

Writing Clean and Readable Code



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Overview

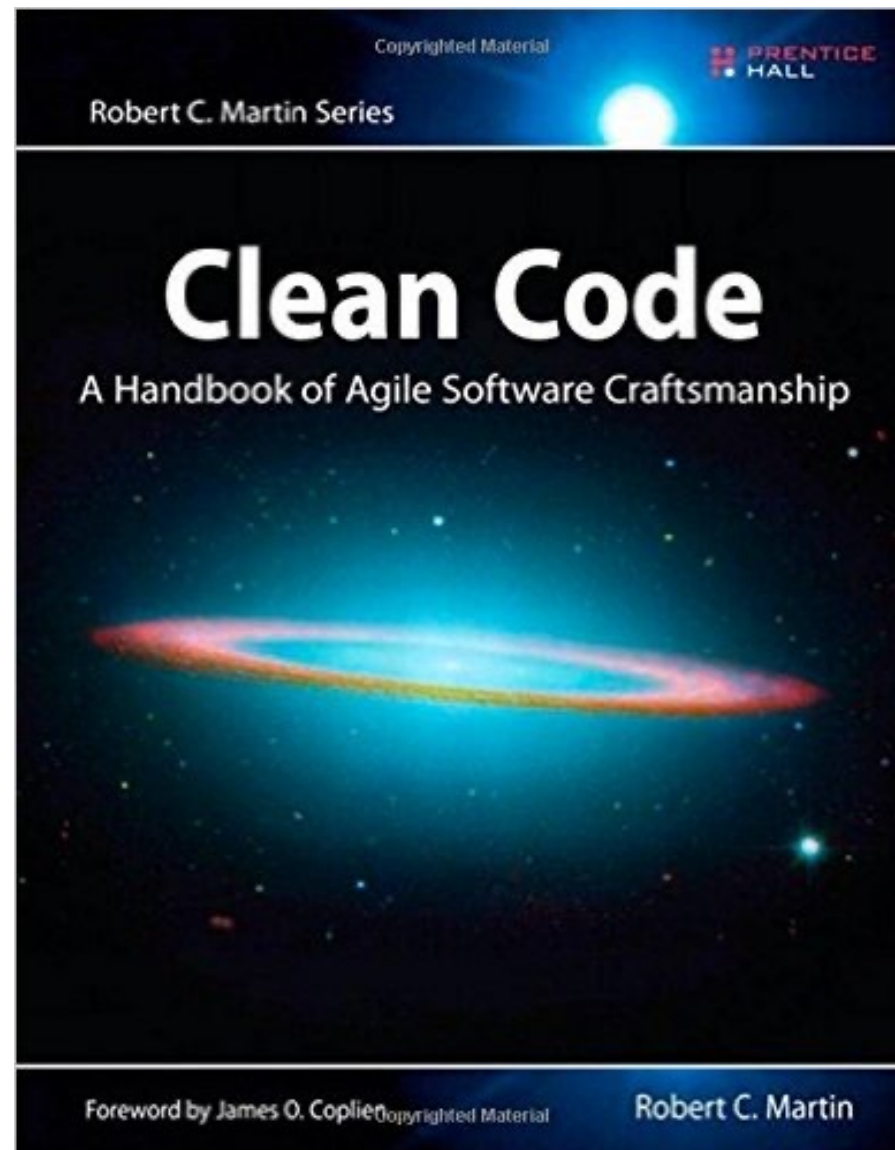


Why “clean code” matters

How to keep our LINQ pipelines readable

More LINQ challenges!





“Clean Code” by Robert C. Martin

Make it easy for humans to understand

We spend more time reading than writing code



Does LINQ Make Code More or Less Readable?

Lambda syntax
looks confusing

Declarative (LINQ)

```
orders.Max(o => o.Amount)
```

What about long
pipelines?

... or pipelines
within pipelines?

Imperative

```
decimal maxAmount = 0M;  
foreach (var order in orders)  
{  
    if (order.Amount > maxAmount)  
        maxAmount = order.Amount;  
}
```

What is this
Aggregate
method doing?





