Assembly

```
using System.Reflection;
using System.Runtime.CompilerServices;
using System.Runtime.InteropServices;

// General Information about an assembly is controlled through the following
// set of attributes. Change these attribute values to modify the information
// associated with an assembly.
[assembly: AssemblyTitle("Car_Betting_Game")]
[assembly: AssemblyDescription("")]
[assembly: AssemblyConfiguration("")]
[assembly: AssemblyCompany("")]
[assembly: AssemblyProduct("Car_Betting_Game")]
[assembly: AssemblyCopyright("Copyright ©  2018")]
[assembly: AssemblyTrademark("")]
[assembly: AssemblyCulture("")]

// Setting ComVisible to false makes the types in this assembly not visible
// to COM components.  If you need to access a type in this assembly from
// COM, set the ComVisible attribute to true on that type.
[assembly: ComVisible(false)]

// The following GUID is for the ID of the typelib if this project is exposed to
COM
[assembly: Guid("2c141a73-b192-48a5-891e-6c577001cd84")]

// Version information for an assembly consists of the following four values:
//
//      Major Version
//      Minor Version
//      Build Number
//      Revision
//
// You can specify all the values or you can default the Build and Revision
Numbers
// by using the '*' as shown below:
// [assembly: AssemblyVersion("1.0.*")]
[assembly: AssemblyVersion("1.0.0.0")]
[assembly: AssemblyFileVersion("1.0.0.0")]
```

Resource Designer

```csharp
//------------------------------------------------------------------------------
// <auto-generated>
//     This code was generated by a tool.
//     Runtime Version:4.0.30319.42000
//
//     Changes to this file may cause incorrect behavior and will be lost if
//     the code is regenerated.
// </auto-generated>
//------------------------------------------------------------------------------

namespace Car_Betting_Game.Properties {
    using System;


    /// <summary>
    ///   A strongly-typed resource class, for looking up localized strings, etc.
    /// </summary>
    // This class was auto-generated by the StronglyTypedResourceBuilder
    // class via a tool like ResGen or Visual Studio.
    // To add or remove a member, edit your .ResX file then rerun ResGen
    // with the /str option, or rebuild your VS project.
[global::System.CodeDom.Compiler.GeneratedCodeAttribute("System.Resources.Tools.StronglyTypedResourceBuilder", "15.0.0.0")]
    [global::System.Diagnostics.DebuggerNonUserCodeAttribute()]
    [global::System.Runtime.CompilerServices.CompilerGeneratedAttribute()]
    internal class Resources {

        private static global::System.Resources.ResourceManager resourceMan;

        private static global::System.Globalization.CultureInfo resourceCulture;


[global::System.Diagnostics.CodeAnalysis.SuppressMessageAttribute("Microsoft.Performance", "CA1811:AvoidUncalledPrivateCode")]
        internal Resources() {
        }

        /// <summary>
        ///   Returns the cached ResourceManager instance used by this class.
        /// </summary>
```

```csharp
[global::System.ComponentModel.EditorBrowsableAttribute(global::System.ComponentM
odel.EditorBrowsableState.Advanced)]
        internal static global::System.Resources.ResourceManager ResourceManager
{
            get {
                if (object.ReferenceEquals(resourceMan, null)) {
                    global::System.Resources.ResourceManager temp = new
global::System.Resources.ResourceManager("Car_Betting_Game.Properties.Resources",
typeof(Resources).Assembly);
                    resourceMan = temp;
                }
                return resourceMan;
            }
        }

        /// <summary>
        ///   Overrides the current thread's CurrentUICulture property for all
        ///   resource lookups using this strongly typed resource class.
        /// </summary>

[global::System.ComponentModel.EditorBrowsableAttribute(global::System.ComponentM
odel.EditorBrowsableState.Advanced)]
        internal static global::System.Globalization.CultureInfo Culture {
            get {
                return resourceCulture;
            }
            set {
                resourceCulture = value;
            }
        }

        /// <summary>
        ///   Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap _base {
            get {
                object obj = ResourceManager.GetObject("base", resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///   Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
```

```csharp
        internal static System.Drawing.Bitmap back_car {
            get {
                object obj = ResourceManager.GetObject("back_car",
resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///   Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap button1 {
            get {
                object obj = ResourceManager.GetObject("button1",
resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///   Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap car_1 {
            get {
                object obj = ResourceManager.GetObject("car_1", resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///   Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap car_2 {
            get {
                object obj = ResourceManager.GetObject("car_2", resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///   Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap car_3 {
            get {
                object obj = ResourceManager.GetObject("car_3", resourceCulture);
```

```csharp
            return ((System.Drawing.Bitmap)(obj));
        }
    }

    /// <summary>
    ///    Looks up a localized resource of type System.Drawing.Bitmap.
    /// </summary>
    internal static System.Drawing.Bitmap car_4 {
        get {
            object obj = ResourceManager.GetObject("car_4", resourceCulture);
            return ((System.Drawing.Bitmap)(obj));
        }
    }

    /// <summary>
    ///    Looks up a localized resource of type System.Drawing.Bitmap.
    /// </summary>
    internal static System.Drawing.Bitmap carh_1 {
        get {
            object obj = ResourceManager.GetObject("carh_1",
resourceCulture);
            return ((System.Drawing.Bitmap)(obj));
        }
    }

    /// <summary>
    ///    Looks up a localized resource of type System.Drawing.Bitmap.
    /// </summary>
    internal static System.Drawing.Bitmap carh_2 {
        get {
            object obj = ResourceManager.GetObject("carh_2",
resourceCulture);
            return ((System.Drawing.Bitmap)(obj));
        }
    }

    /// <summary>
    ///    Looks up a localized resource of type System.Drawing.Bitmap.
    /// </summary>
    internal static System.Drawing.Bitmap carh_3 {
        get {
            object obj = ResourceManager.GetObject("carh_3",
resourceCulture);
            return ((System.Drawing.Bitmap)(obj));
        }
```

```csharp
        }

        /// <summary>
        ///    Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap carh_4 {
            get {
                object obj = ResourceManager.GetObject("carh_4",
resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///    Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap cark_1 {
            get {
                object obj = ResourceManager.GetObject("cark_1",
resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///    Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap exit {
            get {
                object obj = ResourceManager.GetObject("exit", resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///    Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap fast_racing {
            get {
                object obj = ResourceManager.GetObject("fast-racing",
resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }
```

```csharp
        /// <summary>
        ///    Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap margo {
            get {
                object obj = ResourceManager.GetObject("margo", resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }

        /// <summary>
        ///    Looks up a localized resource of type System.Drawing.Bitmap.
        /// </summary>
        internal static System.Drawing.Bitmap track_path {
            get {
                object obj = ResourceManager.GetObject("track_path",
resourceCulture);
                return ((System.Drawing.Bitmap)(obj));
            }
        }
    }
}
```

