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# Progress

gradio.Progress(...)

## Description

The Progress class provides a custom progress tracker that is used in a function signature. To attach a Progress tracker to a function, simply add a parameter right after the input parameters that has a default value set to a `gradio.Progress()` instance. The Progress tracker can then be updated in the function by calling the Progress object or using the `tqdm` method on an Iterable. The Progress tracker is currently only available with `queue()`.

## Example Usage

```
import gradio as gr
import time
def my_function(x, progress=gr.Progress()):
    progress(0, desc="Starting...")
    time.sleep(1)
    for i in progress.tqdm(range(100)):
        time.sleep(0.1)
    return x
gr.Interface(my_function, gr.Textbox(), gr.Textbox()).queue().launch()
```

## Initialization

### Parameter

### Description

track\_tqdm

bool

default: False

If True, the Progress object will track any `tqdm.tqdm` iterations with the `tqdm` library in the function.



progress

```
import gradio as gr
import random
import time
import tqdm
from datasets import load_dataset
import shutil
from uuid import uuid4

with gr.Blocks() as demo:
    with gr.Row():
        text = gr.Textbox()
        submit = gr.Button('Submit')
```

Methods

\_\_call\_\_

```
gradio.Progress.__call__(progress, ...)
```

Description

Updates progress tracker with progress and message text.

Agruments

Parameter	Description
<div>progress</div> <div><i>float   tuple[int, int   None]   None</i></div> <div><b>required</b></div>	<div>If float, should be between 0 and 1 representing completion.</div> <div>If Tuple, first number represents steps completed, and second value represents total steps or None if unknown. If None, hides progress bar.</div>
<div>desc</div> <div><i>str   None</i></div> <div><b>default: None</b></div>	<div>description to display.</div>



Parameter	Description
<div>total</div> <div><i>int</i>   <i>None</i></div> <div>default: None</div>	estimated total number of steps.
<div>unit</div> <div><i>str</i></div> <div>default: "steps"</div>	unit of iterations.

## tqdm

```
gradio.Progress.tqdm(iterable, ...)
```

### Description

Attaches progress tracker to iterable, like tqdm.

### Agruments

Parameter	Description
<div>iterable</div> <div><i>Iterable</i>   <i>None</i></div> <div><b>required</b></div>	iterable to attach progress tracker to.
<div>desc</div> <div><i>str</i>   <i>None</i></div> <div>default: None</div>	description to display.
<div>total</div> <div><i>int</i>   <i>None</i></div> <div>default: None</div>	estimated total number of steps.
<div>unit</div> <div><i>str</i></div> <div>default: "steps"</div>	unit of iterations.



Examples

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