

PDF data remover tool in C# and ByteScout PDF Suite

Build PDF data remover tool in C#

:

Step-by-step instructions on how to do PDF data remover tool in C#

The example source codes on this page will display you how to make PDF data remover tool in C#. PDF data remover tool in C# can be applied with ByteScout PDF Suite. ByteScout PDF Suite is the bundle that provides six different SDK libraries to work with PDF from generating rich PDF reports to extracting data from PDF documents and converting them to HTML. This bundle includes PDF (Generator) SDK, PDF Renderer SDK, PDF Extractor SDK, PDF to HTML SDK, PDF Viewer SDK and PDF Generator SDK for Javascript.

If you want to quickly learn then these fast application programming interfaces of ByteScout PDF Suite for C# plus the guideline and the C# code below will help you quickly learn PDF data remover tool. To use PDF data remover tool in your C# project or application just copy & paste the code and then run your app! These C# sample examples can be used in one or many applications.

If you want to try other samples for C# then free trial version of ByteScout PDF Suite is available on our website.

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Source Code Files:

Form1.Designer.cs

```
namespace Sample_UI_Application
{
    partial class Form1
    {
        /// <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; otherwise, false if disposing of unmanaged resources.
        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();
            System.ComponentModel.ComponentResourceManager resources = new System.ComponentModel.ComponentResourceManager(typeof(Form1));
            this.pdfViewerControl1 = new Bytescout.PDFViewer.PDFViewerControl();
            this.toolStrip1 = new System.Windows.Forms.ToolStrip();
            this.tsbOpen = new System.Windows.Forms.ToolStripButton();
            this.btnProceed = new System.Windows.Forms.Button();
            this.tbSearchExpression = new System.Windows.Forms.TextBox();
            this.btnFind = new System.Windows.Forms.Button();
            this.groupBox1 = new System.Windows.Forms.GroupBox();
            this.cbRegex = new System.Windows.Forms.CheckBox();
            this.label1 = new System.Windows.Forms.Label();
            this.cbMaskRemovedText = new System.Windows.Forms.CheckBox();
            this.cbMakeUnsearchable = new System.Windows.Forms.CheckBox();
            this.toolTip1 = new System.Windows.Forms.ToolTip(this.components);
            this.toolStrip1.SuspendLayout();
            this.groupBox1.SuspendLayout();
            this.SuspendLayout();
            //
            // pdfViewerControl1
            //
            this.pdfViewerControl1.Anchor = ((System.Windows.Forms.AnchorStyles)((((System.Windows.Forms.AnchorStyles.Top | System.Windows.Forms.AnchorStyles.Bottom) && (System.Windows.Forms.AnchorStyles.Left | System.Windows.Forms.AnchorStyles.Right))))
        }
    }
}
```

```

| System.Windows.Forms.AnchorStyles.Right));
this.pdfViewerControl1.BackColor = System.Drawing.SystemColors.ButtonShadow;
this.pdfViewerControl1.BorderStyle = System.Windows.Forms.BorderStyle.Fixed3D;
this.pdfViewerControl1.CacheVisitedPages = true;
this.pdfViewerControl1.Location = new System.Drawing.Point(275, 28);
this.pdfViewerControl1.MouseMode = Bytescout.PDFViewer.MouseMode.Selection;
this.pdfViewerControl1.Name = "pdfViewerControl1";
this.pdfViewerControl1.RegistrationKey = null;
this.pdfViewerControl1.RegistrationName = null;
this.pdfViewerControl1.ShowToolBarFind = false;
this.pdfViewerControl1.Size = new System.Drawing.Size(866, 662);
this.pdfViewerControl1.TabIndex = 0;
this.pdfViewerControl1.PreProcessKey += new Bytescout.PDFViewer.PreProcessKeyEventArgs();
this.pdfViewerControl1.CurrentPageIndexChanged += new System.EventHandler<EventArgs>(this.pdfViewerControl1_CurrentPageIndexChanged);
this.pdfViewerControl1.SelectionChanged += new Bytescout.PDFViewer.SelectionChangedEventHandler(this.pdfViewerControl1_SelectionChanged);
