Busting the myths of software testing

Bogdan - Altom

Who am I

How I got into testing

True or False?

True or false?

1. Testing = QA
2. Testers break software
3. Testing can be automated
4. Testers don’t have tech skills
5. Testers don’t code
6. Testers are paid less than developers
7. Testing is clicking at random places
8. Testers are to blame for bugs in production
9. A tester’s main job is to find bugs
10. Testing is boring

Testing = QA

What is quality?

What is quality?

Value to a person

What is software testing?

What is software testing?

A technical investigation to provide stakeholders information about quality

Testing provides information about quality

It evaluates it but doesn't guarantee it.

Testing is different from quality assurance

Testers break software.

Common things testers do

- Testers find ways to use the product that developers didn't expect
- Testers find security vulnerabilities
- Testers find crashes
- Testers find corner cases when the program misbehaves
- Testers find programming logic issues

Common things testers do

- Testers **find** ways to use the product that developers didn't expect
- Testers **find** security vulnerabilities
- Testers **find** crashes
- Testers **find** corner cases when the program misbehaves
- Testers **find** programming logic issues

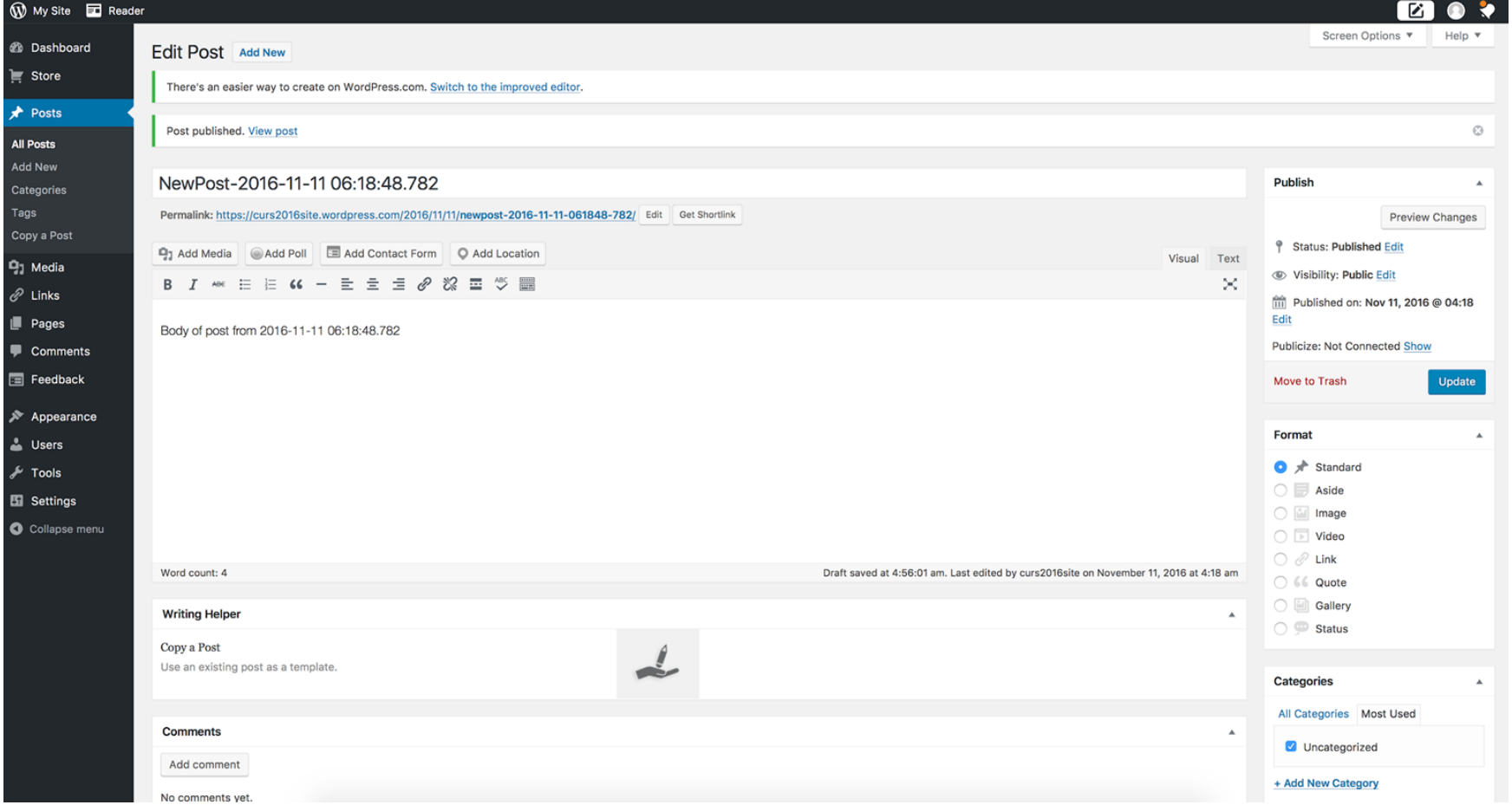
The problems were already there

~~Testers break software~~

“Testers break illusions about software”

(James Bach)

