

# 3 Ways to Create Custom Middleware in

ASP.NET Core





## Using Request Delegate

Middleware can be created with a **request delegate** that takes an **HttpContext** as input and returns a **Task**. This method is commonly employed for shorter middleware components.





#### Using Request Delegate

```
app.Use(async (context, next) ⇒
{
    // Logic to execute before the request is processed
    await next(context);

    // Logic to execute after the response is generated
});
```





### Conventionbased Middleware

A middleware can be extracted to a separate class that adheres to the specific convention.

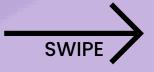




#### Convention-based Middleware

```
public class LoggingMiddleware(
    RequestDelegate next,
    ILogger<LoggingMiddleware> logger)
{
    public async Task InvokeAsync(HttpContext context)
    {
        logger.LogInformation("Before the request");
        await next(context);
        logger.LogInformation("After the request");
    }
}
  In Program.cs
app.UseMiddleware<LoggingMiddleware>();
```





### Factory-based Middleware

Create a custom middleware component that implements the **IMiddleware** interface.





#### Factory-based Middleware

```
public class FactoryMiddleware(ILogger<FactoryMiddleware> logger)
    : IMiddleware
    public async Task InvokeAsync(HttpContext context, RequestDelegate next)
        logger.LogInformation("Before the request");
        await next(context);
        logger.LogInformation("After the request");
    }
// In Program.cs
builder.Services.AddTransient<FactoryMiddleware>();
app.UseMiddleware<FactoryMiddleware>();
```





## Let's spread the knowledge together!

REPOST!

