

# listenerhook, fastapi

## With fastapi, how do I implement a listener hook

In FastAPI, you can implement a listener hook by using the built-in event system provided by Starlette, the web framework that FastAPI is built on top of. Listener hooks allow you to run code before or after specific events in your application, such as before or after a request is processed. Here's how you can implement a listener hook in FastAPI:

1. Import the necessary modules:

```
from fastapi import FastAPI
from starlette.middleware.base import BaseHTTPMiddleware
from starlette.types import ASGIApp
```

2. Create a FastAPI app:

```
app = FastAPI()
```

3. Create a custom middleware class that defines your listener hook:

```
class MyListenerHookMiddleware(BaseHTTPMiddleware):
    async def dispatch(self, request, call_next):
        # Code to run before the request is processed
        response = await call_next(request)
        # Code to run after the request is processed
        return response
```

In this class, you can add your custom code before and after the request is processed.

4. Add the middleware to your FastAPI app:

```
app.add_middleware(MyListenerHookMiddleware)
```

Now, the `MyListenerHookMiddleware` will be executed for every incoming request. You can customize the code within the `dispatch` method to perform actions before and after the request is handled.

Here's an example of a listener hook that prints a message before and after request processing:

```
class MyListenerHookMiddleware(BaseHTTPMiddleware):
    async def dispatch(self, request, call_next):
        # Code to run before the request is processed
        print("Before request processing")
        response = await call_next(request)
        # Code to run after the request is processed
        print("After request processing")
        return response
```

By adding this middleware to your FastAPI app, you'll see the "Before request processing" and "After request processing" messages in the console for every request.

Keep in mind that you can customize this listener hook to perform any actions you need before or after request handling in your FastAPI application.