DEVELOP A PYTHON SCRIPT THAT GENERATES QR CODES FOR PROVIDED INPUT DATA SUCH AS TEXT,URL OT OTHER ENFORMATION ,ALLOWING USERS TO EASILY ENCODE AND DECODE INFORMATION USING QR TECHNOLOGY

```
!pip install qrcode[pil] pillow
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```python
import qrcode
from PIL import Image
from IPython.display import display, clear_output
import ipywidgets as widgets
from google.colab import files

def generate_qr_code(data, filename):
    """
    Generates a QR code for the provided data and saves it as an image
file.

    Parameters:
    - data: The data to encode in the QR code (e.g., URL, text).
    - filename: The name of the file to save the QR code image.
    """
    # Create a QR code object
    qr = qrcode.QRCode(
        version=1,  # Controls the size of the QR Code
        error_correction=qrcode.constants.ERROR_CORRECT_L,  # Error
correction level
        box_size=10,  # Size of each box in pixels
        border=4,  # Thickness of the border (in boxes)
    )
    # Add data to the QR code
    qr.add_data(data)
    qr.make(fit=True)

    # Create an image from the QR code
    img = qr.make_image(fill_color="black", back_color="white")
    # Save the image
    img.save(filename)

    return img

def on_generate_button_click(b):
    data = text_box.value
    if data:
        with output:
            clear_output(wait=True)
            img = generate_qr_code(data, 'qr_code.png')
            display(img)
```

```python
    else:
        with output:
            clear_output(wait=True)
            print("Please enter some data to generate QR code.")

def on_download_button_click(b):
    files.download('qr_code.png')

# Create widgets
text_box = widgets.Text(
    description='Enter Data:',
    placeholder='Type something...',
    layout=widgets.Layout(width='400px')
)
generate_button = widgets.Button(description="Generate QR Code")
download_button = widgets.Button(description="Download QR Code")
output = widgets.Output()

# Set button click events
generate_button.on_click(on_generate_button_click)
download_button.on_click(on_download_button_click)

# Display widgets
display(text_box)
display(generate_button)
display(download_button)
display(output)
```

Enter Data:
Generate QR Code
Download QR Code