

# Printer Caps 6

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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 PrinterCaps6
{
    public class PrinterCaps6 : System.Windows.Forms.Form
    {
        //Saved PageSettings Object
        private PageSettings oPageSettings;

        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.Windows.Forms.PageSetupDialog oPageSetup;
        private System.Windows.Forms.Button btnSetup;
```

```
private System.ComponentModel.Container components = null;

public PrinterCaps6()
{
InitializeComponent();

//Create PageSettings object to store page information
oPageSettings = new PageSettings();
}

///

/// 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(PrinterCaps6));
this.printDoc = new System.Drawing.Printing.PrintDocument();
this.ppDialog = new System.Windows.Forms.PrintPreviewDialog();
this.btnPrint = new System.Windows.Forms.Button();

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```
this.oPrintDialog = new System.Windows.Forms.PrintDialog();
this.oPageSetup = new System.Windows.Forms.PageSetupDialog();
this.btnExit = new System.Windows.Forms.Button();
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(326, 19);
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.btnExit.Location = new System.Drawing.Point(52, 44);
this.btnExit.Name = "btnPrint";
this.btnExit.TabIndex = 0;
this.btnExit.Text = "Print";
this.btnExit.Click += new
System.EventHandler(this.btnExit_Click);
//
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// oPrintDialog
//
this.oPrintDialog.AllowSomePages = true;
this.oPrintDialog.PrintToFile = true;
//
// btnSetup
//
this.btnSetup.Location = new System.Drawing.Point(52, 8);
this.btnSetup.Name = "btnSetup";
this.btnSetup.TabIndex = 1;
this.btnSetup.Text = "Page Setup";
this.btnSetup.Click += new
System.EventHandler(this.btnSetup_Click);
//
// PrinterCaps6
//
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.btnSetup,
this.btnPrint});
this.FormBorderStyle =
System.Windows.Forms.FormBorderStyle.FixedDialog;
this.Name = "PrinterCaps6";
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 PrinterCaps6());  
}  
  
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
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ghtBlue),  
Color.FromArgb(100,Color.Blue),LinearGradientMode.ForwardDiagonal);  
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));
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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 { //Couldn't 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 {  
//Ensure the correct PrinterSettings object is used  
oPageSettings.PrinterSettings = printDoc.PrinterSettings;  
//Assign PageSettings object to all pages  
printDoc.DefaultPageSettings = oPageSettings;  
ppDialog.Document = printDoc; ppDialog.ShowDialog(); }  
catch(Exception ex) { MessageBox.Show(ex.ToString()); } } }  
private void btnSetup_Click(object sender, System.EventArgs e)  
{ oPageSetup.PageSettings = oPageSettings;  
if(oPageSetup.ShowDialog() == DialogResult.OK) { oPageSettings  
= oPageSetup.PageSettings; } } } } [/csharp]
```