point);

albumLabel.Location = new Point(461, 304);

albumLabel.Name = "albumLabel";

albumLabel.Size = new Size(74, 19);

albumLabel.TabIndex = 14;

albumLabel.Text = "Album:";

albumLabel.TextAlign = ContentAlignment.BottomCenter;

//

// Form1

//

AutoScaleDimensions = new SizeF(8F, 20F);

AutoScaleMode = AutoScaleMode.Font;

ClientSize = new Size(773, 506);

Controls.Add(albumLabel);

Controls.Add(albumTextBox);

Controls.Add(artistTextBox);

Controls.Add(songTypeTextBox);

Controls.Add(songNameTextBox);

Controls.Add(songIdTextBox);

Controls.Add(deleteBttn);

Controls.Add(updateBttn);

Controls.Add(insertBttn);

Controls.Add(artistLabel);

Controls.Add(songTypeLabel);

Controls.Add(songNameLabel);

Controls.Add(idLabel);

Controls.Add(currentSongs);

Controls.Add(dbData);

ForeColor = SystemColors.ActiveCaptionText;

Name = "Form1";

Text = "Form1";

Load += Form1\_Load;

ResumeLayout(false);

PerformLayout();

}

#endregion

private ListBox dbData;

private Label currentSongs;

private Label idLabel;

private Label songNameLabel;

private Label songTypeLabel;

private Label artistLabel;

private Button insertBttn;

private Button updateBttn;

private Button deleteBttn;

private TextBox songIdTextBox;

private TextBox songNameTextBox;

private TextBox songTypeTextBox;

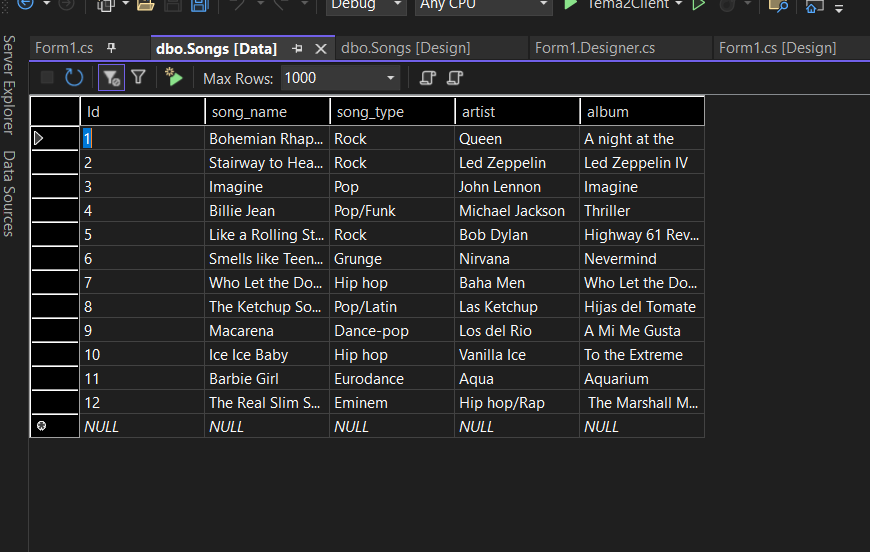
private TextBox artistTextBox;

private TextBox albumTextBox;

private Label albumLabel;

}

## }

O imagine care conține text, captură de ecran, monitor, negru

Descriere generată automat

## Demo