Testing can be automated


My Site
Reader
Dashboard
Store
Posts
All Posts
Add New
Categories
Tags
Copy a Post
Media
Links
Pages
Comments
Feedback
Appearance
Users
Tools
Settings
Collapse menu
Edit Post
Add New
Screen Options
Help
There's an easier way to create on WordPress.com. Switch to the improved editor.
Post published. View post
NewPost-2016-11-11 06:18:48.782
Permalink: https://curs2016site.wordpress.com/2016/11/11/newpost-2016-11-11-061848-782/ Edit Get Shortlink
Add Media
Add Poll
Add Contact Form
Add Location
Visual
Text
Body of post from 2016-11-11 06:18:48.782
Word count: 4
Draft saved at 4:56:01 am. Last edited by curs2016site on November 11, 2016 at 4:18 am
Writing Helper
Copy a Post
Use an existing post as a template.
Comments
Add comment
No comments yet.
Publish
Preview Changes
Status: Published Edit
Visibility: Public Edit
Published on: Nov 11, 2016 @ 04:18 Edit
Publicize: Not Connected Show
Move to Trash
Update
Format
Standard
Aside
Image
Video
Link
Quote
Gallery
Status
Categories
All Categories
Most Used
Uncategorized
+ Add New Category

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23
24
25
26  ChromeDriver driver = new ChromeDriver();
27
28  driver.navigate().to("https://curs2016site.wordpress.com/wp-admin/post-new.php");
29
30  driver.findElement(By.id("user_login")).sendKeys("my_username");
31  driver.findElement(By.id("user_pass")).sendKeys("my_password");
32  driver.findElement(By.id("wp-submit")).click();
33
34  driver.findElement(By.id("title")).sendKeys("New Post Title");
35  driver.findElement(By.id("body")).sendKeys("New Body for the new post");
36
37  driver.findElement(By.id("publish")).click();
38
39  Assert.assertEquals("Published", driver.findElement(By.id("post-status-display")).getText());
40
41  driver.quit();
42
```

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34  driver.findElement(By.id("title")).sendKeys("New Post Title with a very long title that will probably
35    not fit in the box that is meant for it ....");
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32  driver.findElement(By.id("wp-submit")).click();
33
34  driver.findElement(By.id("title")).sendKeys("");
35
36  driver.findElement(By.id("publish")).click();
37
38  Assert.assertEquals("Published", driver.findElement(By.id("post-status-display")).getText());
39
40  driver.quit();
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42
```

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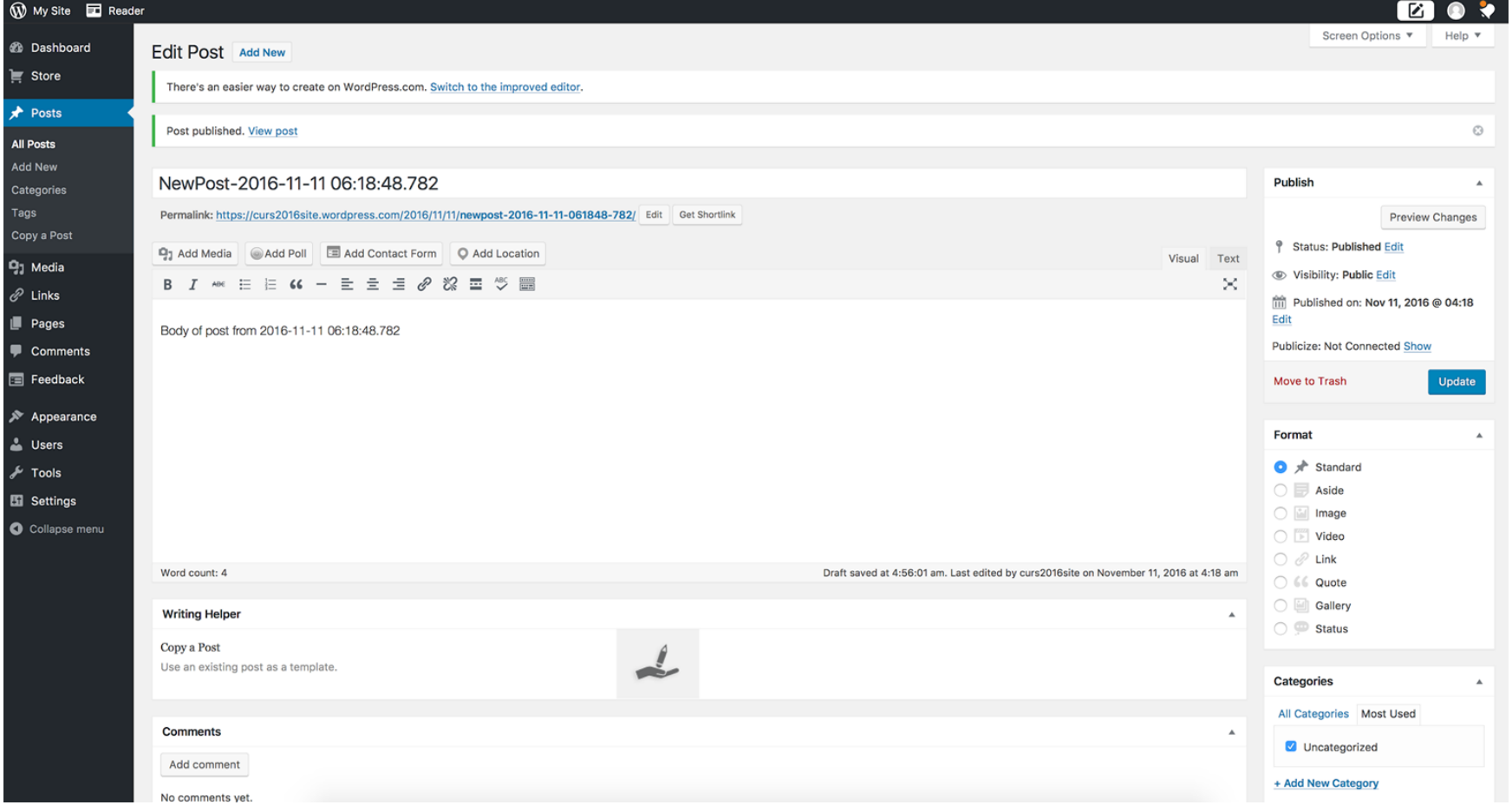
My Site
Reader
Dashboard
Store
Posts
All Posts
Add New
Categories
Tags
Copy a Post
Media
Links
Pages
Comments
Feedback
Appearance
Users
Tools
Settings
Collapse menu
Edit Post
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Add Media
Add Poll
Add Contact Form
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Writing Helper
Copy a Post
Use an existing post as a template.
Comments
Add comment
No comments yet.
Publish
Preview Changes
Status: Published Edit
Visibility: Public Edit
Published on: Nov 11, 2016 @ 04:18 Edit
Publicize: Not Connected Show
Move to Trash
Update
Format
Standard
Aside
Image
Video
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Categories
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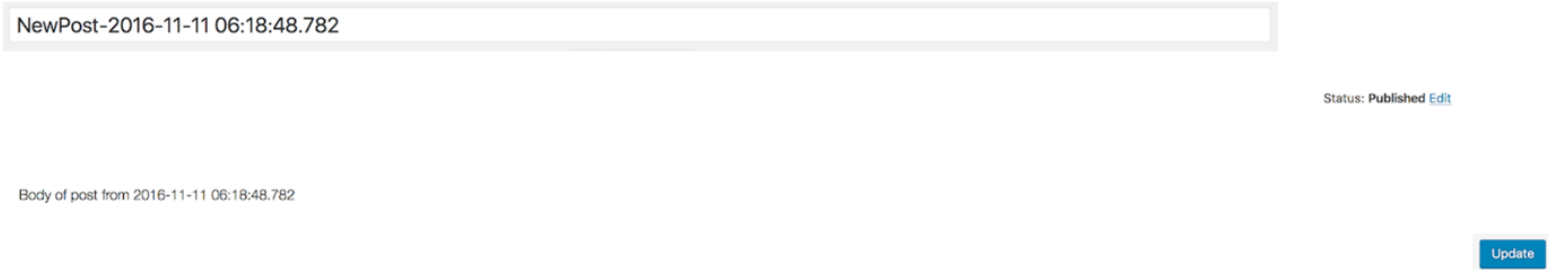
+ Add New Category


