**Beet Seed**

1. Test object : Mobile phone

| **Test** | **Explanation** |
| --- | --- |
| Measure the physical dimensions | Check if the product is built according the stated dimensions |
| Check the color | Checks if the purchased product’s color is visually same |
| Check the button operations | Checks the functions of the buttons which they are intend to do ex:  Volume up button should increase the volume  Power button should prompt to turn off the device |
| Charging port inspection | To check if the charging port is same as the product specification and when plugged in, it functions as it should |
| Physical location of camera | To check if the cameras are positioned correctly as while recording it is not covered by the fingers and easy to hold the phone |
| Check FaceId option | Check if the FaceId works with different scenarios  Ex:  Shades on  Mask on  Beard on/shaved  With eyes closed  With several backgrounds(so bright/pitch dark)  Underwater |
| Check with environmental settings | Check if the phone works with different climate options  Ex: outside temperature -40’C , 0’C , +40’C  Check if the phone works underwater |
| Checking Camera App | Check if the camera app is accessible through various ways  Ex: through shortcut keys  By swiping the lock screen  By navigating through to camera application |
| Check ringing tone | Check if the ringing tone can be changed through the settings and the volume level can be changed accordingly.  Also to check if the phone can be put to silent while ringing with the silent option. |

1. Validation is the process of checking if the product specifications truly reflect the customers requirements.

Verification is the process of making sure the final product is built with the correct specifications.

**Beet Sprout**

2.

| **No** | **Type of Company** | **Pros** | **Cons** |
| --- | --- | --- | --- |
| 1 | Product | * Can gain expertise on the product * Experience can be unique and maybe valued outside of the organization | * Lacks to exposure to other products or some technologies * Maybe harder to switch between jobs/companies due to the unique experience and obsolete technologies |
| 2 | Startup | * Probably offer an interesting salary package * Maybe exposed to several different technologies within a short period of time | * Job security maybe at risk * Extra work/effort can be expected |
| 3 | Outsource | * Freedom to carry on duties without interfering from the project own company * Freedom to choose the pace of Development or QA | * Project own company may have an early project deadlines * Communication and understanding may not be as smooth as an inhouse project |
| 4 | Outstaff | * Most probably work will be totally remote * Can be able to earn more compared to working locally | * Most probably contract time will be very short * Salary offer will not include other non financial benefits like insurance and paid leaves. |

1. While I was working in the bank I encountered a case where a customer applied for a personal loan facility for a certain amount and mistakenly the information recorded was incorrect and afterwards granted a loan for a different amount. Clearly this can be related to a validation failure as the client’s expectation of the final product is not achieved.

In the same way I can relate to another incident where a customer requested a personal loan for 5 years and the information recorded correctly whereas the loan officer mistakenly granted the loan for 7 years which violated the original requirements of the customer. Therefore this is a clear failure of verification where the final product is not delivered according to the desired requirements.

**Mighty Beet**

2. Pesticide Paradox :

It's said that using the same test cases over a long period of time will not be helpful as the product may have adapted to such test cases and it requires more variations or modifications in the outdated test cases in order for bugs to be found.

If I think about the time we had the pandemic covid 19, we were informed that a particular patient can be simply identified by conducting an “Antigen” test initially. But when the virus kept adapting to its variants the antigen test was not enough and was less accurate as even the test results indicated the negative, patient was clearly infected. Then they had to improve the testing technology as well as testing methods and new “PCR” methods introduced to battle the everchanging virus.

Testing is context dependent :

This principle says that testing depends on the product that we are testing. Testing always depends on the subject and methods differ from one another. Actually it's understandable as the products deliver different services hence their delivery methods are various. Therefore the testing of those products should be carried out in several different ways.

If we take a real life experience where we test a vehicle and mobile phone. I would test the car by checking if the lights work, if the air conditioner works, if the tires are not worn out , if it makes any unintended noises or does it drive ok ect. Whereas I can test my mobile phone in a completly different ways like, if the mobile can make a call with several carrier services, does it sound clear while on a call, can we turn on the silent mode ect. Therefore it's clear that the testing is context dependent as here the tests depended on two products: the vehicle and the mobile phone.

Exhaustive testing is impossible:

As we know a simple product can be tested in a million different ways If we gather all the possibilities. So this principle states that testing should be carried out in a prioritized way rather than trying each and every combination of input. Therefore it's always wise to follow this principle in any practical scenario where there are so many different test scenarios we prioritize them to deliver the tested product in stipulated time.

If I think about a time where I had gone to see the doctor to get medications, He observe the patient and simply prioritized the sicknesses according to the observations and did tests accordingly. If this is not the case, the doctor has to carry out all the tests which relate to symptoms which might be very time consuming and probably end up with a dead patient.