Charting.aspx

```
1 <%@ Page Language="C#" Src="Charting.aspx.cs" Inherits="Web_CSharp.GeneratorExamples.Charting" %>
```

Charting.aspx.cs

```
using System;
using ceTe.DynamicPDF;
using ceTe.DynamicPDF.PageElements;
using ceTe.DynamicPDF.PageElements.Charting;
using ceTe.DynamicPDF.PageElements.Charting.Axes;
using ceTe.DynamicPDF.PageElements.Charting.Series;


namespace Web_CSharp.GeneratorExamples
{
    public class Charting : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            // Create a Document
            ceTe.DynamicPDF.Document document = new ceTe.DynamicPDF.Document();
            document.Creator = "Charting.aspx";
            document.Author = "ceTe Software";
            document.Title = "All Types Of Charts";
            AddCharts(document);

            // Output the PDF
            document.DrawToWeb("MyDocument.pdf");
        }
        private void AddCharts(Document document)
        {
            // Create a template and assign it to the document
            Template documentTemplate = new Template();
            document.Template = documentTemplate;
            documentTemplate.Elements.Add(new ceTe.DynamicPDF.PageElements.PageNumberingLabel(
                "Page %%CP%% of %%TP%%", 100, 525, 512, 12, Font.Helvetica,
                12, TextAlign.Center));

            // Create a Page
            ceTe.DynamicPDF.Page page1 = new ceTe.DynamicPDF.Page(PageSize.Letter, PageOrientation.Landscape, 35);
            ceTe.DynamicPDF.Page page2 = new ceTe.DynamicPDF.Page(PageSize.Letter, PageOrientation.Landscape);

            // Adds charts to the Page
            AddAreaChart(page1.Elements, 0, 40);
            AddPieChart(page1.Elements, 0, 280);
            AddLineChart(page1.Elements, 250, 40);
            AddBarChart(page1.Elements, 250, 280);
            AddColumnChart(page1.Elements, 500, 40);
            AddXYScatterChart(page1.Elements, 500, 280);
            AddMultiTypeSeriesChart(page2.Elements, 20, 50);

            // Add Pages to the document
            document.Pages.Add(page2);
            document.Pages.Add(page1);
        }
```

Charting.aspx.cs

```
51          private void AddAreaChart(Group elements, float x, float y)
52          {
53              AddCaptionAndRectangle(elements, "Stacked Area Chart", x, y, 225, 225);
54
55              // Create a chart
56              Chart chart = new Chart(x + 10, y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black);
57
58              // Create a plot area
59              PlotArea plotArea = chart.PrimaryPlotArea;
60
61              // Create header title and add it to the chart
62              Title title1 = new Title("Website Visitors");
63              chart.HeaderTitles.Add(title1);
64
65              // Create indexed stacked area series elements and add values to it
66              IndexedStackedAreaSeriesElement seriesElement1 = new IndexedStackedAreaSeriesElement("Website A");
67              seriesElement1.Values.Add(new float[] { 5, 7, 9, 6 });
68              IndexedStackedAreaSeriesElement seriesElement2 = new IndexedStackedAreaSeriesElement("Website B");
69              seriesElement2.Values.Add(new float[] { 4, 2, 5, 8 });
70              IndexedStackedAreaSeriesElement seriesElement3 = new IndexedStackedAreaSeriesElement("Website C");
71              seriesElement3.Values.Add(new float[] { 2, 4, 6, 9 });
72
73              // Create autogradient and assign it to series
74              AutoGradient autogradient1 = new AutoGradient(90f, CmykColor.Red, CmykColor.IndianRed);
75              seriesElement1.Color = autogradient1;
76              AutoGradient autogradient2 = new AutoGradient(90f, CmykColor.Green, CmykColor.YellowGreen);
77              seriesElement2.Color = autogradient2;
78              AutoGradient autogradient3 = new AutoGradient(120f, CmykColor.Blue, CmykColor.LightBlue);
79              seriesElement3.Color = autogradient3;
80
81              // Create a Indexed Stacked Area Series
82              IndexedStackedAreaSeries areaSeries = new IndexedStackedAreaSeries();
83
84              // Add indexed stacked area series elements to the Indexed Stacked Area Series