NewPost-2016-11-11 06:18:48.782
Status: Published Edit
Body of post from 2016-11-11 06:18:48.782
Update

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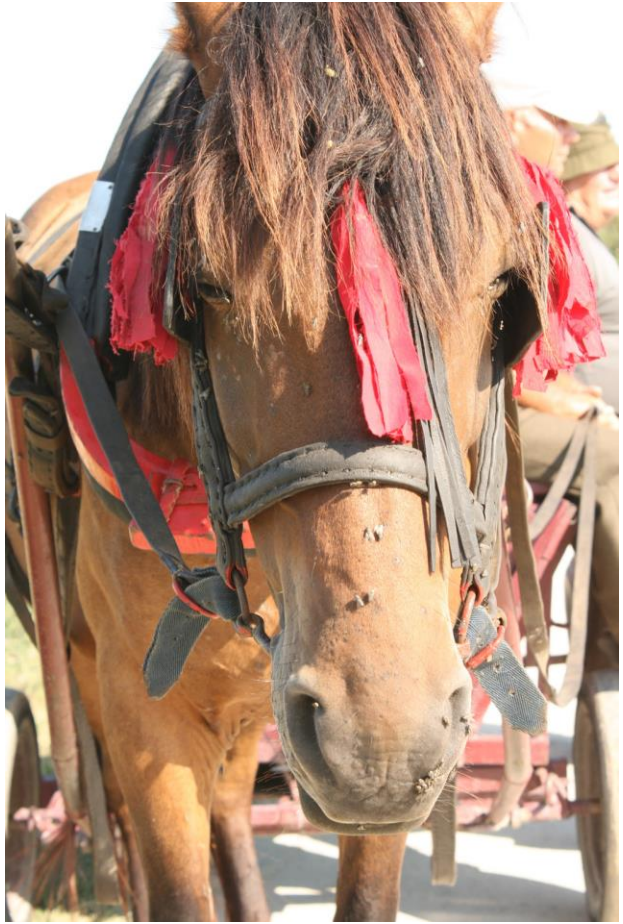
Testing can be automated

@AltomSays



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Testing can be automated

@AltomSays

We can automate

- Repetitive tasks
- Parts of a test - like the setup part
- Tests with easy outcomes/outputs
- Partial tests

We cannot automate

- Thinking
- Improvising
- Strategizing
- Tests that have complex outputs

~~Testing can be automated~~

Some tests can/should be automated

Unlike developers, testers don’t have tech skills.

Technical != coding all day

Tech skills used while testing

- Networking related skills
- Security analysis skills
- Automation tools
- Domain specific skills (web & mobile technologies)
- Debugging & investigating skills
- Performance monitoring skills
- Data analysis skills

~~Unlike developers, testers don’t have tech skills~~

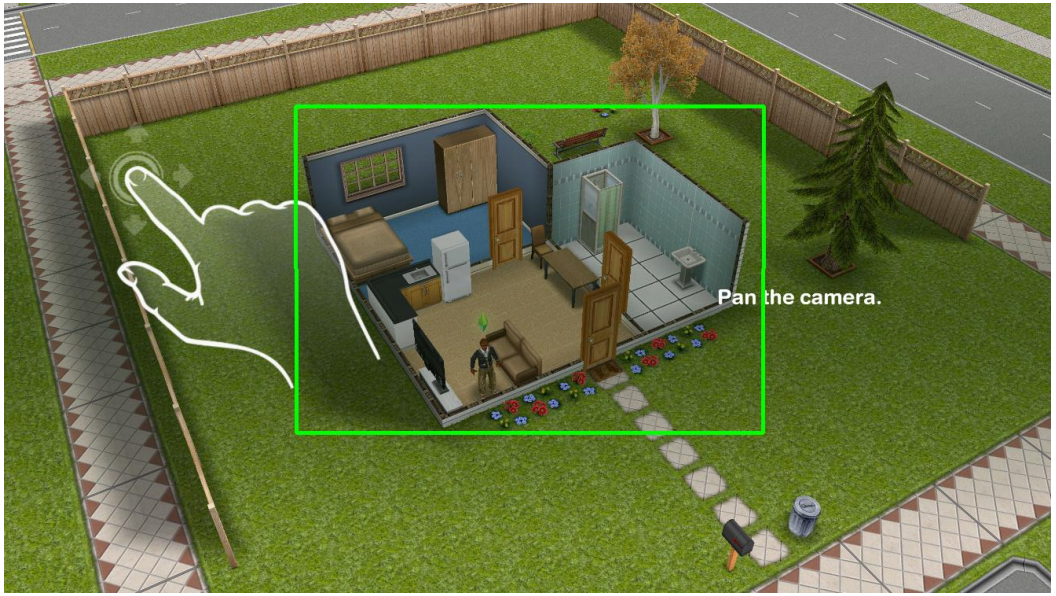
Testers and developers have complementary tech skills

Testers don’t code.

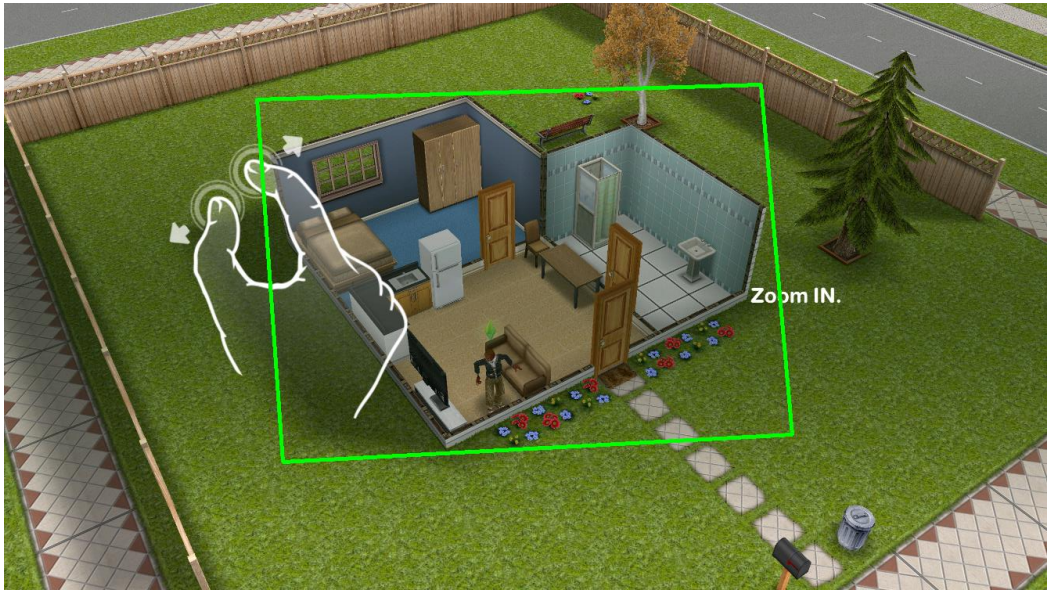
Automation projects

- Mobile games automation

Resolution Agnostic, works rotated and stretched items



Resolution Agnostic, works rotated and stretched items



Resolution Agnostic, works rotated and stretched items

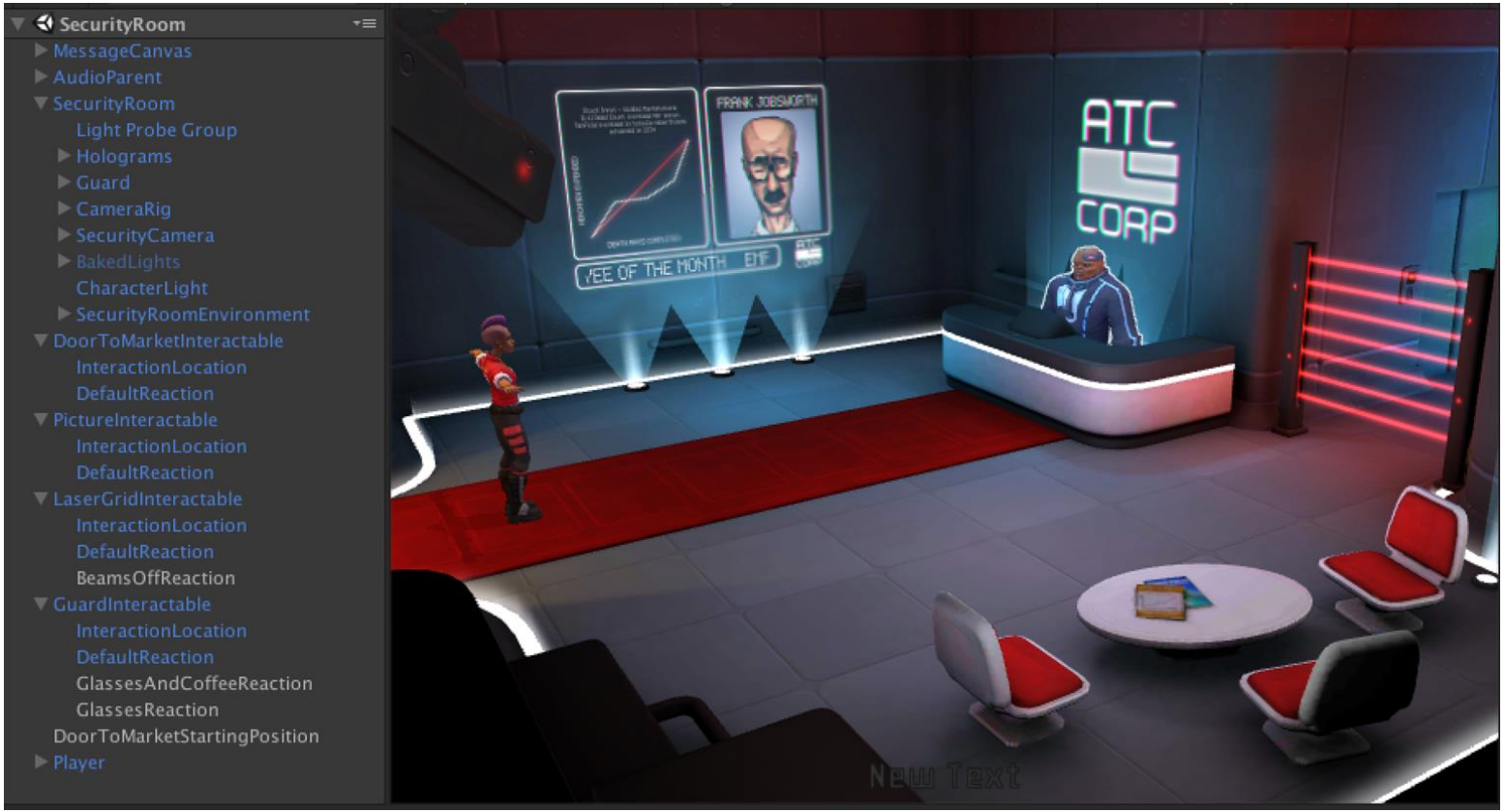
Resolution Agnostic, works rotated and stretched items

Automation projects

- Mobile games automation
- Web apps automation
- Automation using robots

Building testing tools

- AltRunner
- WebUiChecker
- AltUnityTester


SecurityRoom
MessageCanvas
AudioParent
SecurityRoom
Light Probe Group
Holograms
Guard
CameraRig
SecurityCamera
BakedLights
CharacterLight
SecurityRoomEnvironment
DoorToMarketInteractable
InteractionLocation
DefaultReaction
PictureInteractable
InteractionLocation
DefaultReaction
LaserGridInteractable
InteractionLocation
DefaultReaction
BeamsOffReaction
GuardInteractable
InteractionLocation
DefaultReaction
GlassesAndCoffeeReaction
GlassesReaction
DoorToMarketStartingPosition
Player
FRANK JOBSWORTH
ATC
CORP
New Text

~~Testers don’t code~~

Testers can code

Testers are paid less than developers

People are paid based on their skills

Invest in your own skills

Good testers are paid the same as good developers

Testing is clicking at random places

Photo: https://www.guru99.com/monkey-testing.html

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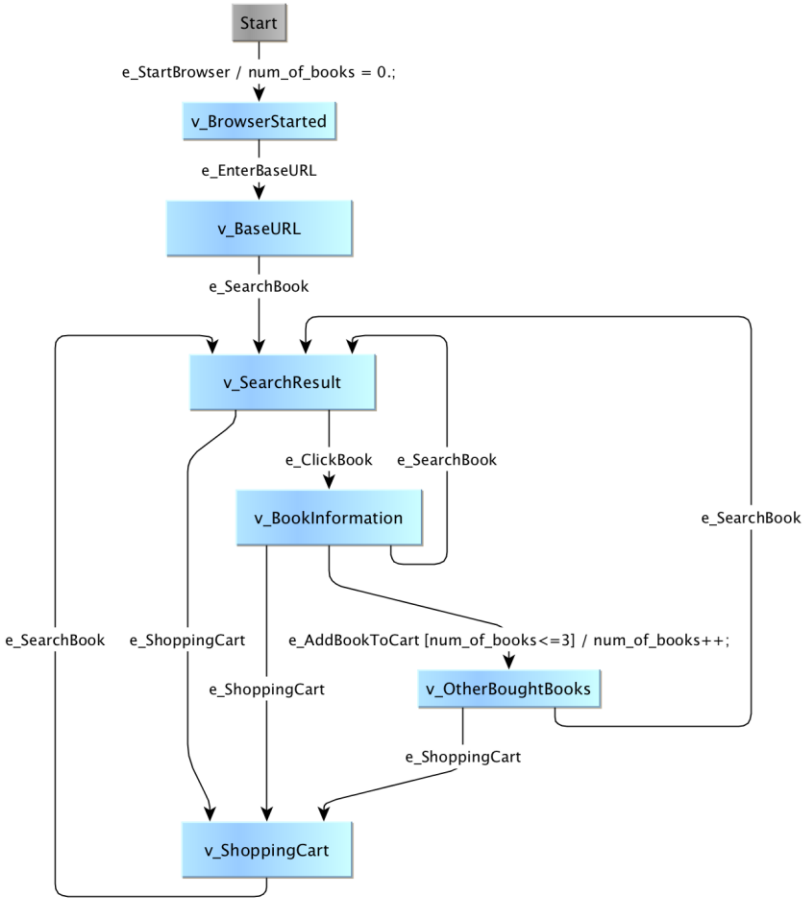
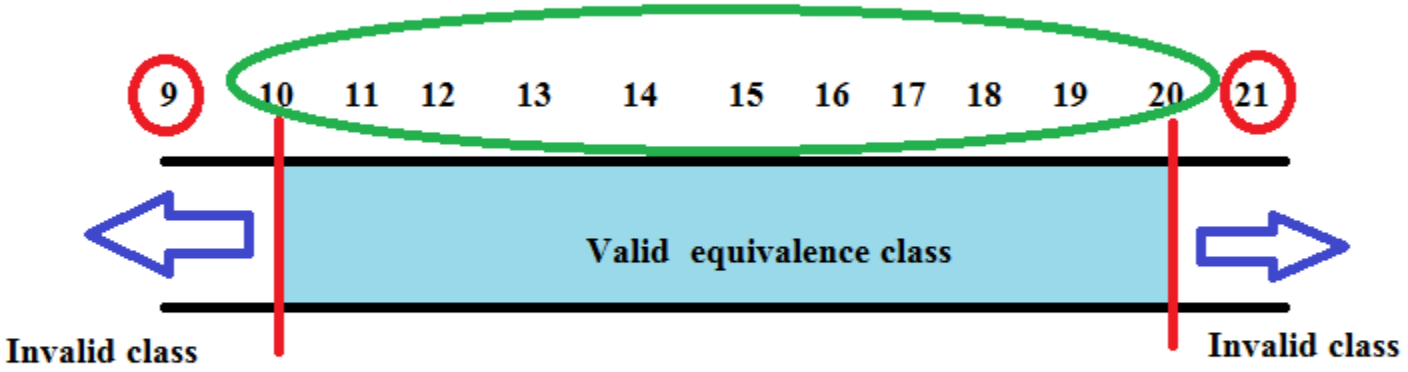
Testing is clicking at random places

@AltomSays

Model Based Testing



Domain Testing



Risk Based Testing

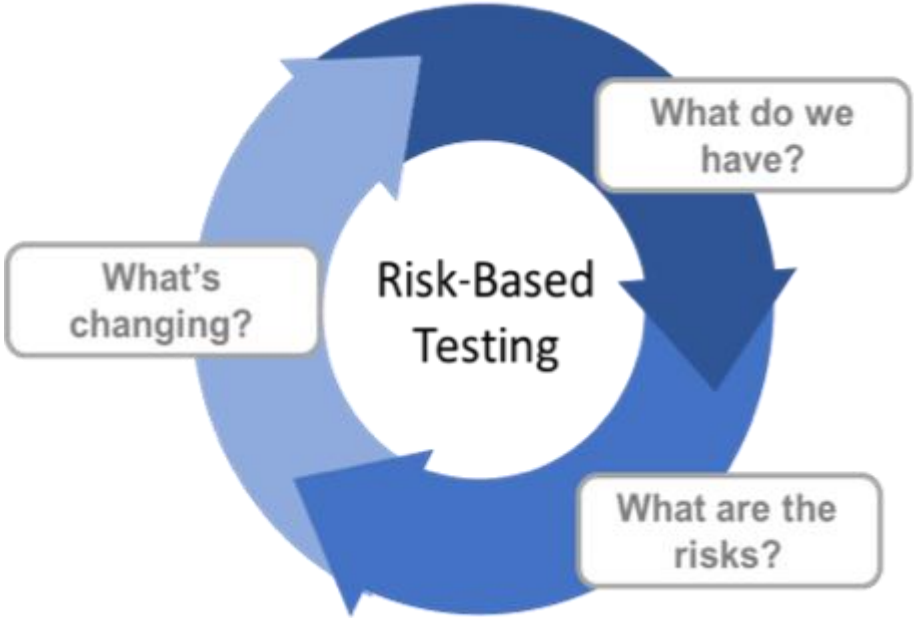


Photo: https://www.worksoft.com/solutions/risk-based-testing

~~Testing is clicking at random places~~

Some testing is getting a machine to click at random places

Testers are to blame
for bugs in production.

Reasons why a bug might slip to production

- We can never test everything
- A tester missed it
- A test manager/project manager said that functionality is not important
- A developer didn’t fix it
- The company only tests in production

Who is to blame?

~~Testers are to blame for bugs in production~~

Blame is irrelevant

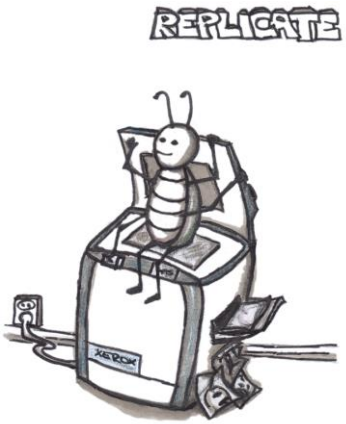
How to do better next time?

A tester’s main job is to find bugs

“It doesn’t work!”

“It doesn’t work!”

Just the first step



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A tester’s main job is to find bugs

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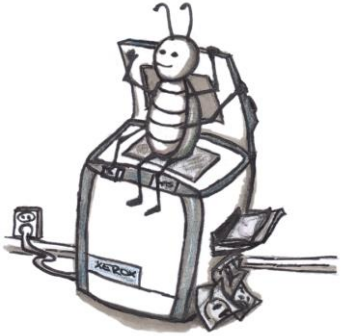
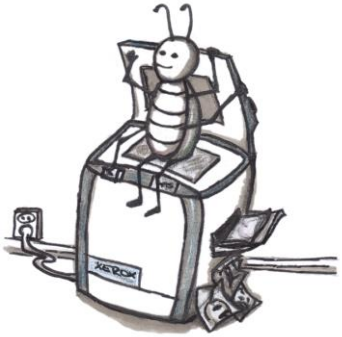
REPLICATE



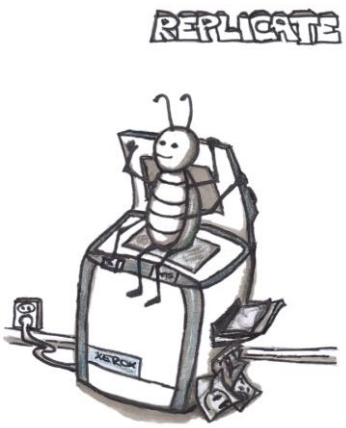
ISOLATE

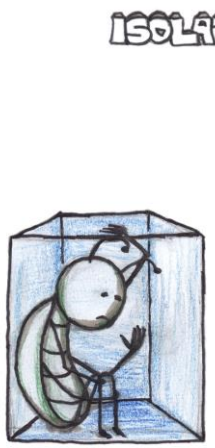
REPLICATE

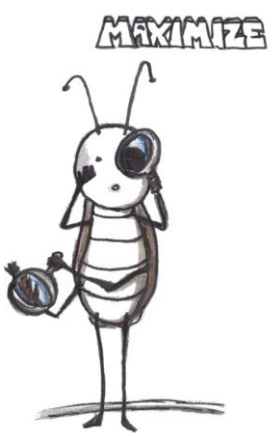


ISOLATE

MAXIMIZE







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A tester's main job is to find bugs

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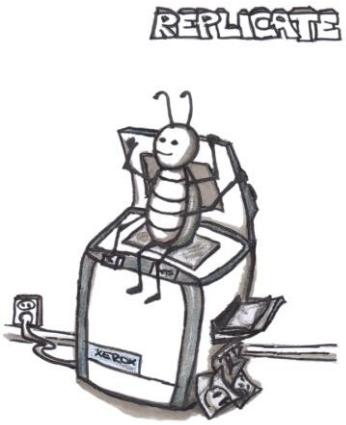
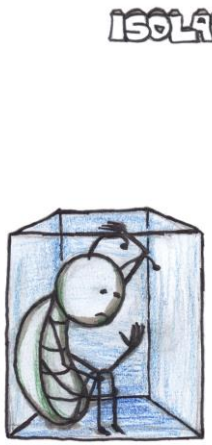
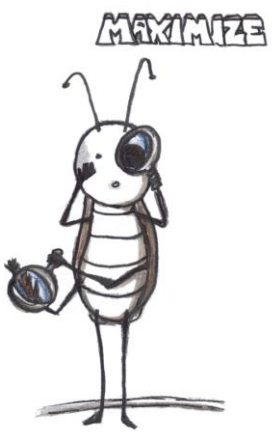
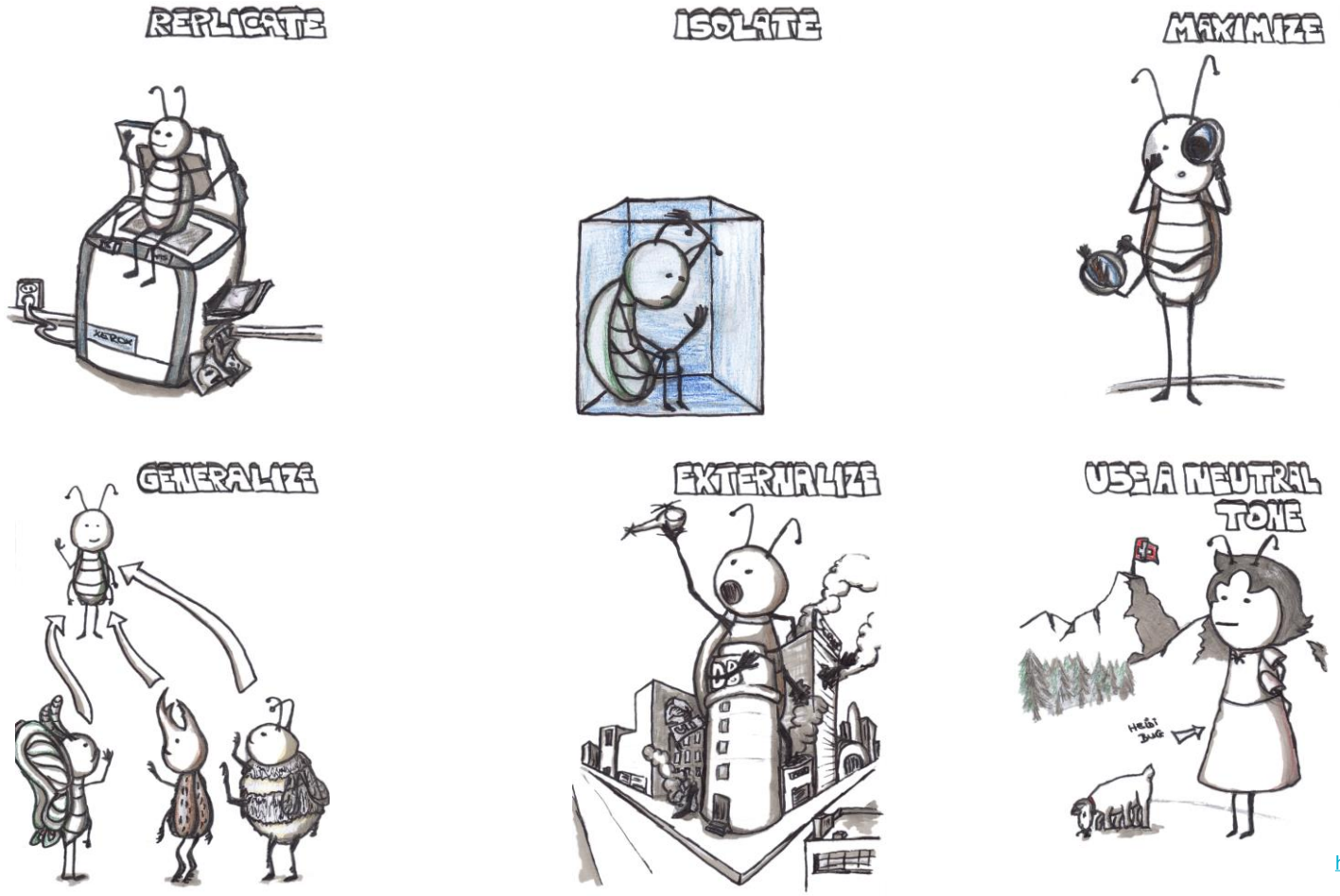

REPLICATE
XEROX


ISOLATE


MAXIMIZE

GENERALIZE

EXTERNALIZE



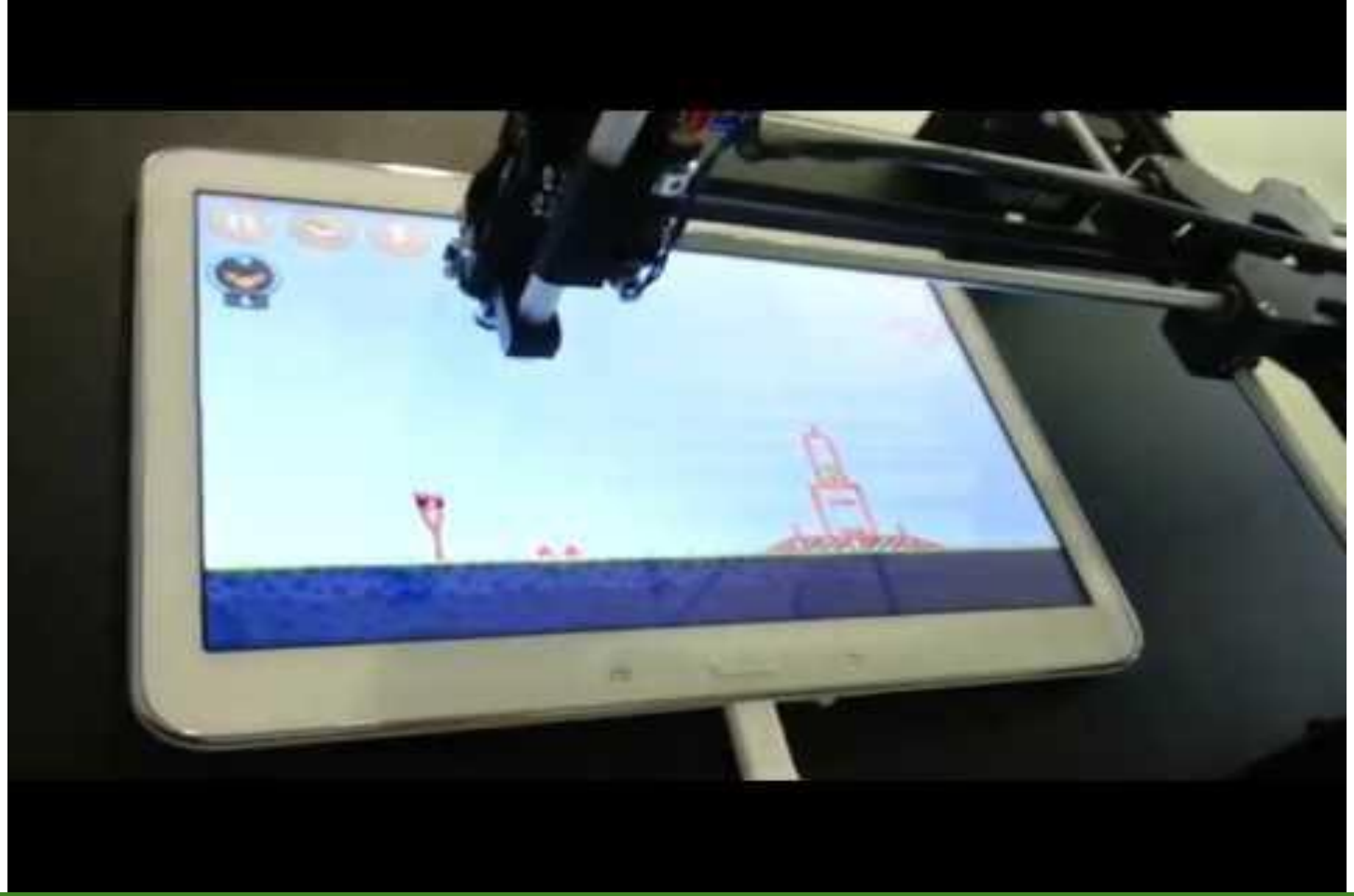
https://bbst.courses/rimgen/

Beyond bugs

~~A tester's main job is to find bugs~~

A tester's main job is to find information

Testing is boring



Testing is boring

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FELIX THE CAT
James Lyndsay's
PUZZLES
built by Altom

~~Testing is boring~~

If it’s boring, you’re doing it wrong!

True or False?

“It depends”

Resources

- Rimgen
  - https://bbst.courses/rimgen/
- Altom open-source projects
  - https://gitlab.com/altom
- Altom BBST courses
  - https://altom.training
- Android Monkey Runner
  - https://developer.android.com/studio/test/monkeyrunner/
- Graphwalker for Model Based Testing
  - https://graphwalker.github.io/

Thank you!

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