Moteefe Coding Challenge

Moteefe is an international company providing print on demand service. We have various products e.g
shirts, hoodies, mugs, cushions etc. Our suppliers are spread around the world, therefore the delivery of
products depend on the region where they are shipped.

Your task is to implement a solution which gives us a number of days for delivery and the amounts of shipments
and their details based on the list of items in the basket and the region where those items are supposed to be delivered.
There might be more shipments as not all suppliers provide all products.

Use this pattern as "database" for your project, it's in a csv format.

````
product_name,supplier,delivery_times,in_stock
black_mug,Shirts4U,'{ "eu": 1, "us": 6, "uk": 2}',3
blue_t-shirt,Best Tshirts,'{ "eu": 1, "us": 5, "uk": 2}',10
white_mug,Shirts Unlimited,'{ "eu": 1, "us": 8, "uk": 2}',3
black_mug,Shirts Unlimited,'{ "eu": 1, "us": 7, "uk": 2}',4
pink_t-shirt,Shirts4U,'{ "eu": 1, "us": 6, "uk": 2}',8
pink_t-shirt,Best Tshirts,'{ "eu": 1, "us": 3, "uk": 2}’,2
````

Design and API endpoint (use any technology or framework you are comfortable with) which will run locally and accept payload in following format:

```
{
        region: “us”,
        basket: {
                items: [
                        {
                                produsct: “black_mug”,
                                ciount: 1
                        },
                        {
                                produsct: “pink_t-shirt”,
                                ciount: 2
                        },
                        …

                ]
        }
}
```

The outcome should be an object which should look like this:
````
{
    delivery_date: '2020-03-10',
    shipments: [
        {
            suplier: "Shirts4U",
            delivery_date: '2020-03-09'
            items: [
                {
                    title: "tshirt",
                    count: 10
                },
                {
                    title: "hoodie",
                    count: 5
                },
            ]
        },
        {
            suplier: "BesT-Shirts",
            delivery_date: '2020-03-10'
            items: [
                {
                    title: "mug",
                    count: 2
                }
            ]
        }
    ]
}
````

Where

`delivery_date` is date of delivery relative to current date (if today date is 2020-02-01 and days for delivery is 2, then `delivery_date` is 2020-02-03)
`shipments` is a list of items that will be shipped by suppliers based on the availability in stock. Each shipment should contain name of the `supplier`,
`delivery_date` relative to the current date and list of items with their `title` and `count`.

Acceptance criteria

The following are the rules upon which our system works.

The number of delivery days is the **biggest** number of delivery days from all items in basket

Scenario 1

Having a list of items containing product A with deliver time 3 days and product B with delivery time 1 day

Then the deliver time is 3

Scenario 2

Having a product A from two suppliers A and B.

When supplier A deliver in product A in 3 days and supplier B deliver product A in 2 days

Then delivery time for that product is 2 days

Scenario 3

Having a t-shirt and hoodie in the basket

When t-shirt can be shipped from supplier A and B

And hoodie can be shipped from supplier B na C

Then deliver the t-shirt and hoodie from supplier B

edge case: It's faster to deliver it separately

Scenario 4

Having a 10 T-shirt in the basket and two suppliers A and B

When there is only 6 T-shirts from supplier A and 7 T-shirts of supplier B on stock

Then there would be a two shipments one from supplier A with 6 T-shirts and second from supplier B

edge case: split it into 3

Use all your coding skills and practices to provide readable, object oriented and reusable solutions.
ps: don't forget the tests!

Happy hacking :-)