85              areaSeries.Add(seriesElement1);
86              areaSeries.Add(seriesElement2);
87              areaSeries.Add(seriesElement3);
88
89              // Add series to the plot area
90              plotArea.Series.Add(areaSeries);
91
92              // Create a title and add it to the YAxis
93              Title lTitle = new Title("Visitors (in millions)");
94              areaSeries.YAxis.Titles.Add(lTitle);
95
96              //Adding AxisLabels to the XAxis
97              areaSeries.XAxis.Labels.Add(new IndexedXAxisLabel("Q1", 0));
98              areaSeries.XAxis.Labels.Add(new IndexedXAxisLabel("Q2", 1));
99              areaSeries.XAxis.Labels.Add(new IndexedXAxisLabel("Q3", 2));
100             areaSeries.XAxis.Labels.Add(new IndexedXAxisLabel("Q4", 3));
```

```
            chart.Legends[0].Visible = false;
            elements.Add(chart);
        }
        private void AddLineChart(Group elements, float x, float y)
        {
            AddCaptionAndRectangle(elements, "Line Chart", x, y, 225, 225);

            // Create a chart
            Chart chart = new Chart(x + 10, y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black);

            // Create a plot area
            PlotArea plotArea = chart.PrimaryPlotArea;

            // Create header title and add it to the chart
            Title title1 = new Title("Website Visitors");
            chart.HeaderTitles.Add(title1);

            // Create a indexed line series and add values to it
            IndexedLineSeries lineSeries1 = new IndexedLineSeries("Website A");
            lineSeries1.Values.Add(new float[] { 5, 7, 9, 6 });
            IndexedLineSeries lineSeries2 = new IndexedLineSeries("Website B");
            lineSeries2.Values.Add(new float[] { 4, 2, 5, 8 });
            IndexedLineSeries lineSeries3 = new IndexedLineSeries("Website C");
            lineSeries3.Values.Add(new float[] { 2, 4, 6, 9 });

            // Add indexed line series to the plot area
            plotArea.Series.Add(lineSeries1);
            plotArea.Series.Add(lineSeries2);
            plotArea.Series.Add(lineSeries3);

            // Create a title and add it to the yaxis
            Title lTitle = new Title("Visitors (in millions)");
            lineSeries1.YAxis.Titles.Add(lTitle);

            //Adding AxisLabels to the XAxis
            lineSeries1.XAxis.Labels.Add(new IndexedXAxisLabel("Q1", 0));
            lineSeries1.XAxis.Labels.Add(new IndexedXAxisLabel("Q2", 1));
            lineSeries1.XAxis.Labels.Add(new IndexedXAxisLabel("Q3", 2));
            lineSeries1.XAxis.Labels.Add(new IndexedXAxisLabel("Q4", 3));
            chart.Legends[0].Visible = false;
            elements.Add(chart);
        }
        private void AddPieChart(Group elements, float x, float y)
        {
            AddCaptionAndRectangle(elements, "Pie Chart", x, y, 225, 225);

            // Create a chart
            Chart chart = new Chart(x + 10, y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black);

            // Add a plot area to the chart
```

```
            PlotArea plotArea = chart.PlotAreas.Add(50, 50, 300, 300);

            // Create the Header title and add it to the chart
            Title tTitle = new Title("Website Visitors (in millions)");
            chart.HeaderTitles.Add(tTitle);

            // Create a scalar datalabel
            ScalarDataLabel da = new ScalarDataLabel(true, false, false);

            // Create autogradient colors
            AutoGradient autogradient1 = new AutoGradient(90f, CmykColor.Red, CmykColor.IndianRed);
            AutoGradient autogradient2 = new AutoGradient(90f, CmykColor.Green, CmykColor.YellowGreen);
            AutoGradient autogradient3 = new AutoGradient(90f, CmykColor.Blue, CmykColor.LightBlue);

            // Create a pie series
            PieSeries pieSeries = new PieSeries();

            // Set scalar datalabel to the pie series
            pieSeries.DataLabel = da;

            // Add series to the plot area
            plotArea.Series.Add(pieSeries);

            //Add pie series elements to the pie series