Settings Designer

```csharp
//------------------------------------------------------------------------------
// <auto-generated>
//     This code was generated by a tool.
//     Runtime Version:4.0.30319.42000
//
//     Changes to this file may cause incorrect behavior and will be lost if
//     the code is regenerated.
// </auto-generated>
//------------------------------------------------------------------------------

namespace Car_Betting_Game.Properties
{


    [global::System.Runtime.CompilerServices.CompilerGeneratedAttribute()]

[global::System.CodeDom.Compiler.GeneratedCodeAttribute("Microsoft.VisualStudio.E
ditors.SettingsDesigner.SettingsSingleFileGenerator", "11.0.0.0")]
    internal sealed partial class Settings :
global::System.Configuration.ApplicationSettingsBase
    {

        private static Settings defaultInstance =
((Settings)(global::System.Configuration.ApplicationSettingsBase.Synchronized(new
Settings())));

        public static Settings Default
        {
            get
            {
                return defaultInstance;
            }
        }
    }
}
```

Bet Modes

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Car_Betting_Game
{
    public class bet_module
    {
        public int Amount;
        public int Car;
        public person_module Bettor;

        public string GetDescription()
        {
            //return a string that say who placed the bet, how much cash was bet,
and which car he bet on.
            //If amount is zero no bet is placed
            string desc = Bettor.Name + " bet $" + this.Amount + " on Car " +
(this.Car + 1);
            return desc;
        }

        public int PayOut(int Winner)
        {
            //parameter is winner of race. if the car won, return the amount bet
            //otherwise, return the negative of the amount bet
            if (Winner == this.Car)
            {
                return this.Amount;
            }
            else
            {
                return -1 * this.Amount;
            }
        }
    }
}
```

Car Modules

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using MetroFramework.Controls;


namespace Car_Betting_Game
{
    public class car_module
    {
        public int StartingPosition;
        public int RacetrackLength;
        public PictureBox MyPictureBox = null;
        public int Location = 0;
        public Random Randomizer;

        public bool Run(PictureBox racetrack)
        {
            //move forward either 1, 2, 3, or 4 spaces at random
            this.MyPictureBox.Left += this.Randomizer.Next(2, 7);
            //update the position of my picturebox on the form
            //MyPictureBox.Left = StartingPosition + Location;
            //return true if I won the race
            if (this.MyPictureBox.Right > racetrack.Right)
            {
                return true;
            }
            return false;
        }

        public void TakeStartingPosition()
        {
            //reset location to 0 and picturebox to starting position
            Location = 0;
            StartingPosition = 0;
        }


    }
}
```