this.pdfViewerControl1.ValidateContextMenu += new Bytescout.PDFViewer.ValidateContextMenuEventArgs();
//
// toolStrip1
//
this.toolStrip1.ImageScalingSize = new System.Drawing.Size(20, 20);
this.toolStrip1.Items.AddRange(new System.Windows.Forms.ToolStripItem[] {
this.tsbOpen});
this.toolStrip1.Location = new System.Drawing.Point(0, 0);
this.toolStrip1.Name = "toolStrip1";
this.toolStrip1.Size = new System.Drawing.Size(1153, 25);
this.toolStrip1.TabIndex = 1;
this.toolStrip1.Text = "toolStrip1";
//
// tsbOpen
//
this.tsbOpen.ImageTransparentColor = System.Drawing.Color.Magenta;
this.tsbOpen.Name = "tsbOpen";
this.tsbOpen.Size = new System.Drawing.Size(64, 22);
this.tsbOpen.Text = "&Open PDF";
this.tsbOpen.Click += new System.EventHandler(this.tsbOpen_Click);
//
// btnProceed
//
this.btnProceed.Location = new System.Drawing.Point(140, 207);
this.btnProceed.Margin = new System.Windows.Forms.Padding(2);
this.btnProceed.Name = "btnProceed";
this.btnProceed.Size = new System.Drawing.Size(129, 23);
this.btnProceed.TabIndex = 4;
this.btnProceed.Text = "Perform Removal";
this.btnProceed.UseVisualStyleBackColor = true;
this.btnProceed.Click += new System.EventHandler(this.BtnProceed_Click);
//
// tbSearchExpression
//
this.tbSearchExpression.Anchor = ((System.Windows.Forms.AnchorStyles)((System.Windows.Forms.AnchorStyles.Top | System.Windows.Forms.AnchorStyles.Right)));
this.tbSearchExpression.Location = new System.Drawing.Point(68, 19);
this.tbSearchExpression.Name = "tbSearchExpression";
this.tbSearchExpression.Size = new System.Drawing.Size(183, 20);
this.tbSearchExpression.TabIndex = 0;
//
// btnFind
//
this.btnFind.Anchor = ((System.Windows.Forms.AnchorStyles)((System.Windows.Forms.AnchorStyles.Top | System.Windows.Forms.AnchorStyles.Right)));
this.btnFind.Location = new System.Drawing.Point(176, 69);

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this.btnFind.Name = "btnFind";
this.btnFind.Size = new System.Drawing.Size(75, 23);
this.btnFind.TabIndex = 2;
this.btnFind.Text = "Find All";
this.btnFind.UseVisualStyleBackColor = true;
this.btnFind.Click += new System.EventHandler(this.BtnFindAll_Click);
//
// groupBox1
//
this.groupBox1.Controls.Add(this.cbRegex);
this.groupBox1.Controls.Add(this.label1);
this.groupBox1.Controls.Add(this.tbSearchExpression);
this.groupBox1.Controls.Add(this.btnFind);
this.groupBox1.Location = new System.Drawing.Point(12, 28);
this.groupBox1.Name = "groupBox1";
this.groupBox1.Size = new System.Drawing.Size(257, 98);
this.groupBox1.TabIndex = 1;
this.groupBox1.TabStop = false;
this.groupBox1.Text = "Find";
//
// cbRegex
//
this.cbRegex.AutoSize = true;
this.cbRegex.Location = new System.Drawing.Point(9, 45);
this.cbRegex.Name = "cbRegex";
this.cbRegex.Size = new System.Drawing.Size(144, 17);
this.cbRegex.TabIndex = 1;
this.cbRegex.Text = "Use Regular Expressions";
this.cbRegex.UseVisualStyleBackColor = true;
//
// label1
//
this.label1.AutoSize = true;
this.label1.Location = new System.Drawing.Point(6, 22);
this.label1.Name = "label1";
this.label1.Size = new System.Drawing.Size(56, 13);
this.label1.TabIndex = 6;
this.label1.Text = "Find what:";
//
// cbMaskRemovedText
//
this.cbMaskRemovedText.AutoSize = true;
this.cbMaskRemovedText.Location = new System.Drawing.Point(12, 151);
this.cbMaskRemovedText.Name = "cbMaskRemovedText";
this.cbMaskRemovedText.Size = new System.Drawing.Size(238, 17);
this.cbMaskRemovedText.TabIndex = 2;
this.cbMaskRemovedText.Text = "Draw black rectangles over the removed text";
this.toolTip1.SetToolTip(this.cbMaskRemovedText, "Mask removed text fragments like \"censored\".");
this.cbMaskRemovedText.UseVisualStyleBackColor = true;
//
// cbMakeUnsearchable
//
this.cbMakeUnsearchable.AutoSize = true;
this.cbMakeUnsearchable.Location = new System.Drawing.Point(12, 174);
this.cbMakeUnsearchable.Name = "cbMakeUnsearchable";
this.cbMakeUnsearchable.Size = new System.Drawing.Size(221, 17);
this.cbMakeUnsearchable.TabIndex = 3;
this.cbMakeUnsearchable.Text = "Make the output document unsearchable";
this.toolTip1.SetToolTip(this.cbMakeUnsearchable, "Make the output document