            pieSeries.Elements.Add(27, "Website A");
            pieSeries.Elements.Add(19, "Website B");
            pieSeries.Elements.Add(21, "Website C");

            // Assign autogradient colors to series elements
            pieSeries.Elements[0].Color = autogradient1;
            pieSeries.Elements[1].Color = autogradient2;
            pieSeries.Elements[2].Color = autogradient3;
            chart.Legends[0].Visible = false;
            elements.Add(chart);
        }
        private void AddBarChart(Group elements, float x, float y)
        {
            AddCaptionAndRectangle(elements, "Bar Chart", x, y, 225, 225);

            // Create a chart
            Chart chart = new Chart(x + 10, y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black);

            // Create a plot area
            PlotArea plotArea = chart.PrimaryPlotArea;

            // Create header title and add it to the chart
            Title title1 = new Title("Website Visitors");
            chart.HeaderTitles.Add(title1);

            // Create a indexed bar series and add values to it
```

```
            IndexedBarSeries barSeries1 = new IndexedBarSeries("Website A");
            barSeries1.Values.Add(new float[] { 5, 7, 9, 6 });
            IndexedBarSeries barSeries2 = new IndexedBarSeries("Website B");
            barSeries2.Values.Add(new float[] { 4, 2, 5, 8 });
            IndexedBarSeries barSeries3 = new IndexedBarSeries("Website C");
            barSeries3.Values.Add(new float[] { 2, 4, 6, 9 });

            // Create autogradient and assign it to series
            AutoGradient autogradient1 = new AutoGradient(180f, CmykColor.Red, CmykColor.IndianRed);
            barSeries1.Color = autogradient1;
            AutoGradient autogradient2 = new AutoGradient(180f, CmykColor.Green, CmykColor.YellowGreen);
            barSeries2.Color = autogradient2;
            AutoGradient autogradient3 = new AutoGradient(180f, CmykColor.Blue, CmykColor.LightBlue);
            barSeries3.Color = autogradient3;

            // Add indexed bar series to the plot area
            plotArea.Series.Add(barSeries1);
            plotArea.Series.Add(barSeries2);
            plotArea.Series.Add(barSeries3);

            // Create a title and add it to the xaxis
            Title lTitle = new Title("Visitors (in millions)");
            barSeries1.XAxis.Titles.Add(lTitle);

            //Adding AxisLabels to the yAxis
            barSeries1.YAxis.Labels.Add(new IndexedYAxisLabel("Q1", 0));
            barSeries1.YAxis.Labels.Add(new IndexedYAxisLabel("Q2", 1));
            barSeries1.YAxis.Labels.Add(new IndexedYAxisLabel("Q3", 2));
            barSeries1.YAxis.Labels.Add(new IndexedYAxisLabel("Q4", 3));
            chart.Legends[0].Visible = false;
            elements.Add(chart);
        }
        private void AddColumnChart(Group elements, float x, float y)
        {
            AddCaptionAndRectangle(elements, "100% Stacked Column Chart", x, y, 225, 225);

            // Create a chart
            Chart chart = new Chart(x + 10, y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black);

            // Create a plot area
            PlotArea plotArea = chart.PrimaryPlotArea;

            // Create header titles and add it to the chart
            Title title1 = new Title("Website Visitors");
            chart.HeaderTitles.Add(title1);

            // Create a indexed 100% column series elements and add values to it
            Indexed100PercentStackedColumnSeriesElement seriesElement1 = new
Indexed100PercentStackedColumnSeriesElement("Website A");
            seriesElement1.Values.Add(new float[] { 5, 7, 9, 6 });
```

```
250             Indexed100PercentStackedColumnSeriesElement seriesElement2 = new

251             seriesElement2.Values.Add(new float[] { 4, 2, 5, 8 });
252             Indexed100PercentStackedColumnSeriesElement seriesElement3 = new
    Indexed100PercentStackedColumnSeriesElement("Website C");
253             seriesElement3.Values.Add(new float[] { 2, 4, 6, 9 });
254
255             // Create a Indexed 100% Stacked Column Series
