Sub Applications - Mounts

If you need to have two independent FastAPI applications, with their own independent OpenAPI and their own docs UIs, you can have a main app and "mount" one (or more) sub-application(s).

Mounting a FastAPI application

"Mounting" means adding a completely "independent" application in a specific path, that then takes care of handling everything under that path, with the *path operations* declared in that sub-application.

Top-level application

First, create the main, top-level, **FastAPI** application, and its *path operations*:

```
{!../../../docs_src/sub_applications/tutorial001.py!}
```

Sub-application

Then, create your sub-application, and its *path operations*.

This sub-application is just another standard FastAPI application, but this is the one that will be "mounted":

```
{!../../../docs_src/sub_applications/tutorial001.py!}
```

Mount the sub-application

In your top-level application, `app`, mount the sub-application, `subapi`.

In this case, it will be mounted at the path `/subapi`:

```
{!../../../docs_src/sub_applications/tutorial001.py!}
```

Check the automatic API docs

Now, run `uvicorn` with the main app, if your file is `main.py`, it would be:

```
$ uvicorn main:app --reload

<span style="color: green;">INFO</span>:     Uvicorn running on
http://127.0.0.1:8000 (Press CTRL+C to quit)
```

And open the docs at http://127.0.0.1:8000/docs.

You will see the automatic API docs for the main app, including only its own *path operations*:

And then, open the docs for the sub-application, at http://127.0.0.1:8000/subapi/docs.

You will see the automatic API docs for the sub-application, including only its own *path operations*, all under the correct sub-path prefix `/subapi` :

If you try interacting with any of the two user interfaces, they will work correctly, because the browser will be able to talk to each specific app or sub-app.

Technical Details: `root_path`

When you mount a sub-application as described above, FastAPI will take care of communicating the mount path for the sub-application using a mechanism from the ASGI specification called a `root_path` .

That way, the sub-application will know to use that path prefix for the docs UI.

And the sub-application could also have its own mounted sub-applications and everything would work correctly, because FastAPI handles all these `root_path` s automatically.

You will learn more about the `root_path` and how to use it explicitly in the section about [Behind a Proxy](#){.internal-link target=_blank}.