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1  function message = decode_qr(img)
2  % DECODE_QR Finds QR code and the message embedded
3  %
4  % Given an image, locates a QR code embedded in the image, and
   extracts the
5  % string message embedded within. With slight modification this
   code can
6  % extract the structural information (see commented out
   ResultParser
7  % lines).
8  %
9  % Note that this function requires zxing
   (http://code.google.com/p/zxing/)
10 % installed, and core/core.jar, javase/javase.jar on the
   classpath
11 %
12 %   Parameters:
13 %
14 %       img - image containig QR code
15 %
16 %   Returns:
17 %
18 %       message - embedded message (or empty string if QR code
   not found)
19
20 %% AUTHOR      : Lior Shapira
21 %% $DATE       : 02-Nov-2010 11:29:03 $
22 %% $Revision   : 1.00 $
23 %% DEVELOPED   : 7.11.0.584 (R2010b)
24 %% FILENAME    : decode_qr.m
25
26 % import com.google.zxing.qrcode.QRCodeReader;
27 % import
   com.google.zxing.client.j2se.BufferedImageLuminanceSource;
28 % import com.google.zxing.BinaryBitmap;
29 % import com.google.zxing.common.HybridBinarizer;
30
31 import com.google.zxing.*;
32
33 jimg = im2java2d(img);
34 source = client.j2se.BufferedImageLuminanceSource(jimg);
35
36 bitmap = BinaryBitmap(common.HybridBinarizer(source));
37
38 qr_reader = qrcode.QRCodeReader;
39 try
40     result = qr_reader.decode(bitmap);
41     %parsedResult = ResultParser.parseResult(result);
42     message = char(result.getText());

```

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43 catch
44     message = [];
45 end
46
47 clear source;
48 clear jimg;
49 clear bitmap;
50
51 % Created with NEWFCN.m by Frank González-Morphy
52 % Contact...: frank.gonzalez-morphy@mathworks.de
53 % ===== EOF ===== [decode_qr.m] =====
54
```