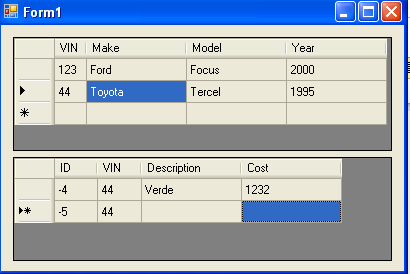
In the form include 2 DataGridViews

* dgVehicles.DataMember
* dgRepairs.DataSource



namespace VehicleRepairLab

{

public partial class Form1 : Form

{

private readonly string xsdFile = Path.Combine(Environment.GetFolderPath(

Environment.SpecialFolder.ApplicationData),"VehiclesRepairs.xsd");

private readonly string xmlFile = Path.Combine(Environment.GetFolderPath(

Environment.SpecialFolder.ApplicationData),"VehiclesRepairs.xml");

private DataSet ds;

public Form1()

{

InitializeComponent();

}

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

{

PopulateDataSet();

dgVehicles.DataSource = ds;

dgVehicles.DataMember = "Vehicles";

dgRepairs.DataSource = ds;

dgRepairs.DataMember = "Vehicles.vehicles\_repairs";

// Hide or show

// dgVehicles.Columns[0].Visible = false;

// dgRepairs.Columns[0].Visible = false;

}

**private void PopulateDataSet()**

{

if (File.Exists(xsdFile))

{

ds = new DataSet();

ds.ReadXmlSchema(xsdFile);

}

else

{

CreateSchema();

}

if (File.Exists(xmlFile))

{

ds.ReadXml(xmlFile, XmlReadMode.IgnoreSchema);

}

}

**private void CreateSchema()**

{

ds = new DataSet("VehiclesRepairs");

var vehicles = ds.Tables.Add("Vehicles");

vehicles.Columns.Add("VIN", typeof(string));

vehicles.Columns.Add("Make", typeof(string));

vehicles.Columns.Add("Model", typeof(string));

vehicles.Columns.Add("Year", typeof(int));

vehicles.PrimaryKey = new DataColumn[] { vehicles.Columns["VIN"] };

var repairs = ds.Tables.Add("Repairs");

var pk = repairs.Columns.Add("ID", typeof(int));

pk.AutoIncrement = true;

pk.AutoIncrementSeed = -1;

pk.AutoIncrementStep = -1;

repairs.Columns.Add("VIN", typeof(string));

repairs.Columns.Add("Description", typeof(string));

repairs.Columns.Add("Cost", typeof(decimal));

repairs.PrimaryKey = new DataColumn[] { repairs.Columns["ID"] };

ds.Relations.Add(

"vehicles\_repairs",

vehicles.Columns["VIN"],

repairs.Columns["VIN"]);

ds.WriteXmlSchema(xsdFile);

}

private void Form1\_FormClosing(object sender, FormClosingEventArgs e)

{

ds.WriteXml(xmlFile, XmlWriteMode.DiffGram);

}

}

}

**VehicleReparis.xsd (schema)**

<?xml version="1.0" standalone="yes"?>

<xs:schema id="VehiclesRepairs" xmlns="" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:msdata="urn:schemas-microsoft-com:xml-msdata">

<xs:element name="VehiclesRepairs" msdata:IsDataSet="true" msdata:UseCurrentLocale="true">

<xs:complexType>

<xs:choice minOccurs="0" maxOccurs="unbounded">

<xs:element name="Vehicles">

<xs:complexType>

<xs:sequence>

<xs:element name="VIN" type="xs:string" />

<xs:element name="Make" type="xs:string" minOccurs="0" />

<xs:element name="Model" type="xs:string" minOccurs="0" />

<xs:element name="Year" type="xs:int" minOccurs="0" />

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="Repairs">

<xs:complexType>

<xs:sequence>

<xs:element name="ID" msdata:AutoIncrement="true" msdata:AutoIncrementSeed="-1" msdata:AutoIncrementStep="-1" type="xs:int" />

<xs:element name="VIN" type="xs:string" minOccurs="0" />

<xs:element name="Description" type="xs:string" minOccurs="0" />

<xs:element name="Cost" type="xs:decimal" minOccurs="0" />

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:choice>

</xs:complexType>

<xs:unique name="Constraint1" msdata:PrimaryKey="true">

<xs:selector xpath=".//Vehicles" />

<xs:field xpath="VIN" />

</xs:unique>

<xs:unique name="Repairs\_Constraint1" msdata:ConstraintName="Constraint1" msdata:PrimaryKey="true">

<xs:selector xpath=".//Repairs" />

<xs:field xpath="ID" />

</xs:unique>

<xs:keyref name="vehicles\_repairs" refer="Constraint1">

<xs:selector xpath=".//Repairs" />

<xs:field xpath="VIN" />

</xs:keyref>

</xs:element>

</xs:schema>

**VehicleReparis.xml (Data)**

<?xml version="1.0" standalone="yes"?>

<diffgr:diffgram xmlns:msdata="urn:schemas-microsoft-com:xml-msdata" xmlns:diffgr="urn:schemas-microsoft-com:xml-diffgram-v1">

<VehiclesRepairs>

<**Vehicles** diffgr:id="Vehicles1" msdata:rowOrder="0" diffgr:hasChanges="inserted">

<VIN>**123**</VIN>

<Make>Ford</Make>

<Model>Focus</Model>

<Year>**2000**</Year>

</Vehicles>

<**Vehicles** diffgr:id="Vehicles2" msdata:rowOrder="1" diffgr:hasChanges="inserted">

<VIN>**44**</VIN>

<Make>Toyota</Make>

<Model>Tercel</Model>

<Year>**1995**</Year>

</Vehicles>

<**Repairs** diffgr:id="Repairs1" msdata:rowOrder="0" diffgr:hasChanges="inserted">

<ID>-1</ID>

<VIN>**123**</VIN>

<Description>Nuevo</Description>

<Cost>**20**</Cost>

</Repairs>

<**Repairs** diffgr:id="Repairs2" msdata:rowOrder="1" diffgr:hasChanges="inserted">

<ID**>-4</**ID>

<VIN>**44**</VIN>

<Description>Verde</Description>

<Cost>**1232**</Cost>

</Repairs>

</VehiclesRepairs>

</diffgr:diffgram>