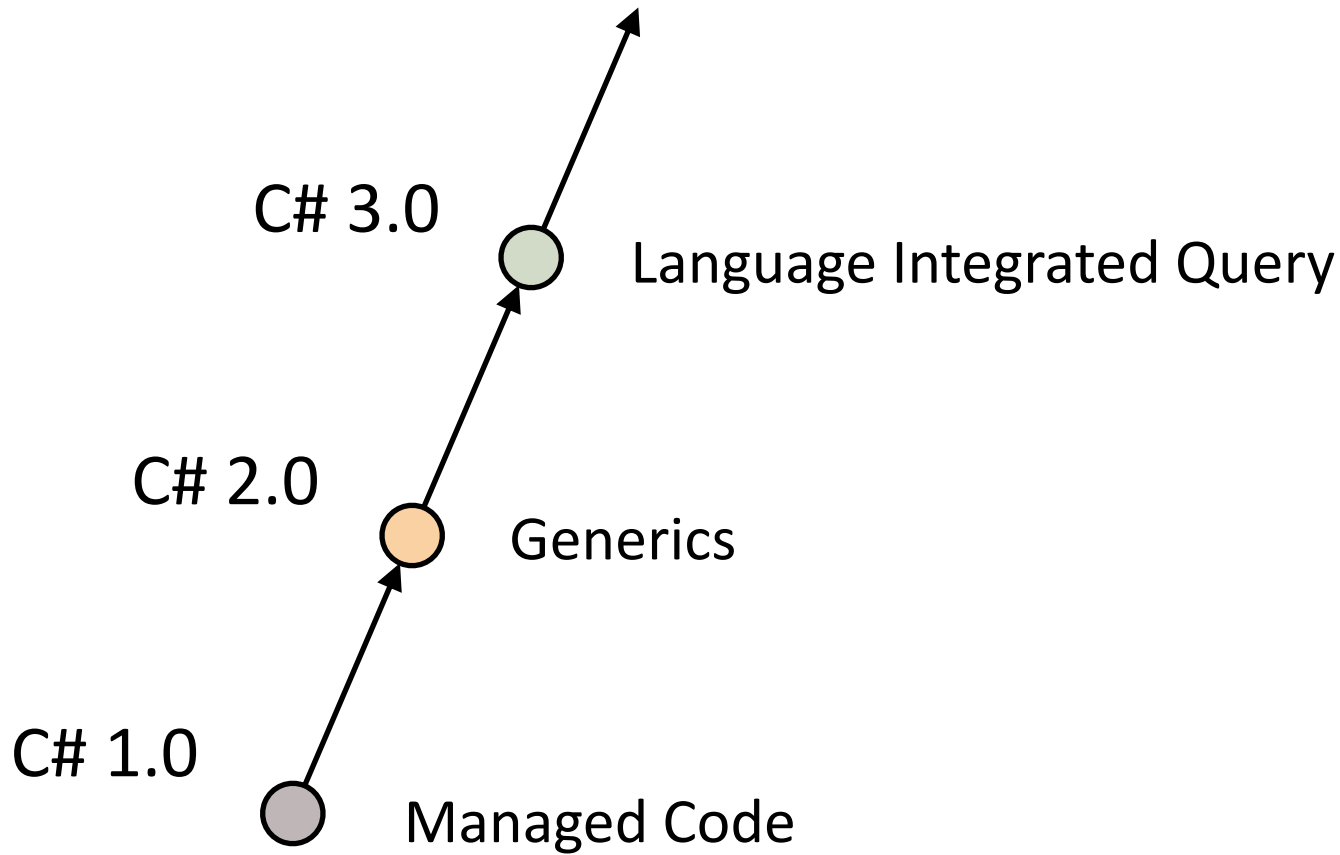


C# 3.0

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The Evolution of C#



C# 3.0 Design Goals

- Integrate objects, relational data, and XML
- Increase conciseness of language
- Add functional programming constructs
- Isolate language from specific APIs
- Remain 100% backwards compatible



C# 3.0 Features

- Local variable type inference
- Lambda expressions and expression trees
- Extension methods
- Query expressions
- Automatic properties
- Anonymous types
- Object and collection initializers
- Partial methods



Query Expressions

Starts with **from**

Zero or more **from**,
join, **let**, **where**, or
orderby

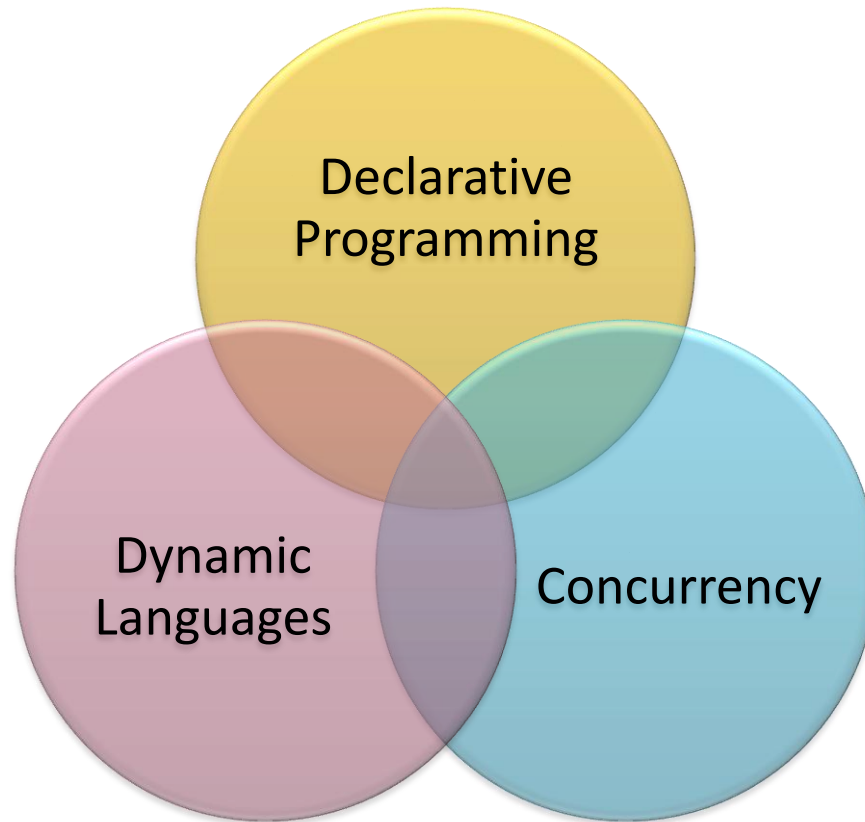
```
from id in source  
{ from id in source |  
  join id in source on expr equals expr [ into id ] |  
  let id = expr |  
  where condition |  
  orderby ordering, ordering, ... }  
select expr | group expr by key  
[ into id query ]
```

Ends with **select** or
group by

Optional **into**
continuation



Future C# Influences



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