Writing Clean and Readable Code

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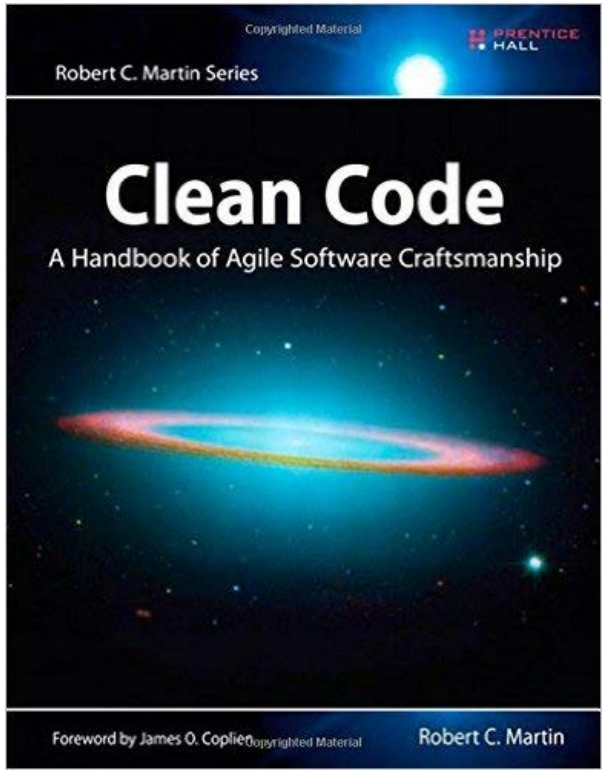
Overview

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?

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

Challenge

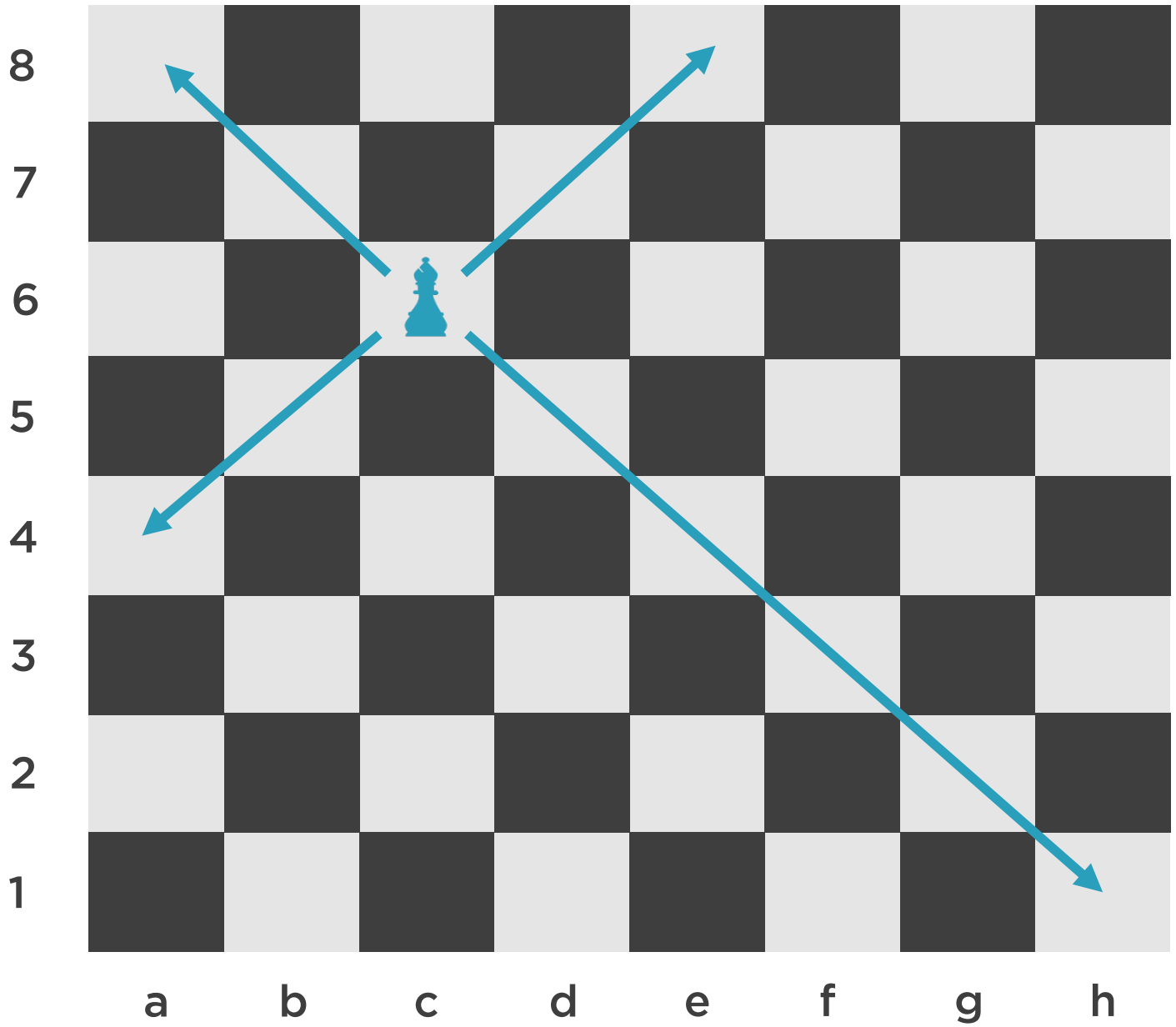
LINQ Challenge

Sort by Age

Challenge

LINQ Challenge

Bishop Moves


8
7
6
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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

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

Next up: extending LINQ