256             Indexed100PercentStackedColumnSeries columnSeries = new Indexed100PercentStackedColumnSeries();
257
258             // Add indexed 100% column series elements to the Indexed 100% Stacked Column Series
259             columnSeries.Add(seriesElement1);
260             columnSeries.Add(seriesElement2);
261             columnSeries.Add(seriesElement3);
262
263             // Add series to the plot area
264             plotArea.Series.Add(columnSeries);
265
266             // Create a title and add it to the yaxis
267             Title lTitle = new Title("Visitors (in millions)");
268             columnSeries.YAxis.Titles.Add(lTitle);
269
270             //Adding AxisLabels to the XAxis
271             columnSeries.XAxis.Labels.Add(new IndexedXAxisLabel("Q1", 0));
272             columnSeries.XAxis.Labels.Add(new IndexedXAxisLabel("Q2", 1));
273             columnSeries.XAxis.Labels.Add(new IndexedXAxisLabel("Q3", 2));
274             columnSeries.XAxis.Labels.Add(new IndexedXAxisLabel("Q4", 3));
275             chart.Legends[0].Visible = false;
276             elements.Add(chart);
277         }
278         private void AddXYScatterChart(Group elements, float x, float y)
279         {
280             AddCaptionAndRectangle(elements, "XYScatter Chart", x, y, 225, 225);
281
282             // Create a chart
283             Chart chart = new Chart(x + 10, y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black);
284
285             // Add a plot Area to the chart
286             PlotArea plotArea = chart.PrimaryPlotArea;
287
288             // Create a Header title and add it to the chart
289             Title tTitle = new Title("Player Height and Weight");
290             chart.HeaderTitles.Add(tTitle);
291
292             // Create a xyScatter series and add values to it
293             XYScatterSeries xyScatterSeries1 = new XYScatterSeries("Team A");
294             xyScatterSeries1.Values.Add(112, 55);
295             xyScatterSeries1.Values.Add(125, 60);
296             xyScatterSeries1.Values.Add(138, 68);
297             xyScatterSeries1.Values.Add(150, 73);
```

```
            xyScatterSeries1.Values.Add(172, 80);
            XYScatterSeries xyScatterSeries2 = new XYScatterSeries("Team B");
            xyScatterSeries2.Values.Add(110, 54);
            xyScatterSeries2.Values.Add(128, 62);
            xyScatterSeries2.Values.Add(140, 70);
            xyScatterSeries2.Values.Add(155, 75);
            xyScatterSeries2.Values.Add(170, 80);

            // Add xyScatter series to the plot Area
            plotArea.Series.Add(xyScatterSeries1);
            plotArea.Series.Add(xyScatterSeries2);

            // Create axis titles and add it to the axis
            Title title1 = new Title("Height (inches)");
            Title title2 = new Title("Weight (pounds)");
            xyScatterSeries1.YAxis.Titles.Add(title1);
            xyScatterSeries1.XAxis.Titles.Add(title2);

            // Set XAxis min  value
            xyScatterSeries1.XAxis.Min = 50;

            // Set YAxis min  value
            xyScatterSeries1.YAxis.Min = 100;
            chart.Legends[0].Visible = false;
            elements.Add(chart);
        }
        private void AddMultiTypeSeriesChart(Group elements, float x, float y)
        {
            AddCaptionAndRectangle(elements, "Plot Area With Different Kinds of Series and Multiple Axis ", x, y, 650, 410);

            // Create a chart
            Chart chart = new Chart(x + 25, y + 37, 600, 350);

            // Create a Auto gradient and set it to chart back ground color
            AutoGradient autogradient = new AutoGradient(90f, CmykColor.LightYellow, CmykColor.LightSkyBlue);
            chart.BackgroundColor = autogradient;

            // Create a plot area
            PlotArea plotArea = chart.PrimaryPlotArea;

            // Create header titles and add it to the chart
            Title title1 = new Title("Company Sales and Website Visitors ");
            title1.Align = Align.Left;
            chart.HeaderTitles.Add(title1);

            // Create a indexed line series and add values to it
            IndexedLineSeries lineSeries1 = new IndexedLineSeries("Website A Visitors");