Car Racing Pattern

```csharp
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Drawing.Drawing2D;
using System.Linq;
using System.Text;
using System.Threading;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Car_Betting_Game
{
    public partial class frmCarRacingGame : MetroFramework.Forms.MetroForm
    {

        //Initialize array of person
        person_module[] person = new person_module[3];
        public int Money;
        //intialize array of car
        car_module[] CarCount = new car_module[4];
        // System.Windows.Forms.Timer ty = new System.Windows.Forms.Timer();



        public frmCarRacingGame()
        {
            Thread t = new Thread(new ThreadStart(Splash));
            t.Start();

            string str = string.Empty;
            for (int i = 0; i < 1000; i++)
                Thread.Sleep(10);
            t.Abort();
            InitializeComponent();
            Application.DoEvents();

            person[0] = new person_module() { Money = 50, Name = "Joe", MyLabel =
lblJoe, MyRadioButton = metroRadioButton1 };
            person[1] = new person_module() { Money = 50, Name = "Bob", MyLabel =
lblBob, MyRadioButton = metroRadioButton2 };
```

```
            person[2] = new person_module() { Money = 50, Name = "Al", MyLabel =
lblAI, MyRadioButton = metroRadioButton3 };
            foreach (person_module guy in person)
                guy.PlaceBet(0, 0);

            //set the default bet name to Joe
            lblName.Text = person[0].Name;

            CarCount[0] = new car_module()
            {
                MyPictureBox = car1,
                StartingPosition = car1.Left,
                RacetrackLength = racetrack.Width - car1.Width,
                Randomizer = new Random()
            };

            CarCount[1] = new car_module()
            {
                MyPictureBox = car2,
                StartingPosition = car2.Left,
                RacetrackLength = racetrack.Width - car2.Width,
                Randomizer = CarCount[0].Randomizer
            };

            CarCount[2] = new car_module()
            {
                MyPictureBox = car3,
                StartingPosition = car3.Left,
                RacetrackLength = racetrack.Width - car3.Width,
                Randomizer = CarCount[0].Randomizer
            };

            CarCount[3] = new car_module()
            {
                MyPictureBox = car4,
                StartingPosition = car4.Left,
                RacetrackLength = racetrack.Width - car4.Width,
                Randomizer = CarCount[0].Randomizer
            };

            updateForm();


        }
```

```csharp
void Splash()
{
    frmSplash frm = new frmSplash();
    Application.Run(frm);
}

public void updateForm()
{
    metroRadioButton1.Text = person[0].Name + " has $" + person[0].Money;
    metroRadioButton2.Text = person[1].Name + " has $" + person[1].Money;
    metroRadioButton3.Text = person[2].Name + " has $" + person[2].Money;
}

private void btnRace_Click(object sender, EventArgs e)
{
    int guy;
    if (metroRadioButton1.Checked)
    {
        guy = 0;
    }
    else if (metroRadioButton2.Checked)
    {
        guy = 1;
    }
    else
    {
        guy = 2;
    }
    if (person[guy].Money >= numBets.Value)
    {

        foreach (car_module g in CarCount)
        {
            g.MyPictureBox.Left = g.StartingPosition;
        }

        //start timer for race

        timer6.Enabled = true;


    }
```

```csharp
            else
            {
                MessageBox.Show(person[guy].Name + " didn't have enough to bet");

            }
        }

        private void Reset_Click(object sender, EventArgs e)
        {

        }

        private void btnBets_Click_1(object sender, EventArgs e)
        {
            int guy;
            if (metroRadioButton1.Checked)
            {
                guy = 0;
            }
            else if (metroRadioButton2.Checked)
            {
                guy = 1;
            }
            else
            {
                guy = 2;
            }
            person[guy].PlaceBet((int)numBets.Value, (int)numCar.Value - 1);

            Console.WriteLine(person[guy].Name + " bets $" +
person[guy].Bet.Amount + " on Car " + (person[guy].Bet.Car + 1));
        }

        private void timer6_Tick_1(object sender, EventArgs e)
        {
            int winner;


                for (int i = 0; i < CarCount.Length; i++)
                {
                    if (CarCount[i].Run(racetrack))
                    {
                        winner = i;
```

```csharp
                                timer6.Enabled = false;
                                MessageBox.Show("Car #" + (winner + 1) + " Wins!");

                                for (int j = 0; j < person.Length; j++)
                                {
                                    if (person[j].MyLabel.Text != "BUSTED")
                                    {

                                        if (person[j].Bet.PayOut(winner) != 0)
                                        {

                                            person[j].Money +=
person[j].Bet.PayOut(winner);


                                            if (person[j].Money > 0)
                                            {
                                                person[j].MyRadioButton.Text =
person[j].Name + " has $" + person[j].Money;
                                            }
                                            else
                                            {
                                                person[j].MyRadioButton.Checked = false;
                                                person[j].MyRadioButton.Enabled = false;
                                                numBets.Value = 0;
                                                person[j].PlaceBet((int)numBets.Value,
(int)numCar.Value - 1);

                                                person[j].MyRadioButton.Text =
person[j].Name + " has $" + person[j].Money;
                                                person[j].MyLabel.Text = "BUSTED";

                                                if (person[0].MyLabel.Text == "BUSTED" &&
person[1].MyLabel.Text == "BUSTED" && person[2].MyLabel.Text == "BUSTED")
                                                {
                                                    DialogResult res = MessageBox.Show("Game
Over !!!! Click OK for Exit..", "Exit", MessageBoxButtons.OK
);
                                                    if (res ==
System.Windows.Forms.DialogResult.OK)
                                                    {

System.Windows.Forms.Application.Exit();
                                                    }
                                                }
```

```csharp
                    }

                }

                }
            }
            break;
        }
    }

}

private void Reset_Click_1(object sender, EventArgs e)
{
    foreach (car_module g in CarCount)
    {
        g.MyPictureBox.Left = g.StartingPosition;
    }
}

private void metroRadioButton1_CheckedChanged_1(object sender, EventArgs e)
{
    lblName.Text = person[0].Name;
}

private void metroRadioButton2_CheckedChanged_1(object sender, EventArgs e)
{
    lblName.Text = person[1].Name;
}

private void metroRadioButton3_CheckedChanged_1(object sender, EventArgs e)
{
    lblName.Text = person[2].Name;
}

private void btnExit_Click(object sender, EventArgs e)
{
    DialogResult res = MessageBox.Show("Would you like to Exit?",
"Confirm", MessageBoxButtons.YesNo
    );
    if (res == System.Windows.Forms.DialogResult.No)
    {
```

```csharp
                return;
            }

            else
            {
                System.Windows.Forms.Application.Exit();
            }
        // base.OnClick(e);
    }

    class RoundedButton : Button
    {
        GraphicsPath GetRoundPath(RectangleF Rect, int radius)
        {
            float r2 = radius / 2f;
            GraphicsPath GraphPath = new GraphicsPath();

            GraphPath.AddArc(Rect.X, Rect.Y, radius, radius, 180, 90);
            GraphPath.AddLine(Rect.X + r2, Rect.Y, Rect.Width - r2, Rect.Y);
            GraphPath.AddArc(Rect.X + Rect.Width - radius, Rect.Y, radius,
radius, 270, 90);
            GraphPath.AddLine(Rect.Width, Rect.Y + r2, Rect.Width,
Rect.Height - r2);
            GraphPath.AddArc(Rect.X + Rect.Width - radius,
                             Rect.Y + Rect.Height - radius, radius, radius,
0, 90);
            GraphPath.AddLine(Rect.Width - r2, Rect.Height, Rect.X + r2,
Rect.Height);
            GraphPath.AddArc(Rect.X, Rect.Y + Rect.Height - radius, radius,
radius, 90, 90);
            GraphPath.AddLine(Rect.X, Rect.Height - r2, Rect.X, Rect.Y + r2);

            GraphPath.CloseFigure();
            return GraphPath;
        }

        protected override void OnPaint(PaintEventArgs e)
        {
            base.OnPaint(e);
            RectangleF Rect = new RectangleF(0, 0, this.Width, this.Height);
            GraphicsPath GraphPath = GetRoundPath(Rect, 50);

            this.Region = new Region(GraphPath);
            using (Pen pen = new Pen(Color.CadetBlue, 1.75f))
            {
```

```csharp
                pen.Alignment = PenAlignment.Inset;
                e.Graphics.DrawPath(pen, GraphPath);
            }
        }
    }


    private void btnExit_Click_2(object sender, EventArgs e)
    {
        DialogResult res = MessageBox.Show("Would you like to Exit?",
"Confirm", MessageBoxButtons.YesNo
    );
        if (res == System.Windows.Forms.DialogResult.No)
        {
            return;
        }

        else
        {
            System.Windows.Forms.Application.Exit();
        }
    }
}
}
```

