

# Refactoring Fundamentals

The Gilded Rose Refactoring Kata

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# **The Gilded Rose Kata**

## **Introduction**

**The Gilded Rose is a small inn with a prime location in a prominent city run by a friendly innkeeper named Allison. It buys and sells only the finest goods. Unfortunately, the goods are constantly degrading in quality as they approach their sell by date. We have a system in place that updates our inventory for us. It was developed by a no-nonsense type named Leeroy, who has moved on to new adventures. Your task is to add a new feature to our system so we can sell a new category of items.**

# Current System Behavior

- All items have a SellIn value which denotes the number of days we have to sell the item
- All items have a Quality value which denotes how valuable the item is
- At the end of each day our system lowers both values for every item
- Once the sell by date has passed, Quality degrades twice as fast
- The Quality of an item is never negative
- “Aged Brie” actually increases in Quality the older it gets
- The Quality of an item is never more than 50
- “Sulfuras”, being a legendary item, never has to be sold or decreases in Quality
- “Backstage passes”, like aged brie, increases in Quality as it’s SellIn value approaches; Quality increases by 2 when there are 10 days or less and by 3 when there are 5 days or less but Quality drops to 0 after the concert

# **New Requirements**

- **“Conjured” items degrade in Quality twice as fast as normal items**

# Restrictions

- Feel free to make any changes to the UpdateQuality method
- Add new code as long as everything works correctly

*However...*

- **Do not alter the Item class or Items property**
  - These belong to the goblin in the corner, and he doesn't believe in shared code ownership
  - (You can make UpdateQuality and/or the Items property static if you like)

# Get the Kata

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

Read more:

- <https://github.com/NotMyself/GildedRose>
- <http://iamnotmyself.com/2011/02/13/refactor-this-the-gilded-rose-kata/>

# Thanks!

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