More about clean code:

Clean Coding Principles in C#

Cory House



It is possible to use the full
power of LINQ *and* keep your
code readable



Challenge



LINQ Challenge



Sort by Age



Challenge

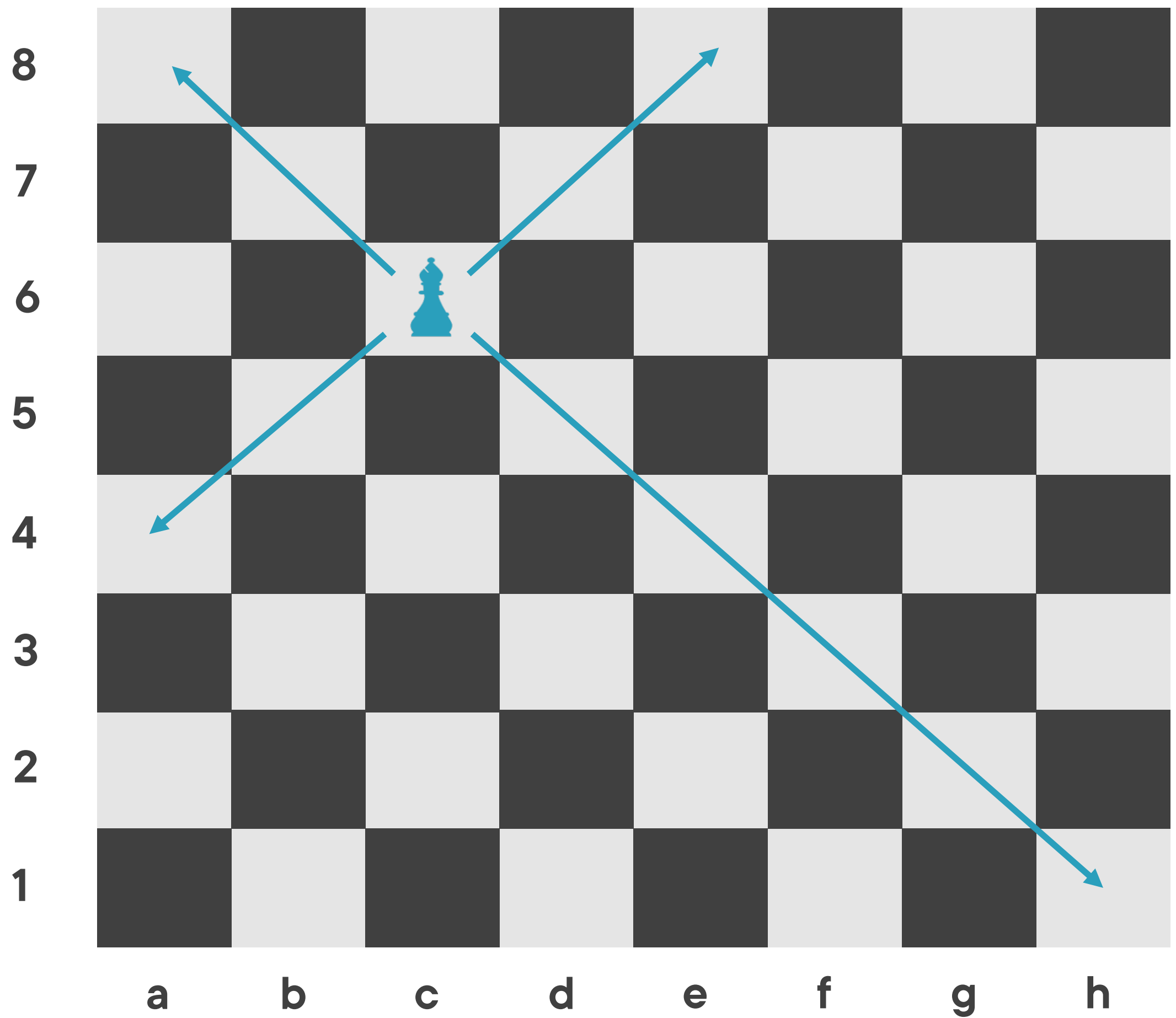


LINQ Challenge



Bishop Moves





LINQ Query Expression Syntax

**Not just for
database queries**

**Great for pipelines
containing
SelectMany**

**Can avoid the
need for
anonymous objects**



Challenge



LINQ Challenge



Longest Book



Workarounds for missing LINQ
methods can result in hard to
read code and performance
issues



Summary



LINQ pipelines can be readable

- Make them easy to maintain

Keeping your LINQ clean

- Naming intermediate stages
- Create helper methods

Anonymous objects can't easily be used in helper methods

The LINQ Query Expression Syntax is sometimes more readable

Beware of “clever” code that obscures intent



Up Next: Extending LINQ

