text-to-image-conversion-project

August 1, 2025

```
[6]: !pip install diffusers transformers accelerate --quiet
```

```
                              363.4/363.4 MB
    4.5 MB/s eta 0:00:00:00:0100:01
                              13.8/13.8 MB
    76.0 MB/s eta 0:00:00:00:010:01
                              24.6/24.6 MB
    59.1 MB/s eta 0:00:00:00:0100:01
                              883.7/883.7 kB
    49.6 MB/s eta 0:00:00
                              664.8/664.8 MB
    1.3 MB/s eta 0:00:00:00:0100:01
                              211.5/211.5 MB
    8.1 MB/s eta 0:00:00:00:0100:01
                              56.3/56.3 MB
    31.2 MB/s eta 0:00:00:00:0100:01
                              127.9/127.9 MB
    12.9 MB/s eta 0:00:0000:0100:01
                              207.5/207.5 MB
    8.2 MB/s eta 0:00:00:00:0100:01
                              21.1/21.1 MB
    71.9 MB/s eta 0:00:00:00:0100:01
```

```python
[10]: import torch
      from diffusers import StableDiffusionPipeline
      from PIL import Image
      from IPython.display import display
```

```python
[12]: pipe = StableDiffusionPipeline.from_pretrained(
          "runwayml/stable-diffusion-v1-5",
          torch_dtype=torch.float16
      ).to("cuda")
```

```
    model_index.json:   0%|              | 0.00/541 [00:00<?, ?B/s]

    Fetching 15 files:   0%|              | 0/15 [00:00<?, ?it/s]

    preprocessor_config.json:   0%|              | 0.00/342 [00:00<?, ?B/s]
```

```
special_tokens_map.json:    0%|              | 0.00/472 [00:00<?, ?B/s]

merges.txt: 0.00B [00:00, ?B/s]

config.json:    0%|           | 0.00/617 [00:00<?, ?B/s]

model.safetensors:    0%|            | 0.00/1.22G [00:00<?, ?B/s]

model.safetensors:    0%|            | 0.00/492M [00:00<?, ?B/s]

config.json: 0.00B [00:00, ?B/s]

scheduler_config.json:    0%|           | 0.00/308 [00:00<?, ?B/s]

vocab.json: 0.00B [00:00, ?B/s]

tokenizer_config.json:    0%|           | 0.00/806 [00:00<?, ?B/s]

config.json:    0%|          | 0.00/743 [00:00<?, ?B/s]

diffusion_pytorch_model.safetensors:    0%|          | 0.00/3.44G [00:00<?, ?B/s]

config.json:    0%|          | 0.00/547 [00:00<?, ?B/s]

diffusion_pytorch_model.safetensors:    0%|            | 0.00/335M [00:00<?, ?B/s]

Loading pipeline components…:    0%|          | 0/7 [00:00<?, ?it/s]
```

```python
[20]: prompt = input("Enter your prompt for image generation:")
      with torch.inference_mode():
          image = pipe(prompt).images[0]
          display(image)
```

```
Enter your prompt for image generation: A scenic view of the Milky Way galaxy
from Earth, ultra realistic, 8k

  0%|            | 0/50 [00:00<?, ?it/s]
```