LYST

QA CHAPTER
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TESTING CONCEPTS

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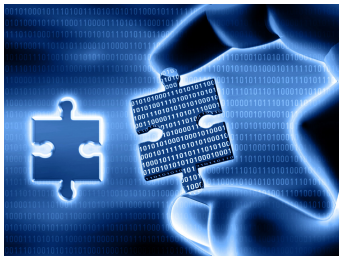
WHAT IS A SOFTWARE?

A set of instructions or a program which instructs a computer to do a task.

➔ *Software is used in all domains: Fashion, Entertainment, Banking, Healthcare, Insurance, Media*



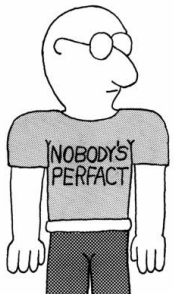
CONSEQUENCES OF FAILURE

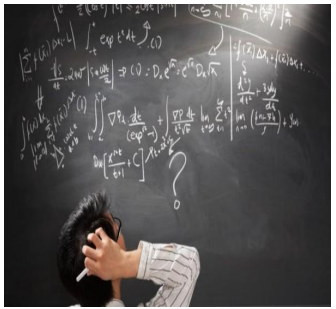
Software that doesn't work correctly can lead to many problems like loss of money, time, business reputation and even injury or death.

WHY SOFTWARE FAILS TO WORK?

Reasons can be many:

➔ ***Mistake*** *(error) by human →* ***Defect*** *in the code →* ***Failure*** *of the system*



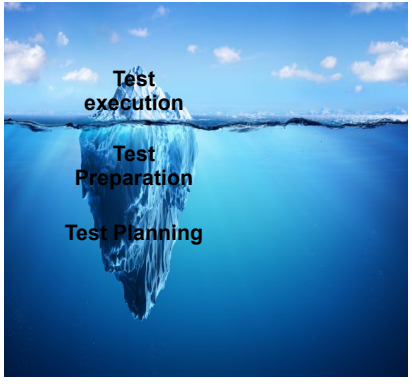


WHY TEST?


money
safety
associated
Measure
check
Save
Development
standards/laws/regulations
Prevent
defects
mitigate
testing
process
Show
product
Quality
risks
Generate
confidence
manage
Gain
requirement
compliance
changes
Evidence
Improve
Requirement
Find
meets

TESTING ACTIVITIES

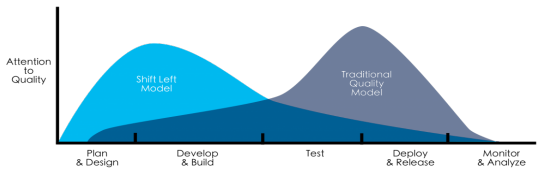
- *A common misperception of testing is that it only consists of running tests, i.e, executing the software and checking the results.*
- *Test execution is only one of these activities.*
- *The QA process also includes activities such as test planning, analyzing, designing and implementing tests, reporting test progress and results, and evaluating the quality of a test object*



SHIFT LEFT?

- ➔ *A defect can arise at any point of the software development life cycle.*
- ➔ *It's always better to find a defect as early as possible.*

How to promote Shift Left Testing in the team?



TESTING PRINCIPLES

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Sr. QA Engineer - App Tribe

PRINCIPLE 1

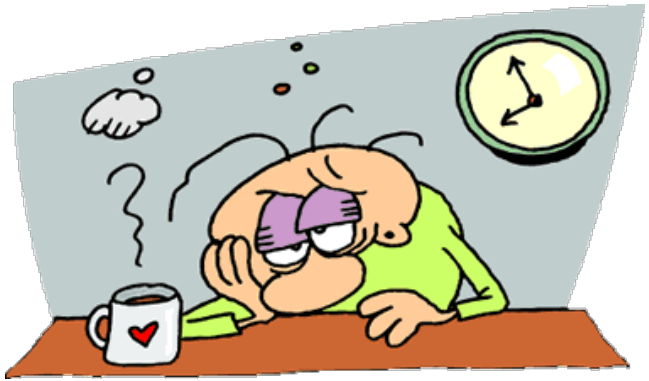
Testing shows the presence of defects, not their absence

- ➔ *Testing shows that defects are present*
- ➔ *It reduces the chance of undiscovered defects remaining in the software*
- ➔ *No defects found ≠ proof of correctness*

PRINCIPLE 2

Exhaustive testing is impossible

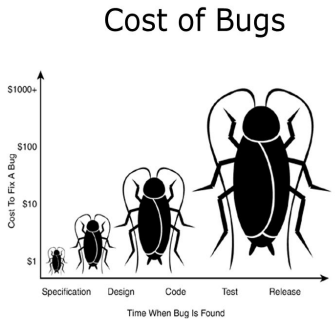
- ➔ *Testing everything is infeasible*
- ➔ *It is only possible in trivial cases*



PRINCIPLE 3

Early testing saves times and money

- ➔ *To find defects early, testing should be started as early as possible in the development life cycle*
- ➔ *Early testing can be called ‘shift left’*



PRINCIPLE 4

Defects cluster together

➔ *A small number of modules usually contain most of the defects found during testing*

PRINCIPLE 5

Beware of the pesticide paradox

- ➔ *The same tests, repeated continually over time, will eventually stop finding new defects*
- ➔ *But to find new defects, tests/data must be regularly revised and new tests written*

PRINCIPLE 6

Testing is context dependent

➔ *Testing is done differently in different contexts*

PRINCIPLE 7

Absence of errors is a fallacy

- ➔ *Finding and fixing defects alone will not ensure the success of a system if the system is:*
  - *Difficult to use*
  - *Doesn't fulfill user's needs and expectations*
  - *Inferior to competition*

Q & A


OBRIGADO
communication
dziekuje
дякую
business
DANKE
logotype
спасибо
mahalo
dakujem
client
TACK
merci
kiitos
תודה
THANK YOU
dank je
GRAZIE
merce
sagolun
grazzi
dankeschon
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