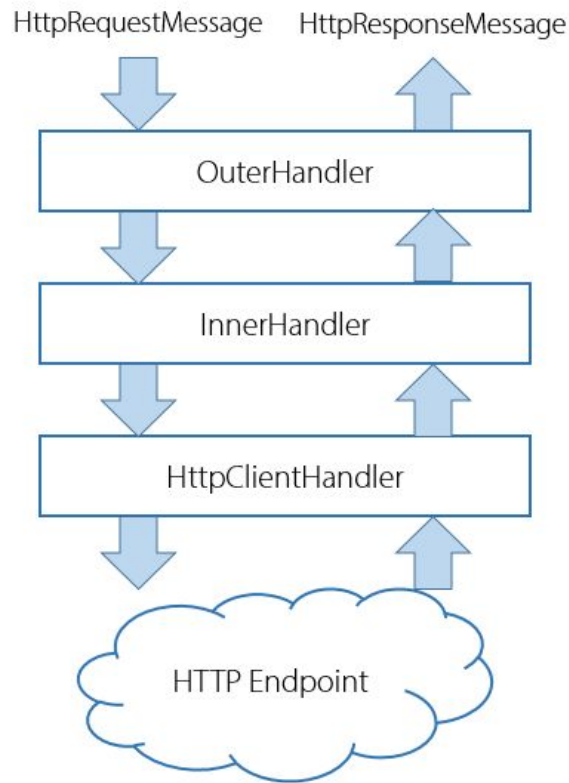


HttpClient in .NET Core 2.1

VDUNY - Aldo Martinez

System.Net.Http.HttpClient

- Http request
- Http response
- Http verbs: GET, POST, PUT, DELETE, etc
- Delegation handlers
 - HttpRequestMessage
 - HttpResponseMessage



Why is important?

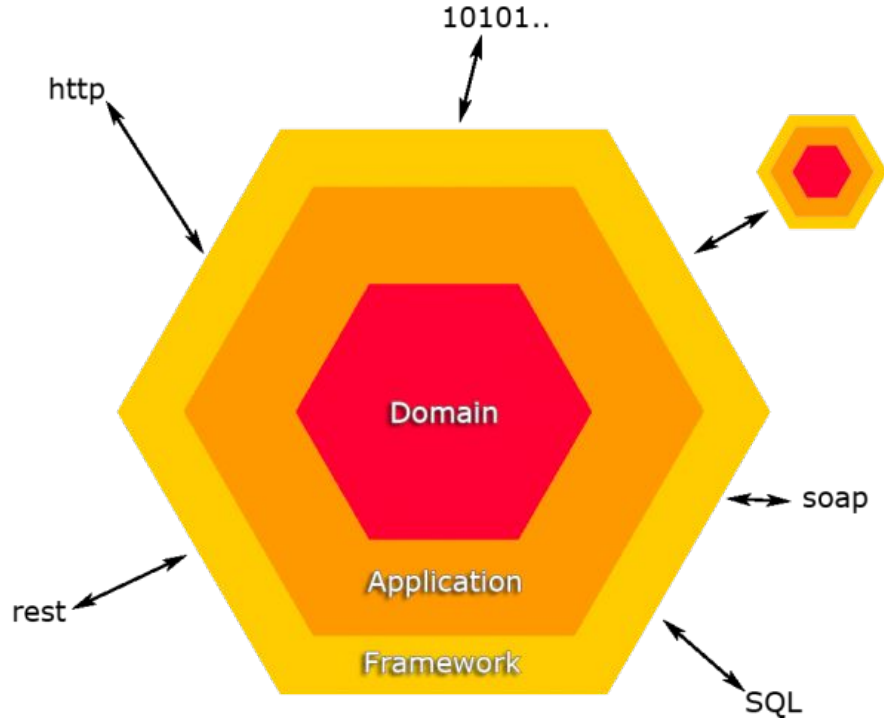
- Microservices architectures
- Integrations with third-party
- Stateless
- Standard http verbs

Example

Socket exhaustion

DNS updates issues

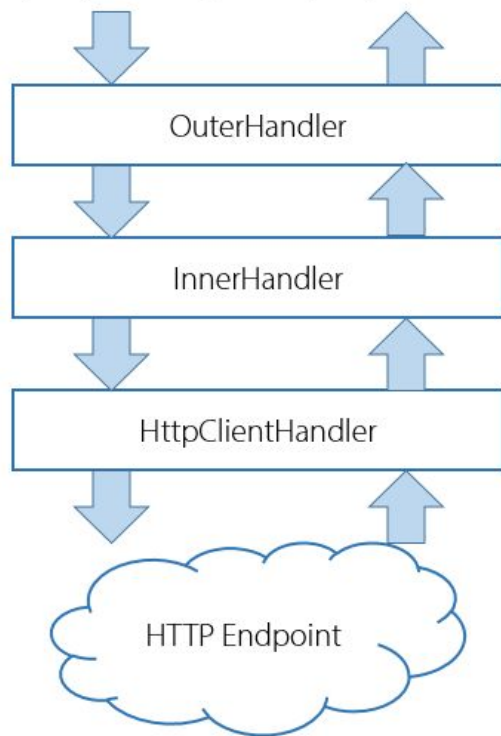
Typed Clients



- Use of HttpClient Factory
- DI
- Testable
- Depend on abstractions

Unit testing typed clients and integration testing

HttpRequestMessage HttpResponseMessage



- Unit Testing
 - Mocking
 - FakeResponseDelegationHandler
- Postman
- Code Coverage

Final thoughts and recommendations

- DefaultRequestHeaders
- Media type different from “application/json”
- Custom content: StringContent
 - Media type and encoding
 - Header
- Use SendAsync

Not covered, but can be use with HttpClient

- Custom delegation handlers
- Cookies
- Adding certs to the request

Recommended readings...

- HttpClient Class
 - <https://docs.microsoft.com/en-us/dotnet/api/system.net.http.httpclient?redirectedfrom=MSDN&view=netcore-2.1>
- Socket exhaustion
 - <https://aspnetmonsters.com/2016/08/2016-08-27-httpclientwrong/index.html>
- Improper Instantiation antipattern
 - <https://docs.microsoft.com/en-us/azure/architecture/antipatterns/improper-instantiation/>
- HttpClientFactory in ASP.NET Core 2.1 - Series
 - <https://www.stevejgordon.co.uk/introduction-to-httpclientfactory-aspnetcore>
- HttpClientExtensions examples
 - <https://gist.github.com/alexandrevicenzi/9216739>