```

```

" with rendered images.");
    this.cbMakeUnsearchable.UseVisualStyleBackColor = true;
    //
    // Form1
    //
    this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);
    this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
    this.ClientSize = new System.Drawing.Size(1153, 702);
    this.Controls.Add(this.cbMakeUnsearchable);
    this.Controls.Add(this.cbMaskRemovedText);
    this.Controls.Add(this.groupBox1);
    this.Controls.Add(this.btnProceed);
    this.Controls.Add(this.pdfViewerControl1);
    this.Controls.Add(this.toolStrip1);
    this.Icon = ((System.Drawing.Icon)(resources.GetObject("$this.Icon")));
    this.Name = "Form1";
    this.Text = "PDF Data Remover Tool";
    this.toolStrip1.ResumeLayout(false);
    this.toolStrip1.PerformLayout();
    this.groupBox1.ResumeLayout(false);
    this.groupBox1.PerformLayout();
    this.ResumeLayout(false);
    this.PerformLayout();

}

#endregion

private Bytescout.PDFViewer.PDFViewerControl pdfViewerControl1;
private System.Windows.Forms.ToolStrip toolStrip1;
private System.Windows.Forms.ToolStripButton tsbOpen;
private System.Windows.Forms.Button btnProceed;
private System.Windows.Forms.TextBox tbSearchExpression;
private System.Windows.Forms.Button btnFind;
private System.Windows.Forms.GroupBox groupBox1;
private System.Windows.Forms.CheckBox cbRegex;
private System.Windows.Forms.Label label1;
private System.Windows.Forms.CheckBox cbMaskRemovedText;
private System.Windows.Forms.CheckBox cbMakeUnsearchable;
private System.Windows.Forms.ToolTip toolTip1;
}
}

```

Form1.cs

```

using System;
using System.Collections.Generic;
using System.Diagnostics;
using System.Drawing;

```

```

using System.IO;
using System.Linq;
using System.Windows.Forms;
using Bytescout.PDFExtractor;
using Bytescout.PDFViewer;

namespace Sample_UI_Application
{
    public partial class Form1 : Form
    {
        // Keep selected rectangles for all document pages
        Dictionary<int, RectangleF[]> _foundTextRectangles = new Dictionary<int, Rectan

        public Form1()
        {
            InitializeComponent();

            // Tune PDF Viewer control
            pdfViewerControl1.MouseMode = MouseMode.Selection;
            pdfViewerControl1.MultiSelectionMode = true;
            pdfViewerControl1.AllowResizeSelectionRectangles = true;
            pdfViewerControl1.ShowResizeHandlesForActiveSelectionOnly = true;
            pdfViewerControl1.ClearSelectionOnClick = false;

            // Load document into PDF viewer
            pdfViewerControl1.InputFile = "sample.pdf";
        }

        private void tsbOpen_Click(object sender, EventArgs e)
        {
            using (OpenFileDialog openFileDialog = new OpenFileDialog())
            {
                openFileDialog.Title = @"Open PDF Document";
                openFileDialog.Filter = @"PDF Files (*.pdf)|*.pdf|All Files|*.*";

                if (openFileDialog.ShowDialog() == DialogResult.OK)
                {
                    this.Text = openFileDialog.FileName;

                    Cursor = Cursors.WaitCursor;

                    try
                    {
                        // Open file in PDF Viewer control
                        pdfViewerControl1.InputFile = openFileDialog.FileName;
                    }
                    catch (Exception exception)
                    {
                        MessageBox.Show(exception.Message);
                    }
                    finally
                    {
                        Cursor = Cursors.Default;
                    }
                }
            }
        }

        private void PdfViewerControl1_SelectionChanged(object sender, SelectionChange

