✳ Rate Limitting

[A] .NET 6.0

→ Rate limiting is the process of restricting the number of requests for a resource within a specific time window.

Why
① Generate Revenue
② Helps against malicious bot attacks

Method - 1

→ Install Package : AspNetCoreRateLimit

There are 2 types of rate limit middleware supported by this package.
1 → Ip based rate limitting using IpRateLimit Middleware
2 → using ClientRateLimitmiddleware

→ add configuration for IP rate limit in appsettings.json.

※ see code.

"Endpoint" : "*"   // for all

→ add services to container
see code

→ add middleware
app.Use IpRateLimitting();

Method-2
Using Custom Middleware

(B) .NET 7.0 +

→ built in rate limiter middleware
→ 4 rate limit algos!
① Fixed window: add a fixed time window
② Concurrency: it just limits the no.
of concurrent requests.
③ Sliding window, Token bucket
→ Add service.
      see code
→ Add useRateLimitter() middleware
→ Add attribute
[EnableRateLimmitting ("fixed")]
on the action method/ controller.