            lineSeries1.Values.Add(new float[] { 1.5f, 8, 7.5f, 5.5f });
            lineSeries1.Color = RgbColor.DarkBlue;
            IndexedLineSeries lineSeries2 = new IndexedLineSeries("Website B Visitors");
```

```
348             lineSeries2.Color = RgbColor.LimeGreen;
349             lineSeries2.Values.Add(new float[] { 4, 3, 7, 7.5f });
350
351             // Create markers and add it to the series
352             Marker marker1 = Marker.GetTriangle(7);
353             lineSeries1.Marker = marker1;
354             Marker marker2 = Marker.GetCircle(7);
355             lineSeries2.Marker = marker2;
356
357             // Add indexed line series to the plot area
358             plotArea.Series.Add(lineSeries1);
359             plotArea.Series.Add(lineSeries2);
360
361             // Create a NumericYAxis and a title to it
362             NumericYAxis numericyaxis1 = new NumericYAxis();
363             numericyaxis1.AnchorType = YAxisAnchorType.Right;
364             numericyaxis1.Titles.Add(new Title("Sales (in $ millions)"));
365             numericyaxis1.Interval = 1;
366
367             // Create a indexed column series and add values to it
368             IndexedColumnSeries columnSeries1 = new IndexedColumnSeries("Company A Sales", numericyaxis1);
369             columnSeries1.Values.Add(new float[] { 2, 10, 14, 17 });
370             columnSeries1.Color = RgbColor.Blue;
371             IndexedColumnSeries columnSeries2 = new IndexedColumnSeries("Company B Sales", numericyaxis1);
372             columnSeries2.Color = RgbColor.Lime;
373             columnSeries2.Values.Add(new float[] { 7, 4, 10, 15 });
374
375             // Create a bar column value position data label
376             BarColumnValuePositionDataLabel barColumnValuePositionDataLabel = new BarColumnValuePositionDataLabel(true, true,
    false);
377             columnSeries1.DataLabel = barColumnValuePositionDataLabel;
378             barColumnValuePositionDataLabel.FontSize = 7;
379             columnSeries1.DataLabel.Prefix = "(";
380             columnSeries1.DataLabel.Suffix = ")";
381             columnSeries2.DataLabel = barColumnValuePositionDataLabel;
382
383             // Add indexed column series to the plot area
384             plotArea.Series.Add(columnSeries1);
385             plotArea.Series.Add(columnSeries2);
386             YAxisGridLines minorGridLines = new YAxisGridLines();
387             minorGridLines.LineStyle = LineStyle.Dots;
388             plotArea.YAxes.DefaultNumericAxis.MajorGridLines = new YAxisGridLines();
389             plotArea.YAxes.DefaultNumericAxis.MinorGridLines = minorGridLines;
390             plotArea.XAxes.DefaultIndexedAxis.MajorGridLines = new XAxisGridLines();
391             plotArea.YAxes.DefaultNumericAxis.MinorTickMarks = new YAxisTickMarks();
392             plotArea.YAxes.DefaultNumericAxis.MajorTickMarks = new YAxisTickMarks();
393
394             // Add title to Yaxis
395             lineSeries1.YAxis.Titles.Add(new Title("Visitors (in millions)"));
396
```

```
            //Adding AxisLabels to the XAxis
            columnSeries1.XAxis.Labels.Add(new IndexedXAxisLabel("Q1", 0));
            columnSeries1.XAxis.Labels.Add(new IndexedXAxisLabel("Q2", 1));
            columnSeries1.XAxis.Labels.Add(new IndexedXAxisLabel("Q3", 2));
            columnSeries1.XAxis.Labels.Add(new IndexedXAxisLabel("Q4", 3));
            chart.Legends[0].BorderStyle = LineStyle.Dots;
            chart.Legends[0].BorderColor = RgbColor.Black;
            chart.Legends[0].BackgroundColor = CmykColor.Lavender;
            elements.Add(chart);
        }
        private void AddCaptionAndRectangle(Group pageElements, string caption, float x, float y, float width, float height)
        {
            // Adds a rectangle and caption to the pageElements
            Rectangle rectangle = new Rectangle(x, y + 15, width, height - 15);
            Label captionLabel = new Label(caption, x, y, 300, 10, Font.HelveticaBold, 10);
            pageElements.Add(rectangle);
            pageElements.Add(captionLabel);
        }
    }
}
```