

# Printer Caps 5

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/*
Professional Windows GUI Programming Using C#
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```
using System;
using System.Drawing;
using System.Collections;
using System.ComponentModel;
using System.Windows.Forms;
using System.Data;

using System.Drawing.Printing;
using System.Drawing.Drawing2D;
```

```
namespace PrinterCaps5
{
    public class PrinterCaps5 : System.Windows.Forms.Form
    {
        private int m_nCurrPrinter;
        private int m_nCurrPage;

        private System.Drawing.Printing.PrintDocument printDoc;
        private System.Windows.Forms.PrintPreviewDialog ppDialog;
        private System.Windows.Forms.Button btnPrint;
        private System.Windows.Forms.PrintDialog oPrintDialog;
        private System.ComponentModel.Container components = null;

        public PrinterCaps5()
        {
            InitializeComponent();
        }
```

```
}

/// 

/// Clean up any resources being used.
///

protected override void Dispose( bool disposing )
{
    if( disposing )
    {
        if (components != null)
        {
            components.Dispose();
        }
    }
    base.Dispose( disposing );
}

#region Windows Form Designer generated code
///

/// Required method for Designer support – do not modify
/// the contents of this method with the code editor.
///

private void InitializeComponent()
{
    // System.Resources.ResourceManager resources = new
    System.Resources.ResourceManager(typeof(PrinterCaps5));
    this.printDoc = new System.Drawing.Printing.PrintDocument();
    this.ppDialog = new System.Windows.Forms.PrintPreviewDialog();
    this.btnPrint = new System.Windows.Forms.Button();
    this.oPrintDialog = new System.Windows.Forms.PrintDialog();
    this.SuspendLayout();
    //
    // printDoc
    //
    this.printDoc.PrintPage += new
    System.Drawing.Printing.PrintPageEventHandler(this.printDoc_PrintPage);
}
```

```
//  
// ppDialog  
//  
this.ppDialog.AutoScrollMargin = new System.Drawing.Size(0,  
0);  
this.ppDialog.AutoScrollMinSize = new System.Drawing.Size(0,  
0);  
this.ppDialog.ClientSize = new System.Drawing.Size(400, 300);  
this.ppDialog.Enabled = true;  
//           this.ppDialog.Icon =  
((System.Drawing.Icon)(resources.GetObject("ppDialog.Icon")));  
this.ppDialog.Location = new System.Drawing.Point(142, 13);  
this.ppDialog.MaximumSize = new System.Drawing.Size(0, 0);  
this.ppDialog.Name = "ppDialog";  
this.ppDialog.Opacity = 1;  
this.ppDialog.TransparencyKey = System.Drawing.Color.Empty;  
this.ppDialog.Visible = false;  
  
//  
// btnPrint  
//  
this.btnPrint.Location = new System.Drawing.Point(52, 28);  
this.btnPrint.Name = "btnPrint";  
this.btnPrint.TabIndex = 0;  
this.btnPrint.Text = "Print";  
this.btnPrint.Click += new  
System.EventHandler(this.btnPrint_Click);  
  
//  
// oPrintDialog  
//  
this.oPrintDialog.AllowSomePages = true;  
  
//  
// PrinterCaps5  
//  
this.AutoScaleBaseSize = new System.Drawing.Size(5, 13);  
this.ClientSize = new System.Drawing.Size(176, 86);  
this.Controls.AddRange(new System.Windows.Forms.Control[] {  
this.btnPrint});
```

```
this.FormBorderStyle = System.Windows.Forms.FormBorderStyle.FixedDialog;
this.Name = "PrinterCaps5";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "Printer Caps";
this.ResumeLayout(false);

}

#endregion

/// 

/// The main entry point for the application.
///
[STAThread]
static void Main()
{
Application.Run(new PrinterCaps5());
}

private void printDoc_PrintPage(object sender,
System.Drawing.Printing.PrintPageEventArgs e)
{
PrinterSettings pSettings = new PrinterSettings();
Font printFont = new Font("Arial", 12);

//Use the Margins
int nTextPosY = e.MarginBounds.Top;
int nTextPosX = e.MarginBounds.Left;
int nHeight = (int)printFont.GetHeight(e.Graphics);

//Height of a printer block
int nBlockHeight = 9 * nHeight;

if(e.PageSettings.PrinterSettings.PrintRange == PrintRange.SomePages)
{
while(m_nCurrPage < e.PageSettings.PrinterSettings.FromPage) {
```

