Logging in ASP.NET Core Web API refers to the process of capturing and storing information about the application's behavior and operations during runtime.

**Logging** ka matlab hai:  
Aapki **Web API** kis tarah kaam kar rahi hai uska **record banana** – jaise errors, requests, warnings, ya important events.

Ye information **runtime** ke dauraan collect hoti hai aur developer ya support team use analyze karke problems samajh sakti hai.

**Logging** ka matlab hai:  
**App ke important events, errors ya information ko record karna** — taaki baad me debugging, monitoring ya analysis me madad mile.

**🔧 ASP.NET Core me Logging ka use:**

ASP.NET Core built-in logging system provide karta hai jisse aap:

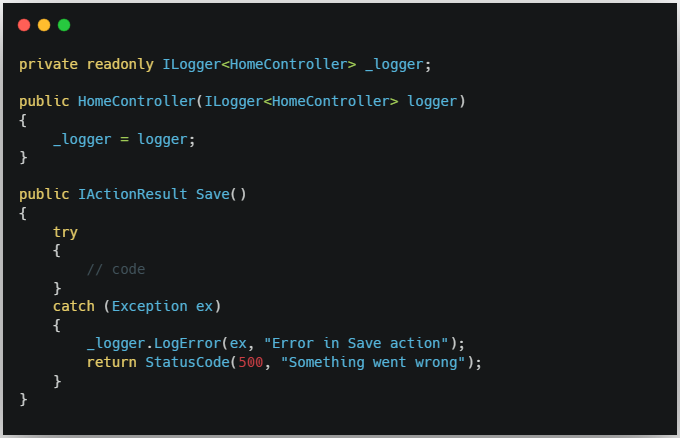


Ye log **console me show hoga** agar aap dotnet run ya VS se chalayenge.

Aap ek **school ERP** bana rahe ho. Suppose:

* Student record add karte waqt koi error aata hai.
* Aap chahte ho ki error log ho jaye (record ho jaye), taaki developer check kar sake kya issue tha.

**Example 2**



Logging nahi hai = No error trace

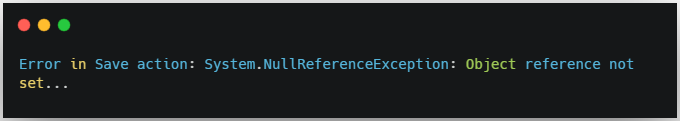
\_logger.LogError(ex, "Error in Save action");

// Agar try block me koi exception aayi to us error ko log kar rahe hain

// 'ex' = actual exception object (jisme error ka detail hota hai)

// "Error in Save action" = custom message, jisse hume pata chale kis jagah error aaya

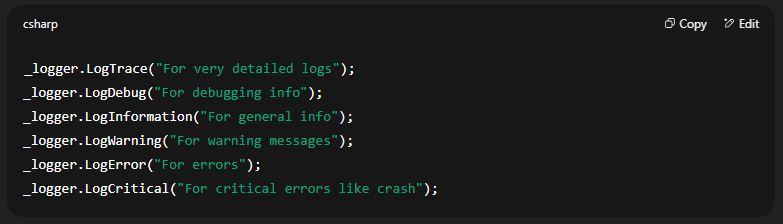
\_logger.LogError(ex, "Error in Save action");



**📌 Logging ka kaam:**

| **Type** | **Real Example** |
| --- | --- |
| Info | "User X logged in at 2:00 PM" |
| Warning | "Low disk space on server" |
| Error | "NullReferenceException in Save()" |
| Debug | "Entered Save() method" |

📋 **Common Log Levels:**

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🔧 Configure Logging:

