Testing methods

- What is testing?
- Why we test?
- Testing methods

What is testing?

The process of exercising software to verify that it satisfies specified requirements of end user and to detect errors

Misconceptions

It is possible to completely test a product

Why testing?

- Challenge to release a bug-free product;
- Ensuring that system is ready for use;

Lets face it:
No one want
To lose money!

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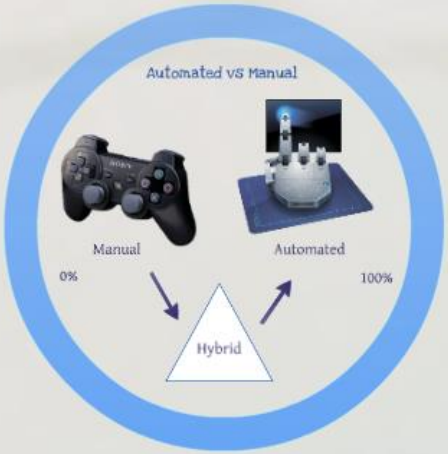
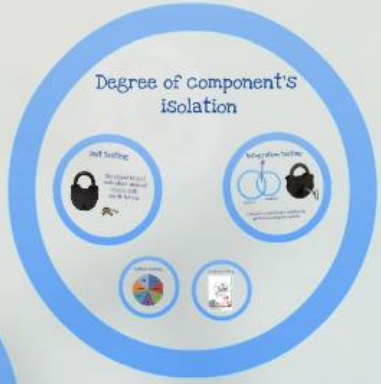
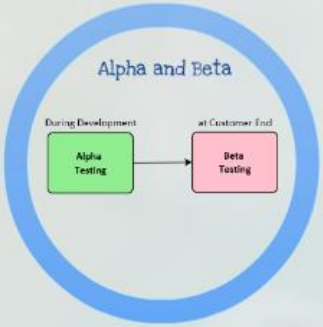
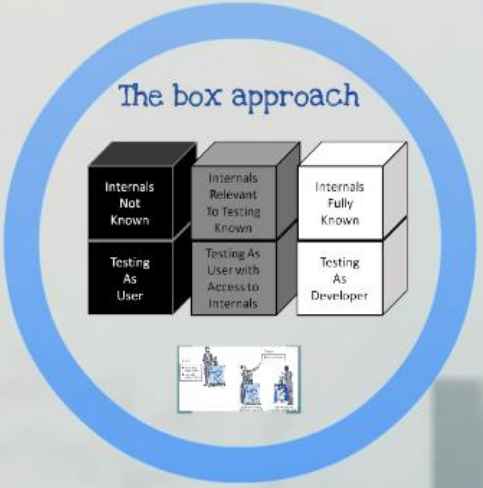
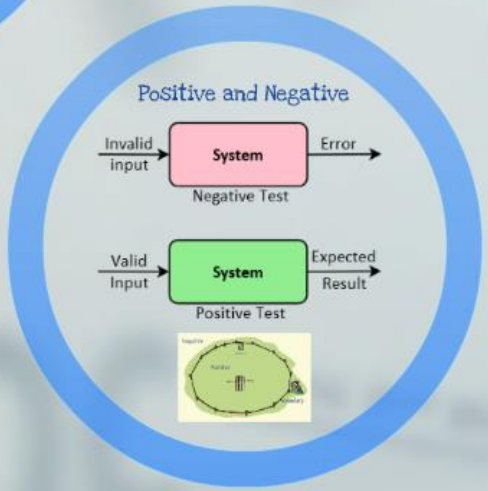
Testing Techniques

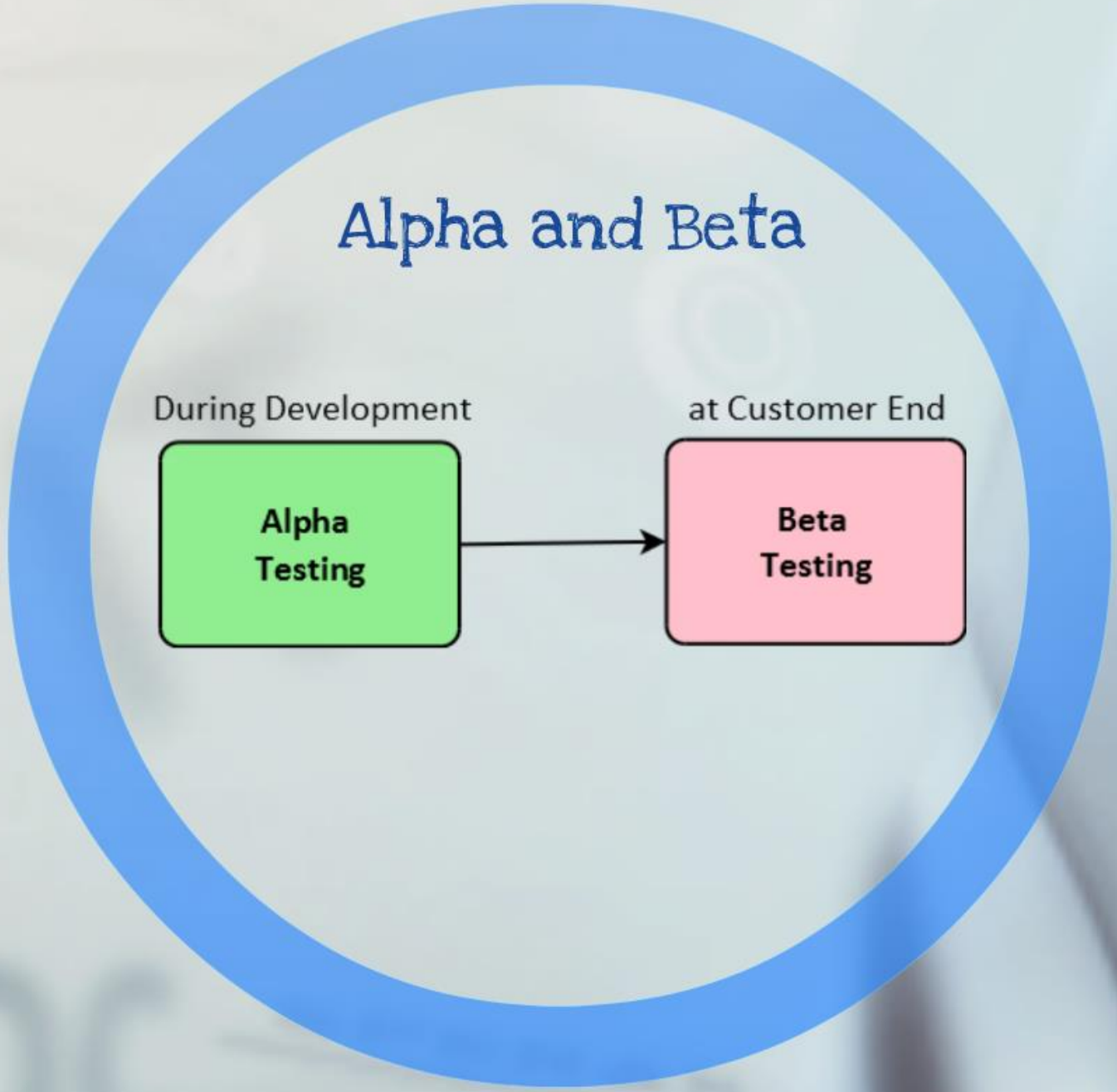




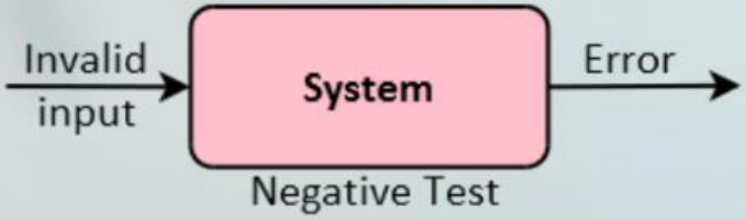




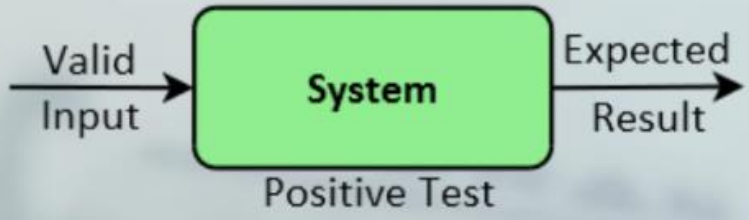



Alpha and Beta
During Development
at Customer End
Alpha Testing
Beta Testing

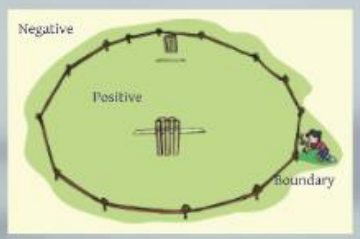
Positive and Negative

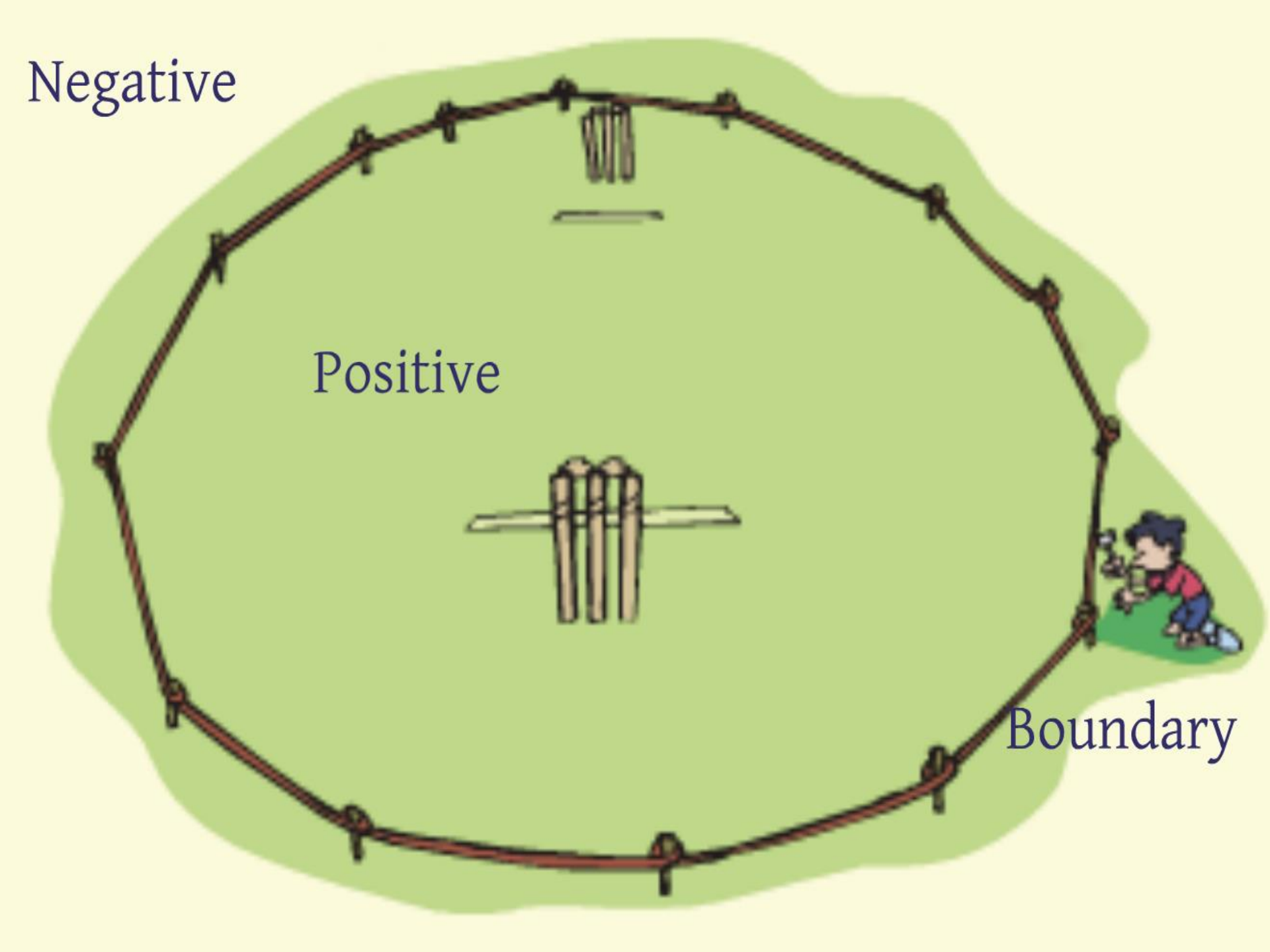


Negative Test



Positive Test




Negative
Positive
Boundary

Automated vs Manual

Manual

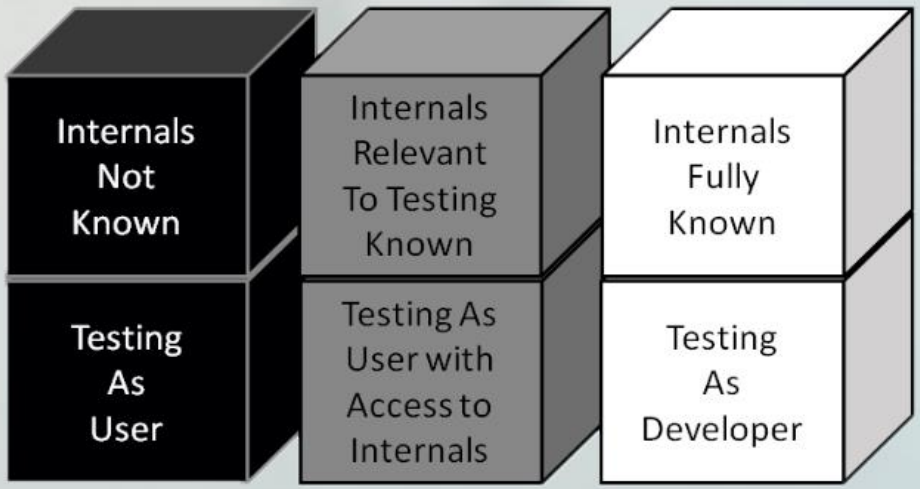
Automated

0%

100%

Hybrid

The box approach



Inputs

- Put in two magic coins
- Tap with magic wand

Outputs

- Pull out rabbit.

Black box testing
Does the trick work?

Clear box testing
How does the trick work?


DON'T DEFINE
YOUR WORLD IN
BLACK AND WHITE
BECAUSE THERE IS
SO MUCH HIDING
AMONGST THE
GREYS

Level of product knowledge

Monkey

Always Remember!

We can hire a trained monkey to Do Your Job!

Exploratory

It is an approach to software testing that is concisely described as simultaneous learning, test design and test execution

Ad Hoc (Intuitive)

Ad-Hoc testing is not structured

Monkey

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We can hire a trained
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Ad Hoc
(Intuitive)

Ad-Hoc testing is not structured

Exploratory

It is an approach to software testing that is concisely described as simultaneous learning, test design and test execution