Car Racing Designer

```csharp
namespace Car_Betting_Game
{
    partial class frmCarRacingGame
    {
        /// <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()
        {
            this.components = new System.ComponentModel.Container();
            this.timer6 = new System.Windows.Forms.Timer(this.components);
            this.car4 = new System.Windows.Forms.PictureBox();
            this.car3 = new System.Windows.Forms.PictureBox();
            this.car2 = new System.Windows.Forms.PictureBox();
            this.car1 = new System.Windows.Forms.PictureBox();
            this.groupBox1 = new System.Windows.Forms.GroupBox();
            this.lblName = new MetroFramework.Controls.MetroLabel();
            this.btnRace = new MetroFramework.Controls.MetroButton();
            this.Reset = new MetroFramework.Controls.MetroButton();
            this.metroRadioButton3 = new
MetroFramework.Controls.MetroRadioButton();
```

```csharp
            this.numBets = new System.Windows.Forms.NumericUpDown();
            this.btnBets = new MetroFramework.Controls.MetroButton();
            this.metroRadioButton1 = new
MetroFramework.Controls.MetroRadioButton();
            this.metroLabel1 = new MetroFramework.Controls.MetroLabel();
            this.numCar = new System.Windows.Forms.NumericUpDown();
            this.metroRadioButton2 = new
MetroFramework.Controls.MetroRadioButton();
            this.lblBets = new MetroFramework.Controls.MetroLabel();
            this.lblJoe = new MetroFramework.Controls.MetroLabel();
            this.lblAI = new MetroFramework.Controls.MetroLabel();
            this.lblBob = new MetroFramework.Controls.MetroLabel();
            this.racetrack = new System.Windows.Forms.PictureBox();
            this.btnExit = new MetroFramework.Controls.MetroButton();
            ((System.ComponentModel.ISupportInitialize)(this.car4)).BeginInit();
            ((System.ComponentModel.ISupportInitialize)(this.car3)).BeginInit();
            ((System.ComponentModel.ISupportInitialize)(this.car2)).BeginInit();
            ((System.ComponentModel.ISupportInitialize)(this.car1)).BeginInit();
            this.groupBox1.SuspendLayout();

((System.ComponentModel.ISupportInitialize)(this.numBets)).BeginInit();

((System.ComponentModel.ISupportInitialize)(this.numCar)).BeginInit();

((System.ComponentModel.ISupportInitialize)(this.racetrack)).BeginInit();
            this.SuspendLayout();
            //
            // timer6
            //
            this.timer6.Interval = 50;
            this.timer6.Tick += new System.EventHandler(this.timer6_Tick_1);
            //
            // car4
            //
            this.car4.BackColor = System.Drawing.Color.Transparent;
            this.car4.BackgroundImage =
global::Car_Betting_Game.Properties.Resources.carh_4;
            this.car4.BackgroundImageLayout =
System.Windows.Forms.ImageLayout.Stretch;
            this.car4.Location = new System.Drawing.Point(17, 356);
            this.car4.Name = "car4";
            this.car4.Size = new System.Drawing.Size(93, 43);
            this.car4.TabIndex = 27;
            this.car4.TabStop = false;
            //
```

```csharp
// car3
//
this.car3.BackColor = System.Drawing.Color.Transparent;
this.car3.BackgroundImage =
global::Car_Betting_Game.Properties.Resources.carh_3;
this.car3.BackgroundImageLayout =
System.Windows.Forms.ImageLayout.Stretch;
this.car3.Location = new System.Drawing.Point(17, 308);
this.car3.Name = "car3";
this.car3.Size = new System.Drawing.Size(93, 40);
this.car3.TabIndex = 26;
this.car3.TabStop = false;
//
// car2
//
this.car2.BackColor = System.Drawing.Color.Transparent;
this.car2.BackgroundImage =
global::Car_Betting_Game.Properties.Resources.carh_2;
this.car2.BackgroundImageLayout =
System.Windows.Forms.ImageLayout.Stretch;
this.car2.Location = new System.Drawing.Point(17, 260);
this.car2.Name = "car2";
this.car2.Size = new System.Drawing.Size(93, 37);
this.car2.TabIndex = 25;
this.car2.TabStop = false;
//
// car1
//
this.car1.BackColor = System.Drawing.Color.Transparent;
this.car1.BackgroundImage =
global::Car_Betting_Game.Properties.Resources.carh_1;
this.car1.BackgroundImageLayout =
System.Windows.Forms.ImageLayout.Stretch;
this.car1.Location = new System.Drawing.Point(17, 211);
this.car1.Name = "car1";
this.car1.Size = new System.Drawing.Size(93, 39);
this.car1.TabIndex = 24;
this.car1.TabStop = false;
//
// groupBox1
//
this.groupBox1.BackColor = System.Drawing.Color.MidnightBlue;
this.groupBox1.BackgroundImage =
global::Car_Betting_Game.Properties.Resources._base;
```

```csharp
            this.groupBox1.BackgroundImageLayout =
System.Windows.Forms.ImageLayout.Stretch;
            this.groupBox1.Controls.Add(this.btnExit);
            this.groupBox1.Controls.Add(this.lblName);
            this.groupBox1.Controls.Add(this.btnRace);
            this.groupBox1.Controls.Add(this.Reset);
            this.groupBox1.Controls.Add(this.metroRadioButton3);
            this.groupBox1.Controls.Add(this.numBets);
            this.groupBox1.Controls.Add(this.btnBets);
            this.groupBox1.Controls.Add(this.metroRadioButton1);
            this.groupBox1.Controls.Add(this.metroLabel1);
            this.groupBox1.Controls.Add(this.numCar);
            this.groupBox1.Controls.Add(this.metroRadioButton2);
            this.groupBox1.Controls.Add(this.lblBets);
            this.groupBox1.Controls.Add(this.lblJoe);
            this.groupBox1.Controls.Add(this.lblAI);
            this.groupBox1.Controls.Add(this.lblBob);
            this.groupBox1.Font = new System.Drawing.Font("Arial Rounded MT
Bold", 12F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point,
((byte)(0)));
            this.groupBox1.ForeColor = System.Drawing.Color.White;
            this.groupBox1.Location = new System.Drawing.Point(-1, 405);
            this.groupBox1.Name = "groupBox1";
            this.groupBox1.Size = new System.Drawing.Size(920, 157);
            this.groupBox1.TabIndex = 23;
            this.groupBox1.TabStop = false;
            this.groupBox1.Text = "Maximum Bet";
            //
            // lblName
            //
            this.lblName.AutoSize = true;
            this.lblName.BackColor = System.Drawing.Color.Transparent;
            this.lblName.FontWeight = MetroFramework.MetroLabelWeight.Bold;
            this.lblName.Location = new System.Drawing.Point(594, 62);
            this.lblName.Name = "lblName";
            this.lblName.Size = new System.Drawing.Size(57, 19);
            this.lblName.TabIndex = 32;
            this.lblName.Text = "Name :";
            this.lblName.UseCustomBackColor = true;
            this.lblName.UseCustomForeColor = true;
            this.lblName.UseStyleColors = true;
            //
            // btnRace
            //
            this.btnRace.BackColor = System.Drawing.Color.Teal;
```

```csharp
            this.btnRace.Location = new System.Drawing.Point(792, 110);
            this.btnRace.Name = "btnRace";
