

Text - Image

```
!pip install diffusers --upgrade
```

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```
!pip install invisible_watermark transformers accelerate safetensors
```

```

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```
from diffusers import DiffusionPipeline
import torch
```

```
pipe = DiffusionPipeline.from_pretrained("stabilityai/stable-diffusion-xl-base-1.0", torch_dtype=torch.float16, use_safetensors=True)
pipe.to("cuda")
```

```
# if using torch < 2.0
# pipe.enable_xformers_memory_efficient_attention()
```

```
prompt = "A happy cartoon studying"
```

```
images = pipe(prompt=prompt).images[0]
```



Loading pipeline components...: 100%

7/7 [00:01<00:00, 3.99it/s]

100%

50/50 [00:40<00:00, 1.22it/s]

images



```
!pip install gradio
```




```

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Successfully installed aiofiles-24.1.0 fastapi-0.115.12 ffmpeg-0.5.0 gradio-5.25.2 gradio-client-1.8.0 groovy-0.1

```

```

import gradio as gr
from diffusers import DiffusionPipeline, EulerDiscreteScheduler
import torch
model_id = "stabilityai/stable-diffusion-xl-base-1.0"
schedulers = EulerDiscreteScheduler.from_pretrained(model_id, subfolder="scheduler")
pipe = DiffusionPipeline.from_pretrained(model_id, scheduler=schedulers, torch_dtype=torch.float16)
pipe.to("cuda")

```

```

def generated_image(prompt):
    Image = pipe(prompt=prompt).images[0]
    return Image

```

```

gr.Interface(
    fn = generated_image,
    inputs =gr.Textbox(label = "Enter your prompt"),
    outputs =gr.Image(type ='pil'),
    title= "Stable Diffusion 2.1- Ratnaprava Generator app",
    description = "Enter text prompt and see generated image"
).launch()

```

➦ Loading pipeline components...: 100% 7/7 [01:02<00:00, 6.37s/it]

It looks like you are running Gradio on a hosted Jupyter notebook. For the Gradio app to work, sharing must be enabled.

Colab notebook detected. To show errors in colab notebook, set debug=True in launch()

* Running on public URL: <https://00211a02f3d22f0655.gradio.live>

This share link expires in 1 week. For free permanent hosting and GPU upgrades, run `gradio deploy` from the terminal.

Stable Diffusion 2.1- Ratnaprava Generator app

Enter text prompt and see generated image

Enter your prompt

laughing cartoon ganesh

output

