
Something's Rotten at the Gilded Rose: A Refactoring Tale

— Chris C —

Who am I? (i.e. Shameless Self Promotion)

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What is the Gilded Rose Kata?

Refactoring exercise created by Terry Hughes and expanded by Emily Bache

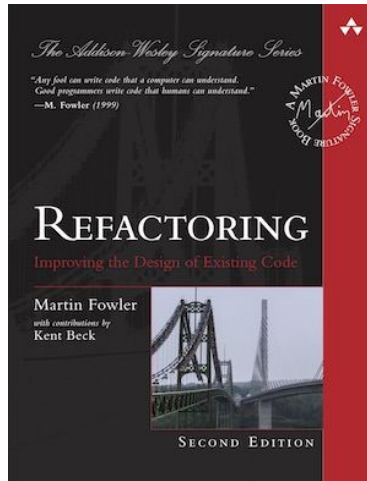


```
public void UpdateQuality()
{
    for (var i = 0; i < Items.Count; i++)
    {
        if (Items[i].Name != "Aged Brie" && Items[i].Name != "Backstage passes to a TAFKAL80ETC concert")
        {
            if (Items[i].Quality > 0)
            {
                if (Items[i].Name != "Sulfuras, Hand of Ragnaros")
                {
                    Items[i].Quality = Items[i].Quality - 1;
                }
            }
        }
        else
        {
            if (Items[i].Quality < 50)
            {
                Items[i].Quality = Items[i].Quality + 1;
            }

            if (Items[i].Name == "Backstage passes to a TAFKAL80ETC concert")
            {
                if (Items[i].Quality < 30)
                {
                    Items[i].Quality = Items[i].Quality + 1;
                }
            }
        }
    }
}
```

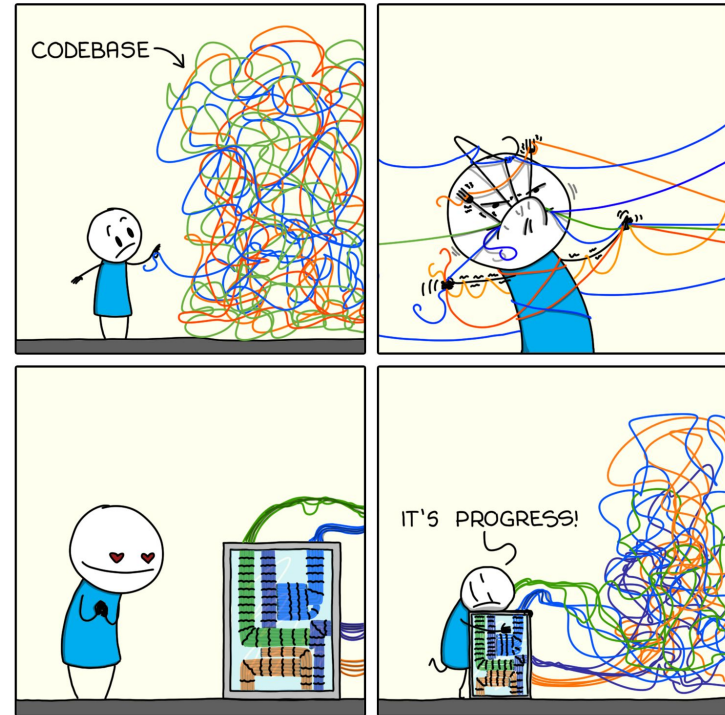
What is Refactoring?

Changing existing source code without changing its external behavior.



SMALL DELIGHTS

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Use Churn to Know when to Refactor

The more often a file is changed the more benefit you will get from refactoring it.

Example Churn Script:

<https://github.com/garybernhardt/dotfiles/blob/main/bin/git-churn>

```
git log --all -M -C --name-only --format='format:'  
| sort | grep -v '^$' | uniq -c | sort -n
```



Live Refactoring

Assumptions:

- Can't edit or inherit item class
- Short timeline for Conjured Mana Cakes
- Camping rule: leave things better than you found them.

This is just one of many ways to refactor this kata.



Learn More

Gilded Rose Kata:

<https://github.com/emilybache/GildedRose-Refactoring-Kata>

<https://www.youtube.com/@EmilyBache-tech-coach>

Refactoring (Martin Fowler):

<https://refactoring.com/>

Understand Legacy Code:

<https://understandlegacycode.com/>

Legacy Code Rocks:

<https://legacycode.rocks/>

SaturdayMP Videos:

<https://www.youtube.com/@saturdaymp>

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Slides:

<https://github.com/saturdaymp-examples/a-refactoring-tale>