

Gilded Rose Kata

Source: <https://github.com/ardalis/kata-catalog>

Background

This kata puts you in the role of having to work with someone else's code. It is highly suggested that you use test-first development with this kata.

Hi and welcome to team Gilded Rose. As you know, we are a small inn with a prime location in a prominent city run by a friendly innkeeper named Allison. We also buy and sell only the finest goods. Unfortunately, our 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. The `UpdateQuality()` method is called each morning by another part of our system. Your task is to add the new feature to our system so that we can begin selling a new category of items. First an introduction to our system:

- 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

Pretty simple, right? Well, this is where it gets interesting:

- 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 its `SellIn` value approaches
 - `Quality` increases by 2 when there are 10 days or less
 - `Quality` increases by 3 when there are 5 days or less
 - but `Quality` drops to 0 after the concert

Instructions

We have recently signed a supplier of conjured items. This requires an update to our system:

- "Conjured" items degrade in `Quality` twice as fast as normal items

Feel free to make any changes to the `UpdateQuality` method and add any new code as long as everything still works correctly. However, **do not alter the `Item` class or `Items` property** as those belong to the goblin in the corner who will insta-rage and one-shot you as he doesn't believe in

shared code ownership (you can make the UpdateQuality method and Items property static if you like, we'll cover for you). Your work needs to be completed by Friday, February 18, 2011 08:00:00 AM PST.

Just for clarification, an item can never have its Quality increased above 50, however "Sulfuras" is a legendary item and as such its Quality is 80 and it never alters.

Extra Credit

- Item categories are determined by whether they contain a given string in their name (e.g. "Aged Brie" or "Sulfuras" or "Backstage passes")
- Any item can thus be conjured, with the resulting effects (e.g. "Conjured Backstage passes")

Resources

- [Original Source by Bobby Johnson \(NotMyself\) on GitHub](#)
- [Starting code in many languages](#)