

Copilot

Certainly! Let's break down the code step by step:

1. Importing Libraries:

- `import qrcode`: This line imports the qrcode library, which allows us to create QR codes.
- `from PIL import Image`: We also import the Image module from the Python Imaging Library (PIL) to work with images.

2. QR Code Configuration:

- `qr=qrcode.QRCode(version=1, error_correction=qrcode.constants.ERROR_CORRECT_H, box_size=10, border=10,)`: Here, we create a QRCode object named `qr`.
 - `version=1`: Sets the QR code version (size). Higher versions allow more data, but the QR code becomes denser.
 - `error_correction=qrcode.constants.ERROR_CORRECT_H`: Specifies the error correction level (H for high).
 - `box_size=10`: Determines the size of each QR code module (square block).
 - `border=10`: Sets the border width around the QR code.

3. Adding Data:

- `qr.add_data("https://koushikkoush.github.io/Portfolio/")`: We add the URL "https://koushikkoush.github.io/Portfolio/" to the QR code. You can replace this with any other content you'd like to encode.

4. Generating the QR Code:

- `qr.make(fit=True)`: This generates the QR code based on the added data. The `fit=True` parameter ensures that the QR code adjusts its size to fit the data.

5. Creating the Image:

- `img=qr.make_image(fill_color="darkblue",back_color="lightgray")`: We create an image representation of the QR code.
 - `fill_color="darkblue"`: Sets the color of the QR code modules (the actual pattern).
 - `back_color="lightgray"`: Specifies the background color.

6. Saving the Image:

- `img.save("Portfolio.png")`: Finally, we save the QR code image as "Portfolio.png" in the current working directory.

Now you have a QR code that encodes your portfolio URL! Feel free to customize the colors and content as needed. 😊