

Trading TP5

Part 1

- 1) This code is about the inventory management of a tavern through its product quality. When day passes, quality goes down.
- 2) Yes, all the goods are declared in the "main" function in program.cs in the item list.
- 3) When the day is over, sellIn's value which is the peremption date and the quality's value of the product goes down by 1.
- 4) Only Aged Brie keeps its quality up through time when sellIn goes -1, quality up +1 and the limit is 50. So, when sellIn is negative, quality is up to 2.
- 5) When a product goes by its expiration date, quality value goes down by -2 two times faster. Quality is never under 0 and maximum is 50.
- 6) This code is hard to read because it doesn't have any comments of methods and functions, the items data are in the main of the code. It has if loops in loops.
- 7) The rules are not clear enough to work from scratch. For example, what does the app do for the cheese when it goes down, does the legendary item sellIn goes down as it's quality never changes?

Part 2

We do tests to assure the quality of the code and that are conditions are respected. Tests are foundations of stable and durable project.

Here, we check if items under conditions are respected.

Listing of possible tests:

- Item SellIn should drop by one Each day -- done
- Item Quality should drop by one Each day -- done
- Check if cheese and backstage passes quality always +1 when time passes -- done
- Cheese should have maximum 50 of quality -- done
- Sulfuras' quality should stay of value 80 and has NO expiration date -- done
- Quality of an Item should never be negative < 0 -- done
- When an item has a negative Sellin, check if it's quality drops by 2 and cheese up by 2 -- done
- Check if "backstage passes" Quality up to +2 when $10 < \text{Sellin} < 4$ and +3 from $3 < \text{Sellin} < 1$ and when $\text{Sellin} == 0$, quality drops to $== 0$ -- done
- Check if "conjured items" quality drops by 2.-- done

Part 4

To expand this code we can :

- add threads to do the switch loop and the calculations at the same time.
- We can put an "input" to add item directly in the console
-

