Analog Clock

Source	http://www.dotnetspider.com/kb/Article3015.aspx

Analog Clock

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Drawing.Drawing2D;
using System.Text;
using System.Windows.Forms;

namespace Clock
{
   public partial class Form1 : Form
   {
       public Form1()
       {
           InitializeComponent();
           this.Paint += new PaintEventHandler(drawclock);
           this.SetStyle(ControlStyles.AllPaintingInWmPaint, true);
           this.SetStyle(ControlStyles.UserPaint, true);
           this.SetStyle(ControlStyles.DoubleBuffer, true);
       }
       private void drawclock(object sender, PaintEventArgs e)
       {
           Graphics g = e.Graphics;
           Rectangle rec = new Rectangle(20,20,250,250);
           LinearGradientBrush linearbrush = new LinearGradientBrush(rec,
Color.Yellow, Color.Green,225);
           g.FillEllipse(linearbrush,20, 20, 200, 200);
           linearbrush.LinearColors = new Color[] { Color.Yellow,
Color.Green, };
           g.FillEllipse(linearbrush,30, 30, 180, 180);
           linearbrush.LinearColors = new Color[] { Color.Green, Color.Yellow
};
           g.FillEllipse(linearbrush,33,33,174,174);

           SolidBrush solidbrush = new SolidBrush(Color.White);
           Font textFont = new Font("Arial Bold", 12F);
           g.DrawString("12", textFont, solidbrush, 109, 40);
           g.DrawString("11", textFont, solidbrush, 75, 50);
           g.DrawString("10", textFont, solidbrush, 47, 75);
           g.DrawString("9", textFont, solidbrush, 43, 110);
           g.DrawString("8", textFont, solidbrush, 52, 145);
           g.DrawString("7", textFont, solidbrush, 75, 170);
           g.DrawString("6", textFont, solidbrush, 113, 180);
           g.DrawString("5", textFont, solidbrush, 150, 170);
           g.DrawString("4", textFont, solidbrush, 173, 145);
```

```
            g.DrawString("3", textFont, solidbrush, 182, 110);
            g.DrawString("2", textFont, solidbrush, 173, 75);
            g.DrawString("1", textFont, solidbrush, 150, 50);

            g.TranslateTransform(120,120,MatrixOrder.Append);
            int hour = DateTime.Now.Hour;
            int min = DateTime.Now.Minute;
            int sec = DateTime.Now.Second;
            // Create Pens
            Pen hourPen = new Pen(Color.White, 2);
            Pen minutePen = new Pen(Color.LightGray, 2);
            Pen secondPen = new Pen(Color.Red, 1);

            // Create angles
            double secondAngle = 2.0 * Math.PI * sec / 60.0;
            double minuteAngle = 2.0 * Math.PI * (min + sec / 60.0) / 60.0;
            double hourAngle = 2.0 * Math.PI * (hour + min / 60.0) / 12.0;

            // Set centre point
            Point centre = new Point(0, 0);

            // Draw Hour Hand
            Point hourHand = new Point((int)(40 * Math.Sin(hourAngle)),
                                       (int)(-40 * Math.Cos(hourAngle)));
            g.DrawLine(hourPen, centre, hourHand);

            // Draw Minute Hand
            Point minHand = new Point((int)(70 * Math.Sin(minuteAngle)),
                                      (int)(-70 * Math.Cos(minuteAngle)));
            g.DrawLine(minutePen, centre, minHand);

            // Draw Second Hand
            Point secHand = new Point((int)(70 * Math.Sin(secondAngle)),
                                      (int)(-70 * Math.Cos(secondAngle)));
            g.DrawLine(secondPen, centre, secHand);
            Invalidate();


        }
    }
}
```

~~~ End of Article ~~~