# QR-code generator

# Preparation

## **NuGet Package**

First of all, install the next NuGet Package with the NuGet Manager:



Or

With the Package Manager Console:

"Install-Package Zen.Barcode.Core"

## Import in the file

Use a using to use the package Using Zen.Barcode;

# Resize of the image

An Image object does not give the ability to adjust the height/width, therefore it needs to be converted to a Bitmap and cast back to an image after resizing. I found this method online.

```
QrCode = ResizeImage(QrCode, new Size(maxWidth, maxWidth));
private static Image ResizeImage(Image imgToResize, Size size)
   //Get the image current width
   int sourceWidth = imgToResize.Width;
   //Get the image current height
   int sourceHeight = imgToResize.Height;
   float nPercent = 0;
   float nPercentW = 0;
   float nPercentH = 0;
   //Calulate width with new desired size
   nPercentW = ((float)size.Width / (float)sourceWidth);
   //Calculate height with new desired size
   nPercentH = ((float)size.Height / (float)sourceHeight);
   if (nPercentH < nPercentW)</pre>
        nPercent = nPercentH;
        nPercent = nPercentW;
   //New Width
   int destWidth = (int)(sourceWidth * nPercent);
    //New Height
   int destHeight = (int)(sourceHeight * nPercent);
   Bitmap b = new Bitmap(destWidth, destHeight);
   Graphics g = Graphics.FromImage((System.Drawing.Image)b);
   g.InterpolationMode = InterpolationMode.HighQualityBicubic;
   // Draw image with new width and height
   g.DrawImage(imgToResize, 0, 0, destWidth, destHeight);
   g.Dispose();
   return b;
```

# **QR** creation

#### Standard QR

```
Image QrCode = BarcodeDrawFactory.CodeQr.Draw("URLTEKST", 50);
```

The 50 is the maxBarHeight, the example doesn't explain exactly what this does and changing the value doesn't change much. Example does suggest filling in 50 here.

# Saving the QRcode

## SaveDialog

You can also work with a savedialog (windows forms control), add it to your form first.

(Control appears at the bottom of the editor and must be used in the code)

The object Image has a .Save() method

```
saveFileDialog1.Filter = "PNG Files (*.png)|*.png|JPG Files (*.jpg)|*.jpg|JPEG Files
(*.jpeg)|*.jpeg";
saveFileDialog1.AddExtension = true;
saveFileDialog1.FileName = "";
if (saveFileDialog1.ShowDialog() == DialogResult.OK)
{
          QrCode.Save(saveFileDialog1.FileName);
}
```

Filter: The filter the extension that will be chosen.

The pattern works as follows:

```
"Name option 1 | *.extentiontype 1 | Name option 2 | *.extentiontype 2"
```

If you enter \*.\* as the extension type, all the files will be displayed and the file will not have an extension.

**AddExtension:** With this property you can choose if you want the extension to be automatically added to the fileName.

**FileName:** The name (and therefore also the location) of the file. make this empty again, otherwise the whole file location will appear as a name when you want to save the QR again.

## Clipboard

Once the QR has been generated it can be copied immediately.

```
Clipboard.SetImage(QrCode);
```