Degree of component's isolation

Unit testing

Developer tests if individual units of source code are fit for use

Integration testing

Integrate components together to perform a complete system

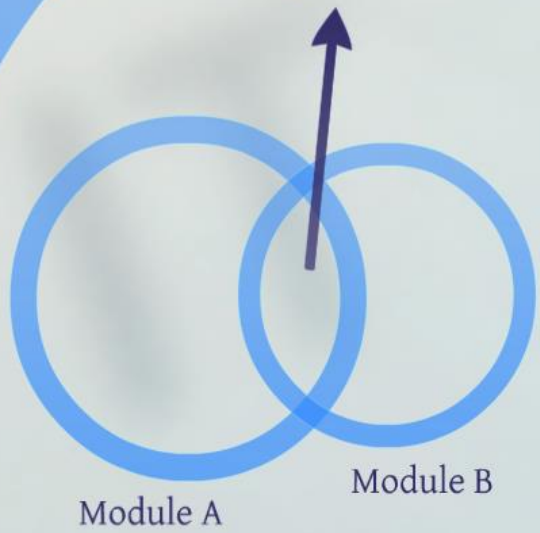
System testing

Acceptance testing

Unit testing

Developer tests if individual units of source code are fit for use

Integration testing

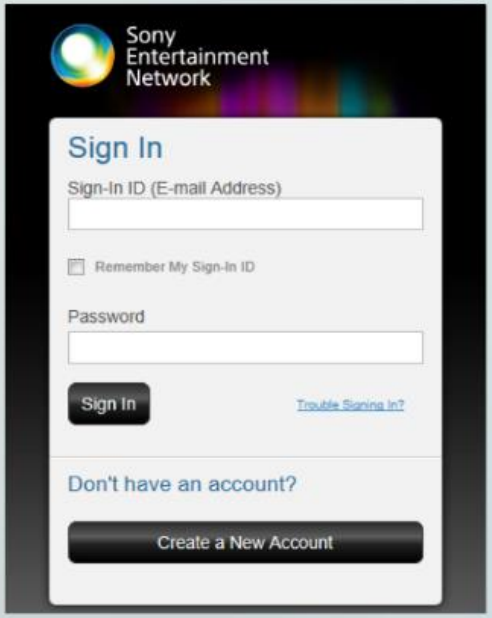


Integrate components together to perform a complete system

System testing

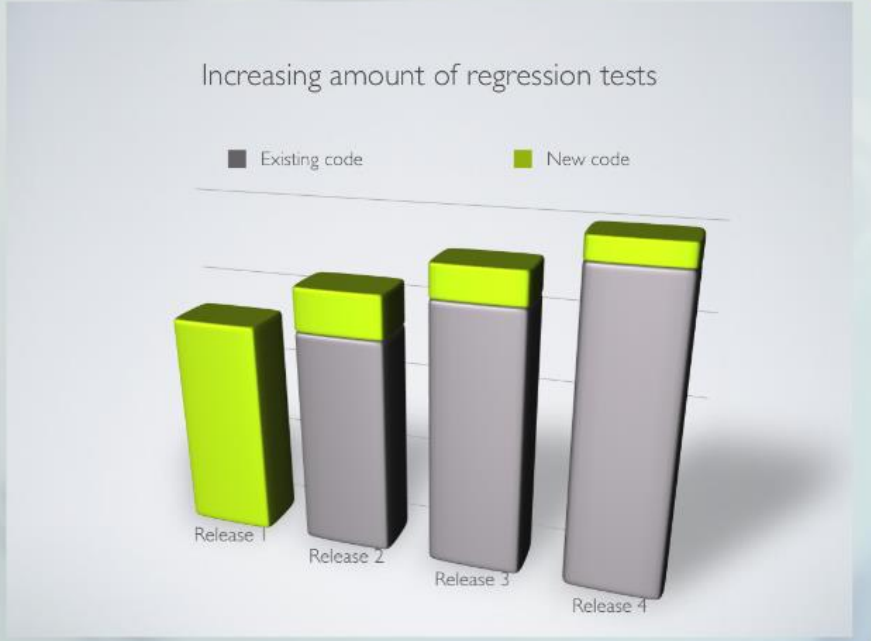
Smoke/functional

Functional Testing describes what the system does



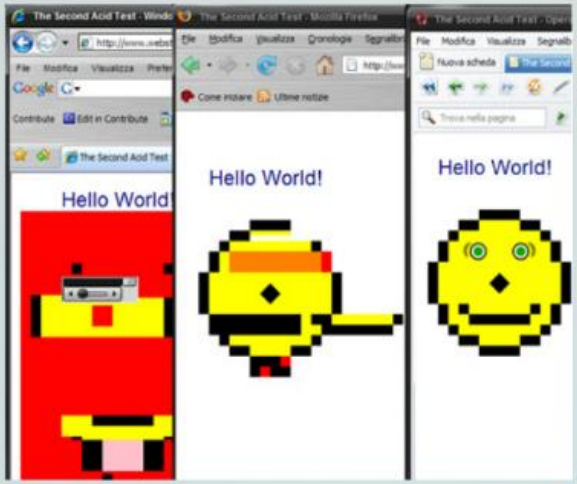
Smoke testing is preliminary testing

RegreSSion


Increasing amount of regression tests
Existing code
New code
Release 1
Release 2
Release 3
Release 4

Compatibility

evaluate the application's compatibility with the computing environment



Usability


cingular
11:14 AM
All Contacts
A
Jeffrey Alston
B
Sidney Bailey
Susan Bean
Ruth Benfield
Dustin Booth
Sandra Brooks
Kate Byers
C
Favorites
Recents
Contacts
Keypad
Voicemail

Security

process to determine that an information system protects data and maintains functionality as intended

Localization

Because every country's language, culture, currency, taxes and standards are different

Performance

Load/stability

Determine a system's behavior under both normal and anticipated peak load conditions

Configuration

Stress

Load/Stability

Determine a system's behavior under both normal and anticipated peak load conditions

Stress

Configuration

Acceptance testing

this is how we finish a presentation:

Questions?