using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Xml;

namespace Serialization

{

public class Car

{

public string Model { get; set; }

public string Vendor { get; set; }

public int Year { get; set; }

public override string ToString()

{

return $"{Model}-{Vendor}-{Year}";

}

}

public class Program

{

static void Main(string[] args)

{

var cars = new List<Car>

{

new Car{Model="Mustang",Vendor="Ford",Year=1964},

new Car{Model="Charger",Vendor="Dodge",Year=2000},

new Car{Model="Veyron",Vendor="Bugatti",Year=2010},

new Car{Model="M5",Vendor="BMW",Year=2020}

};

#region Xml Writer

using (var writer = new XmlTextWriter("cars.xml", Encoding.UTF8))

{

writer.Formatting = Formatting.Indented;

writer.WriteStartDocument();

writer.WriteStartElement("Cars");

foreach (var car in cars)

{

writer.WriteStartElement("Car");

//like tag

writer.WriteElementString(nameof(car.Model), car.Model);

writer.WriteElementString(nameof(car.Vendor), car.Vendor);

writer.WriteElementString(nameof(car.Year), car.Year.ToString());

//like attribute

//writer.WriteAttributeString(nameof(car.Model), car.Model);

//writer.WriteAttributeString(nameof(car.Vendor), car.Vendor);

//writer.WriteAttributeString(nameof(car.Year), car.Year.ToString());

writer.WriteEndElement();

}

writer.WriteEndElement();

writer.WriteEndDocument();

}

#endregion

#region Xml Reading

//XmlDocument xml = new XmlDocument();

//xml.Load("cars.xml");

//var root = xml.DocumentElement;

//if (root.HasChildNodes)

//{

// foreach (XmlNode car\_node in root.ChildNodes)

// {

// var car = new Car

// {

// //Model = car\_node.Attributes[0].Value,

// //Vendor = car\_node.Attributes[1].Value,

// //Year = int.Parse(car\_node.Attributes[2].Value)

// Model = car\_node.ChildNodes[0].InnerText,

// Vendor = car\_node.ChildNodes[1].InnerText,

// Year = int.Parse(car\_node.ChildNodes[2].InnerText)

// };

// Console.WriteLine(car);

// }

//}

#endregion

}

}

}