            this.btnRace.Size = new System.Drawing.Size(113, 32);
            this.btnRace.TabIndex = 20;
            this.btnRace.Text = "Start Race!!";
            this.btnRace.UseCustomBackColor = true;
            this.btnRace.UseCustomForeColor = true;
            this.btnRace.UseSelectable = true;
            this.btnRace.UseStyleColors = true;
            this.btnRace.Click += new System.EventHandler(this.btnRace_Click);
            //
            // Reset
            //
            this.Reset.BackColor = System.Drawing.Color.RoyalBlue;
            this.Reset.Location = new System.Drawing.Point(658, 111);
            this.Reset.Name = "Reset";
            this.Reset.Size = new System.Drawing.Size(113, 32);
            this.Reset.TabIndex = 21;
            this.Reset.Text = "Reset";
            this.Reset.UseCustomBackColor = true;
            this.Reset.UseCustomForeColor = true;
            this.Reset.UseSelectable = true;
            this.Reset.UseStyleColors = true;
            this.Reset.Click += new System.EventHandler(this.Reset_Click_1);
            //
            // metroRadioButton3
            //
            this.metroRadioButton3.AutoSize = true;
            this.metroRadioButton3.BackColor = System.Drawing.Color.Transparent;
            this.metroRadioButton3.FontSize =
MetroFramework.MetroCheckBoxSize.Medium;
            this.metroRadioButton3.FontWeight =
MetroFramework.MetroCheckBoxWeight.Bold;
            this.metroRadioButton3.Location = new System.Drawing.Point(18, 87);
            this.metroRadioButton3.Name = "metroRadioButton3";
            this.metroRadioButton3.Size = new System.Drawing.Size(39, 19);
            this.metroRadioButton3.TabIndex = 11;
            this.metroRadioButton3.Text = "AI";
            this.metroRadioButton3.UseCustomBackColor = true;
            this.metroRadioButton3.UseCustomForeColor = true;
            this.metroRadioButton3.UseSelectable = true;
            this.metroRadioButton3.UseStyleColors = true;
            this.metroRadioButton3.CheckedChanged += new
System.EventHandler(this.metroRadioButton3_CheckedChanged_1);
            //
```

```
            // numBets
            //
            this.numBets.Font = new System.Drawing.Font("Arial Rounded MT Bold",
9.75F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point,
((byte)(0)));
            this.numBets.Location = new System.Drawing.Point(785, 61);
            this.numBets.Maximum = new decimal(new int[] {
            10000,
            0,
            0,
            0});
            this.numBets.Name = "numBets";
            this.numBets.Size = new System.Drawing.Size(120, 23);
            this.numBets.TabIndex = 29;
            //
            // btnBets
            //
            this.btnBets.BackColor = System.Drawing.Color.Crimson;
            this.btnBets.Location = new System.Drawing.Point(658, 57);
            this.btnBets.Name = "btnBets";
            this.btnBets.Size = new System.Drawing.Size(113, 31);
            this.btnBets.TabIndex = 31;
            this.btnBets.Text = "Apply Bet";
            this.btnBets.UseCustomBackColor = true;
            this.btnBets.UseCustomForeColor = true;
            this.btnBets.UseSelectable = true;
            this.btnBets.UseStyleColors = true;
            this.btnBets.Click += new System.EventHandler(this.btnBets_Click_1);
            //
            // metroRadioButton1
            //
            this.metroRadioButton1.AutoSize = true;
            this.metroRadioButton1.BackColor = System.Drawing.Color.Transparent;
            this.metroRadioButton1.Checked = true;
            this.metroRadioButton1.FontSize =
MetroFramework.MetroCheckBoxSize.Medium;
            this.metroRadioButton1.FontWeight =
MetroFramework.MetroCheckBoxWeight.Bold;
            this.metroRadioButton1.ForeColor = System.Drawing.Color.White;
            this.metroRadioButton1.Location = new System.Drawing.Point(18, 36);
            this.metroRadioButton1.Name = "metroRadioButton1";
            this.metroRadioButton1.Size = new System.Drawing.Size(48, 19);
            this.metroRadioButton1.TabIndex = 10;
            this.metroRadioButton1.TabStop = true;
            this.metroRadioButton1.Text = "Joe";
```

```csharp
            this.metroRadioButton1.Theme = MetroFramework.MetroThemeStyle.Light;
            this.metroRadioButton1.UseCustomBackColor = true;
            this.metroRadioButton1.UseCustomForeColor = true;
            this.metroRadioButton1.UseSelectable = true;
            this.metroRadioButton1.UseStyleColors = true;
            this.metroRadioButton1.CheckedChanged += new
System.EventHandler(this.metroRadioButton1_CheckedChanged_1);
            //
            // metroLabel1
            //
            this.metroLabel1.AutoSize = true;
            this.metroLabel1.BackColor = System.Drawing.Color.Transparent;
            this.metroLabel1.FontWeight = MetroFramework.MetroLabelWeight.Bold;
            this.metroLabel1.Location = new System.Drawing.Point(650, 22);
            this.metroLabel1.Name = "metroLabel1";
            this.metroLabel1.Size = new System.Drawing.Size(123, 19);
            this.metroLabel1.TabIndex = 30;
            this.metroLabel1.Text = "Bets On Car No. :";
            this.metroLabel1.UseCustomBackColor = true;
            this.metroLabel1.UseCustomForeColor = true;
            this.metroLabel1.UseStyleColors = true;
            //
            // numCar
            //
            this.numCar.Font = new System.Drawing.Font("Arial Rounded MT Bold",
9.75F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point,
((byte)(0)));
            this.numCar.Location = new System.Drawing.Point(785, 20);
            this.numCar.Maximum = new decimal(new int[] {
            4,
            0,
            0,
            0});
            this.numCar.Minimum = new decimal(new int[] {
            1,
            0,
            0,
            0});
            this.numCar.Name = "numCar";
            this.numCar.Size = new System.Drawing.Size(120, 23);
            this.numCar.TabIndex = 28;
            this.numCar.Value = new decimal(new int[] {
            1,
            0,
            0,
```

```
            0});
            // 
            // metroRadioButton2
            // 
            this.metroRadioButton2.AutoSize = true;
            this.metroRadioButton2.BackColor = System.Drawing.Color.Transparent;
            this.metroRadioButton2.FontSize =
MetroFramework.MetroCheckBoxSize.Medium;
            this.metroRadioButton2.FontWeight =
MetroFramework.MetroCheckBoxWeight.Bold;
            this.metroRadioButton2.Location = new System.Drawing.Point(18, 62);
            this.metroRadioButton2.Name = "metroRadioButton2";
            this.metroRadioButton2.Size = new System.Drawing.Size(52, 19);
            this.metroRadioButton2.TabIndex = 10;
            this.metroRadioButton2.Text = "Bob";
            this.metroRadioButton2.Theme = MetroFramework.MetroThemeStyle.Light;