```

```

{
    // Store selection changes
    if (selectionChange != SelectionChange.Cleared)
    {
        _foundTextRectangles[pdfViewerControl1.CurrentPageIndex] = pdfViewerControl1.SelectionRectangles;
    }
}

private void PdfViewerControl1_CurrentPageIndexChanged(object sender, EventArgs e)
{
    // Show stored selection on page switching
    if (_foundTextRectangles.ContainsKey(pdfViewerControl1.CurrentPageIndex))
    {
        pdfViewerControl1.SelectionInPoints = _foundTextRectangles[pdfViewerControl1.CurrentPageIndex];
    }
}

private void PdfViewerControl1_ValidateContextMenu(object source, ContextMenuStrip menu)
{
    // Add context menu item to delete active selection
    menu.Items.Insert(0, new ToolStripMenuItem("Delete active selection", null, new EventHandler(DeleteActiveSelection)));
    {
        int activeSelectionIndex = pdfViewerControl1.ActiveSelectionIndex;
        if (activeSelectionIndex != -1)
            pdfViewerControl1.RemoveSelectionAt(activeSelectionIndex);
    }
    menu.Items.Insert(1, new ToolStripSeparator());
}

private void PdfViewerControl1_PreProcessKey(object source, Keys keyData, ref bool handled)
{
    // `Delete` key will delete active selection
    if (keyData == Keys.Delete)
    {
        int activeSelectionIndex = pdfViewerControl1.ActiveSelectionIndex;
        if (activeSelectionIndex != -1)
        {
            pdfViewerControl1.RemoveSelectionAt(activeSelectionIndex);
            handled = true;
        }
    }
}

private void BtnFindAll_Click(object sender, EventArgs e)
{
    if (tbSearchExpression.Text.Length > 1)
    {
        // Prepare TextExtractor
        using (TextExtractor textExtractor = new TextExtractor("demo", "demo"))
        {
            // Load document into TextExtractor
            textExtractor.LoadDocumentFromFile(pdfViewerControl1.InputFile);

            // Set options from UI
            textExtractor.RegexSearch = cbRegex.Checked;
            textExtractor.WordMatchingMode = WordMatchingMode.None;

            // Search for text in all pages and store rectangles of found pieces
            for (int pageIndex = 0; pageIndex < textExtractor.GetPageCount(); pageIndex++)
            {
                textExtractor.SearchForText(tbSearchExpression.Text, pageIndex);
            }
        }
    }
}

```

```

        {
            ISearchResult[] searchResults = textExtractor.FindAll(pageIndex);
            if (searchResults.Length > 0)
            {
                _foundTextRectangles[pageIndex] = searchResults.Select(sea
            }
        }
    }

    // Select found rectangles in PDF Viewer
    if (_foundTextRectangles.ContainsKey(pdfViewerControl1.CurrentPageIndex)
        pdfViewerControl1.SelectionInPoints = _foundTextRectangles[pdfViewe
    }
    else
    {
        MessageBox.Show(@"Try larger search string");
    }
}

private void BtnProceed_Click(object sender, EventArgs e)
{
    var outputFile = "output.pdf";
    MemoryStream tempStream = new MemoryStream();

    // Create `Bytescout.PDFExtractor.Remover2` instance
    using (Remover2 remover = new Remover2("demo", "demo"))
    {
        // Load document into remover
        remover.LoadDocumentFromFile(pdfViewerControl1.InputFile);

        // Set options from UI
        remover.MaskRemovedText = cbMaskRemovedText.Checked;
        remover.MakePDFUnsearchable = cbMakeUnsearchable.Checked;

        // Add fragments to remove
        foreach (KeyValuePair<int, RectangleF[]> keyValuePair in _foundTextRec
            remover.AddTextToRemove(keyValuePair.Key, keyValuePair.Value);

        // Perform removal and save result document to file
        remover.PerformRemoval(outputFile);
    }

    // Open output PDF file in default associated application
    Process.Start(outputFile);
}
}
}
}

```

PdfDataRemoverTool.sln

```

Microsoft Visual Studio Solution File, Format Version 12.00
# Visual Studio Version 16
VisualStudioVersion = 16.0.29025.244
MinimumVisualStudioVersion = 10.0.40219.1
Project("{FAE04EC0-301F-11D3-BF4B-00C04F79EFBC}") = "PdfDataRemoverTool", "PdfDataRemoverTool.sln"
EndProject
Global
    GlobalSection(SolutionConfigurationPlatforms) = preSolution
        Debug|Any CPU = Debug|Any CPU
        Release|Any CPU = Release|Any CPU
    EndGlobalSection
    GlobalSection(ProjectConfigurationPlatforms) = postSolution
        {0DB74CC3-1DD8-4A58-94FC-CA9A60E2F8A2}.Debug|Any CPU.ActiveCfg = Debug|Any CPU
        {0DB74CC3-1DD8-4A58-94FC-CA9A60E2F8A2}.Debug|Any CPU.Build.0 = Debug|Any CPU
        {0DB74CC3-1DD8-4A58-94FC-CA9A60E2F8A2}.Release|Any CPU.ActiveCfg = Release|Any CPU
        {0DB74CC3-1DD8-4A58-94FC-CA9A60E2F8A2}.Release|Any CPU.Build.0 = Release|Any CPU
    EndGlobalSection
    GlobalSection(SolutionProperties) = preSolution
        HideSolutionNode = FALSE
    EndGlobalSection
    GlobalSection(ExtensibilityGlobals) = postSolution
        SolutionGuid = {6A423F77-480F-401A-9016-BED7CAE557A3}
    EndGlobalSection
EndGlobal

```

Program.cs

```

using System;
using System.Collections.Generic;
using System.Windows.Forms;

namespace Sample_UI_Application
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        [STAThread]
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new Form1());
        }
    }
}

```

VIDEO

<https://www.youtube.com/watch?v=NEwNs2b9YN8>

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