

C#

# The Gilded Rose Recap

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# The Gilded Rose

Demo

# Code Metrics (Visual Studio Proper)

## **Maintainability Index**

Between 0 and 100. Higher is better. Aim for higher than 20

## **Cyclomatic Complexity**

Lower is better. Split methods with complexity  $> 10$

## **Depth of Inheritance**

Between 1 and infinity

Lower is better, but sometimes inheritance is good

## **Class Coupling**

Lower is better. Aim for max 9

## **Lines of Code**

# Code Metrics - Original

	Maintainability Index	Cyclomatic Complexity	Depth of Inheritance	Class Coupling	Lines of Code
Program	57	3	1	5	49
GildedRose	54	20	1	2	85
Item	100	6	1	0	6
Total	70	29	1	5	151

# Approach

Understand the task at hand – inspect the code

Write tests to ensure the program works to specification

Refactor, refactor, refactor

Extract methods

Implement *Conjured*

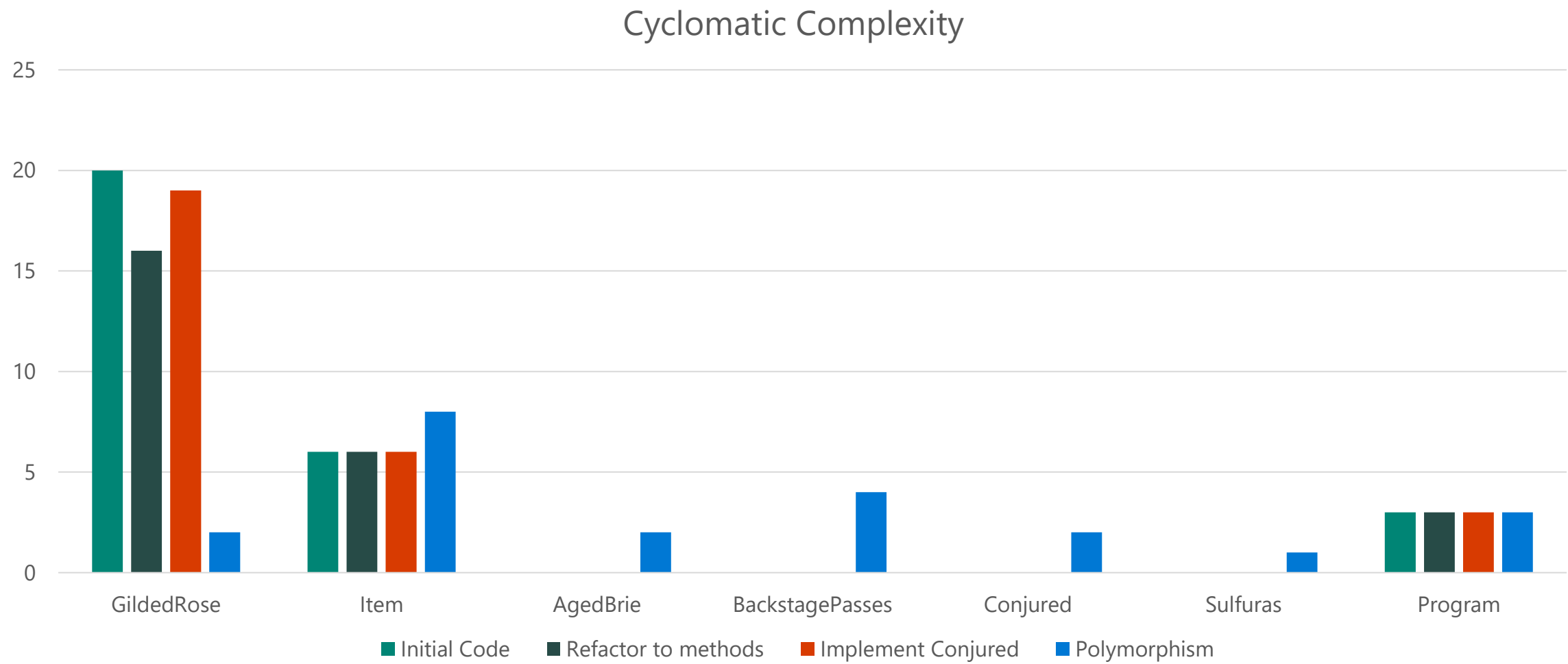
Refactor, refactor, refactor

Introduce polymorphism

# Code Metrics – Polymorphed

	Maintainability Index	Cyclomatic Complexity	Depth of Inheritance	Class Coupling	Lines of Code
Program	57	3	1	8	48
GildedRose	94	2	1	5	14
Item	91	8	1	1	21
AgedBrie	71	2	2	2	15
BackstageP.	63	4	2	2	23
Conjured	71	2	2	2	15
Sulfuras	100	1	2	1	6
Total	78	23	2	10	166

# Cyclomatic Complexity



# Conclusion - Discussion