            this.metroRadioButton2.UseCustomBackColor = true;
            this.metroRadioButton2.UseCustomForeColor = true;
            this.metroRadioButton2.UseSelectable = true;
            this.metroRadioButton2.UseStyleColors = true;
            this.metroRadioButton2.CheckedChanged += new
System.EventHandler(this.metroRadioButton2_CheckedChanged_1);
            // 
            // lblBets
            // 
            this.lblBets.AutoSize = true;
            this.lblBets.BackColor = System.Drawing.Color.Transparent;
            this.lblBets.FontWeight = MetroFramework.MetroLabelWeight.Bold;
            this.lblBets.Location = new System.Drawing.Point(247, 26);
            this.lblBets.Name = "lblBets";
            this.lblBets.Size = new System.Drawing.Size(45, 19);
            this.lblBets.TabIndex = 24;
            this.lblBets.Text = "Bets :";
            this.lblBets.UseCustomBackColor = true;
            this.lblBets.UseCustomForeColor = true;
            this.lblBets.UseStyleColors = true;
            // 
            // lblJoe
            // 
            this.lblJoe.AutoSize = true;
            this.lblJoe.BackColor = System.Drawing.Color.Transparent;
            this.lblJoe.FontWeight = MetroFramework.MetroLabelWeight.Bold;
            this.lblJoe.Location = new System.Drawing.Point(247, 53);
            this.lblJoe.Name = "lblJoe";
            this.lblJoe.Size = new System.Drawing.Size(54, 19);
```

```csharp
            this.lblJoe.TabIndex = 25;
            this.lblJoe.Text = "label 1";
            this.lblJoe.UseCustomBackColor = true;
            this.lblJoe.UseCustomForeColor = true;
            this.lblJoe.UseStyleColors = true;
            //
            // lblAI
            //
            this.lblAI.AutoSize = true;
            this.lblAI.BackColor = System.Drawing.Color.Transparent;
            this.lblAI.FontWeight = MetroFramework.MetroLabelWeight.Bold;
            this.lblAI.Location = new System.Drawing.Point(247, 110);
            this.lblAI.Name = "lblAI";
            this.lblAI.Size = new System.Drawing.Size(54, 19);
            this.lblAI.TabIndex = 27;
            this.lblAI.Text = "label 3";
            this.lblAI.UseCustomBackColor = true;
            this.lblAI.UseCustomForeColor = true;
            this.lblAI.UseStyleColors = true;
            //
            // lblBob
            //
            this.lblBob.AutoSize = true;
            this.lblBob.BackColor = System.Drawing.Color.Transparent;
            this.lblBob.FontWeight = MetroFramework.MetroLabelWeight.Bold;
            this.lblBob.Location = new System.Drawing.Point(247, 82);
            this.lblBob.Name = "lblBob";
            this.lblBob.Size = new System.Drawing.Size(54, 19);
            this.lblBob.TabIndex = 26;
            this.lblBob.Text = "label 2";
            this.lblBob.UseCustomBackColor = true;
            this.lblBob.UseCustomForeColor = true;
            this.lblBob.UseStyleColors = true;
            //
            // racetrack
            //
            this.racetrack.BackColor = System.Drawing.Color.Transparent;
            this.racetrack.BackgroundImage =
global::Car_Betting_Game.Properties.Resources.track_path;
            this.racetrack.BackgroundImageLayout =
System.Windows.Forms.ImageLayout.Stretch;
            this.racetrack.Location = new System.Drawing.Point(-1, -3);
            this.racetrack.Name = "racetrack";
            this.racetrack.Size = new System.Drawing.Size(920, 559);
            this.racetrack.TabIndex = 0;
```

```csharp
            this.racetrack.TabStop = false;
            //
            // btnExit
            //
            this.btnExit.BackColor = System.Drawing.Color.Red;
            this.btnExit.BackgroundImageLayout =
System.Windows.Forms.ImageLayout.Stretch;
            this.btnExit.CausesValidation = false;
            this.btnExit.Location = new System.Drawing.Point(523, 111);
            this.btnExit.Name = "btnExit";
            this.btnExit.Size = new System.Drawing.Size(114, 31);
            this.btnExit.TabIndex = 28;
            this.btnExit.Text = "Exit";
            this.btnExit.UseCustomBackColor = true;
            this.btnExit.UseCustomForeColor = true;
            this.btnExit.UseSelectable = true;
            this.btnExit.Click += new System.EventHandler(this.btnExit_Click_2);
            //
            // frmCarRacingGame
            //
            this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);
            this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
            this.ClientSize = new System.Drawing.Size(913, 554);
            this.Controls.Add(this.car4);
            this.Controls.Add(this.car3);
            this.Controls.Add(this.car2);
            this.Controls.Add(this.car1);
            this.Controls.Add(this.groupBox1);
            this.Controls.Add(this.racetrack);
            this.Name = "frmCarRacingGame";
            ((System.ComponentModel.ISupportInitialize)(this.car4)).EndInit();
            ((System.ComponentModel.ISupportInitialize)(this.car3)).EndInit();
            ((System.ComponentModel.ISupportInitialize)(this.car2)).EndInit();
            ((System.ComponentModel.ISupportInitialize)(this.car1)).EndInit();
            this.groupBox1.ResumeLayout(false);
            this.groupBox1.PerformLayout();
            ((System.ComponentModel.ISupportInitialize)(this.numBets)).EndInit();
            ((System.ComponentModel.ISupportInitialize)(this.numCar)).EndInit();

((System.ComponentModel.ISupportInitialize)(this.racetrack)).EndInit();
            this.ResumeLayout(false);

        }

        #endregion
```

```
        private System.Windows.Forms.PictureBox racetrack;
        private MetroFramework.Controls.MetroLabel lblName;
        private MetroFramework.Controls.MetroButton btnBets;
        private MetroFramework.Controls.MetroLabel metroLabel1;
        private System.Windows.Forms.NumericUpDown numBets;
        private System.Windows.Forms.NumericUpDown numCar;
        private MetroFramework.Controls.MetroLabel lblAI;
        private MetroFramework.Controls.MetroLabel lblBob;
        private MetroFramework.Controls.MetroLabel lblJoe;
        private MetroFramework.Controls.MetroLabel lblBets;
        private System.Windows.Forms.GroupBox groupBox1;
        private MetroFramework.Controls.MetroRadioButton metroRadioButton3;
        private MetroFramework.Controls.MetroRadioButton metroRadioButton1;
        private MetroFramework.Controls.MetroRadioButton metroRadioButton2;
        private MetroFramework.Controls.MetroButton Reset;
        private MetroFramework.Controls.MetroButton btnRace;
        private System.Windows.Forms.Timer timer6;
        private System.Windows.Forms.PictureBox car1;
        private System.Windows.Forms.PictureBox car2;
        private System.Windows.Forms.PictureBox car3;
        private System.Windows.Forms.PictureBox car4;
        private MetroFramework.Controls.MetroButton btnExit;
    }
}
```