```
//Move printer to next page block m_nCurrPrinter +=  
(int)(e.MarginBounds.Height / nBlockHeight); m_nCurrPage++;  
if(m_nCurrPrinter > PrinterSettings.InstalledPrinters.Count)  
return;  
}  
  
if(m_nCurrPage > e.PageSettings.PrinterSettings.ToPage)  
{  
//Don't print anything more  
return;  
}  
}  
  
//Print Background Graphic  
LinearGradientBrush aBrush =  
new  
LinearGradientBrush(e.MarginBounds,Color.FromArgb(100,Color.Li  
ghtBlue),  
Color.FromArgb(100,Color.Blue),LinearGradientMode.ForwardDiago  
nal);  
e.Graphics.FillRectangle(aBrush,e.MarginBounds);  
  
//Loop through using indexor now  
//Start with the previous index in m_nCurrPrinter  
for(int x = m_nCurrPrinter;x<  
PrinterSettings.InstalledPrinters.Count; x++)//each(string  
sPtr in PrinterSettings.InstalledPrinters) {  
pSettings.PrinterName = PrinterSettings.InstalledPrinters[x];  
if(pSettings.IsValid) { //Ensure this printer block can fit on  
the page if(nTextPosY + nBlockHeight < e.MarginBounds.Bottom)  
{ //Print the caps of the printer  
e.Graphics.DrawString(PrinterSettings.InstalledPrinters[x],  
printFont,Brushes.Black, nTextPosX, nTextPosY + 5);  
e.Graphics.DrawString("Can Duplex: " +  
pSettings.CanDuplex.ToString(), printFont,Brushes.Black,  
nTextPosX + 10, nTextPosY + (5 + nHeight));  
e.Graphics.DrawString("Is Default: " +  
pSettings.IsDefaultPrinter.ToString(),
```

```
printFont,Brushes.Black, nTextPosX + 10, nTextPosY + (5 +  
nHeight*2)); e.Graphics.DrawString("Is Plotter: " +  
pSettings.IsPlotter.ToString(), printFont,Brushes.Black,  
nTextPosX + 10, nTextPosY + (5 + nHeight*3));  
e.Graphics.DrawString("Landscape Angle: " +  
pSettings.LandscapeAngle.ToString(), printFont,Brushes.Black,  
nTextPosX + 10, nTextPosY + (5 + nHeight*4));  
e.Graphics.DrawString("Maximum Copies: " +  
pSettings.MaximumCopies.ToString(), printFont,Brushes.Black,  
nTextPosX + 10, nTextPosY + (5 + nHeight*5));  
e.Graphics.DrawString("Maximum Page: " +  
pSettings.MaximumPage.ToString(), printFont,Brushes.Black,  
nTextPosX + 10, nTextPosY + (5 + nHeight*6));  
e.Graphics.DrawString("Minimum Page: " +  
pSettings.MinimumPage.ToString(), printFont,Brushes.Black,  
nTextPosX + 10, nTextPosY + (5 + nHeight*7));  
e.Graphics.DrawString("Supports Color: " +  
pSettings.SupportsColor.ToString(), printFont,Brushes.Black,  
nTextPosX + 10, nTextPosY + (5 + nHeight*8)); nTextPosY =  
nTextPosY + ((5 + nHeight*8) + nHeight); //Draw line after  
each  
e.Graphics.DrawLine(System.Drawing.Pens.Black,nTextPosX,nTextP  
osY,e.MarginBounds.Right - 10,nTextPosY);  
e.Graphics.FillEllipse(System.Drawing.Brushes.Black,e.MarginBo  
unds.Right - 10,nTextPosY-5,10,10); } else { //Could not fit  
block on the page - need more pages m_nCurrPrinter = x;  
e.HasMorePages = true; return; } } } //Last page if we reached  
here e.HasMorePages = false; m_nCurrPrinter = 0; return; }  
private void btnPrint_Click(object sender, System.EventArgs e)  
{ //Set to defaults m_nCurrPrinter = 0; m_nCurrPage = 1;  
oPrintDialog.Document = printDoc; if  
(oPrintDialog.ShowDialog() == DialogResult.OK) { try {  
ppDialog.Document = printDoc; ppDialog.ShowDialog(); }  
catch(Exception ex) { MessageBox.Show(ex.ToString()); } } } }  
} [/csharp]
```