Splash Designer

```csharp
namespace Car_Betting_Game
{
    partial class frmSplash
    {
        /// <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()
        {
            System.ComponentModel.ComponentResourceManager resources = new
System.ComponentModel.ComponentResourceManager(typeof(frmSplash));
            this.metroPanel1 = new MetroFramework.Controls.MetroPanel();
            this.metroProgressBar1 = new
MetroFramework.Controls.MetroProgressBar();
            this.metroPanel1.SuspendLayout();
            this.SuspendLayout();
            //
            // metroPanel1
            //
            this.metroPanel1.BackgroundImage =
((System.Drawing.Image)(resources.GetObject("metroPanel1.BackgroundImage")));
```

```
            this.metroPanel1.BackgroundImageLayout =
System.Windows.Forms.ImageLayout.Stretch;
            this.metroPanel1.Controls.Add(this.metroProgressBar1);
            this.metroPanel1.HorizontalScrollbarBarColor = true;
            this.metroPanel1.HorizontalScrollbarHighlightOnWheel = false;
            this.metroPanel1.HorizontalScrollbarSize = 10;
            this.metroPanel1.Location = new System.Drawing.Point(0, 1);
            this.metroPanel1.Name = "metroPanel1";
            this.metroPanel1.Size = new System.Drawing.Size(921, 557);
            this.metroPanel1.TabIndex = 0;
            this.metroPanel1.Theme = MetroFramework.MetroThemeStyle.Dark;
            this.metroPanel1.VerticalScrollbarBarColor = true;
            this.metroPanel1.VerticalScrollbarHighlightOnWheel = false;
            this.metroPanel1.VerticalScrollbarSize = 10;
            //
            // metroProgressBar1
            //
            this.metroProgressBar1.Location = new System.Drawing.Point(215, 538);
            this.metroProgressBar1.Name = "metroProgressBar1";
            this.metroProgressBar1.ProgressBarStyle =
System.Windows.Forms.ProgressBarStyle.Marquee;
            this.metroProgressBar1.Size = new System.Drawing.Size(644, 10);
            this.metroProgressBar1.Style = MetroFramework.MetroColorStyle.Orange;
            this.metroProgressBar1.TabIndex = 2;
            this.metroProgressBar1.Theme = MetroFramework.MetroThemeStyle.Dark;
            //
            // frmSplash
            //
            this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);
            this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
            this.BackgroundImage =
global::Car_Betting_Game.Properties.Resources.fast_racing;
            this.ClientSize = new System.Drawing.Size(922, 557);
            this.Controls.Add(this.metroPanel1);
            this.DisplayHeader = false;
            this.MaximizeBox = false;
            this.MinimizeBox = false;
            this.Movable = false;
            this.Name = "frmSplash";
            this.Padding = new System.Windows.Forms.Padding(20, 30, 20, 20);
            this.Resizable = false;
            this.Style = MetroFramework.MetroColorStyle.Black;
            this.Theme = MetroFramework.MetroThemeStyle.Dark;
            this.metroPanel1.ResumeLayout(false);
            this.ResumeLayout(false);
```

```csharp
        }

        #endregion

        private MetroFramework.Controls.MetroPanel metroPanel1;
        private MetroFramework.Controls.MetroProgressBar metroProgressBar1;
    }
}
```

Person Modules

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;


namespace Car_Betting_Game
{
    public class person_module
     {
        public string Name;
        public int Money;
        public bet_module Bet;

        //person's gui controls
        public RadioButton MyRadioButton;
        public Label MyLabel;

        public void UpdateLabels()
        {
            //set the label to my bet's description and label on radio button to
show money
            MyLabel.Text = this.Bet.GetDescription();//"Bets $"+Bet.Amount + " on
car " + (Bet.Car +1);
        }

        public void ClearBet()
        {
            //reset my bet so it's zero
        }

        public bool PlaceBet(int BetAmount, int CarToWin)
        {
            //Place a new bet and store it
            //return true if person had enough money to bet
            if (this.Money >= BetAmount)
            {
                Bet = new bet_module()
                {
                    Amount = BetAmount,
                    Car = CarToWin,
```

```csharp
                    Bettor = this//Amount = numBets.Value, Bettor = Name, Car =
numCar.Value -1
                };

                UpdateLabels();

                Console.WriteLine(this.Name + " had enough to bet");
                return true;
            }
            else
            {


                MessageBox.Show(this.Name + " didn't have enough to bet");
                // Console.WriteLine(this.Name + " didn't have enough to bet");
                return false;
            }
        }

        public void Collect(int num)
        {
            //ask my bet to pay out, clear my bet, and update my labels
        }
    }
}
```

Program Class

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Car_Betting_Game
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        [STAThread]
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new frmCarRacingGame());
        }
    }
}
```