

# Busting the myths of software testing

Bogdan - Altom

# Who am I

# How I got into testing

# True or False?

# True or false?

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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

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- 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

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- Testers **find** programming logic issues

The problems were already there



~~Testers break software~~

“Testers break illusions  
about software”

(James Bach)



# Testing can be automated



```
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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33
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 ....");
36 driver.findElement(By.id("body")).sendKeys("New Body for the new post");
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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("");
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();
41
42
```





NewPost-2016-11-11 06:18:48.782

Status: **Published** [Edit](#)

Body of post from 2016-11-11 06:18:48.782

Update

Body of post from 2016-11-11 06:18:48.782

NewPost-2016-11-11 06:18:48.782

Status: **Published** [Edit](#)

Update



# We can automate

# We cannot automate

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

- 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

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- 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.

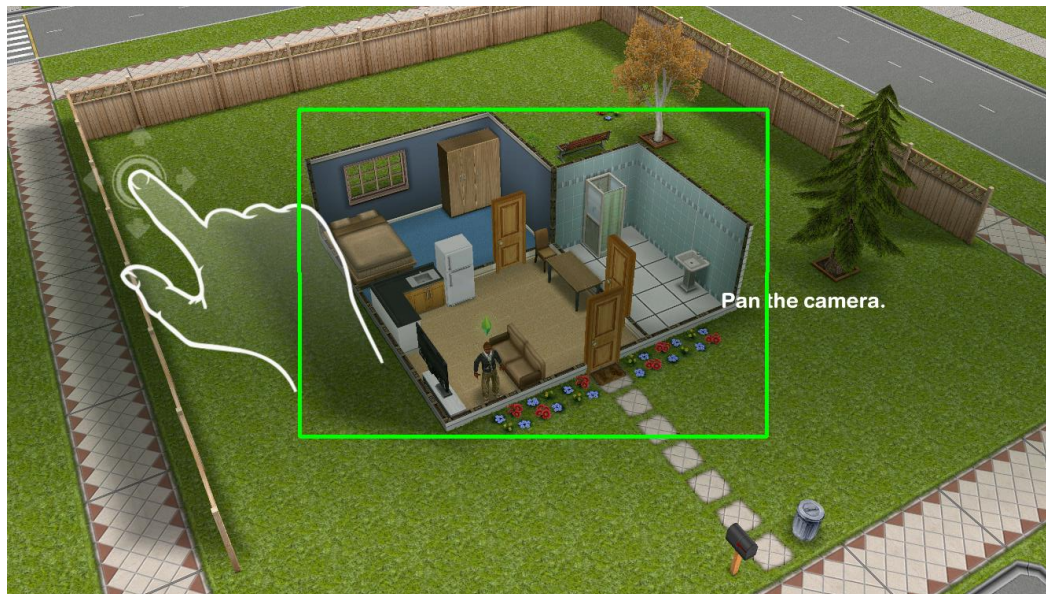


# Automation projects

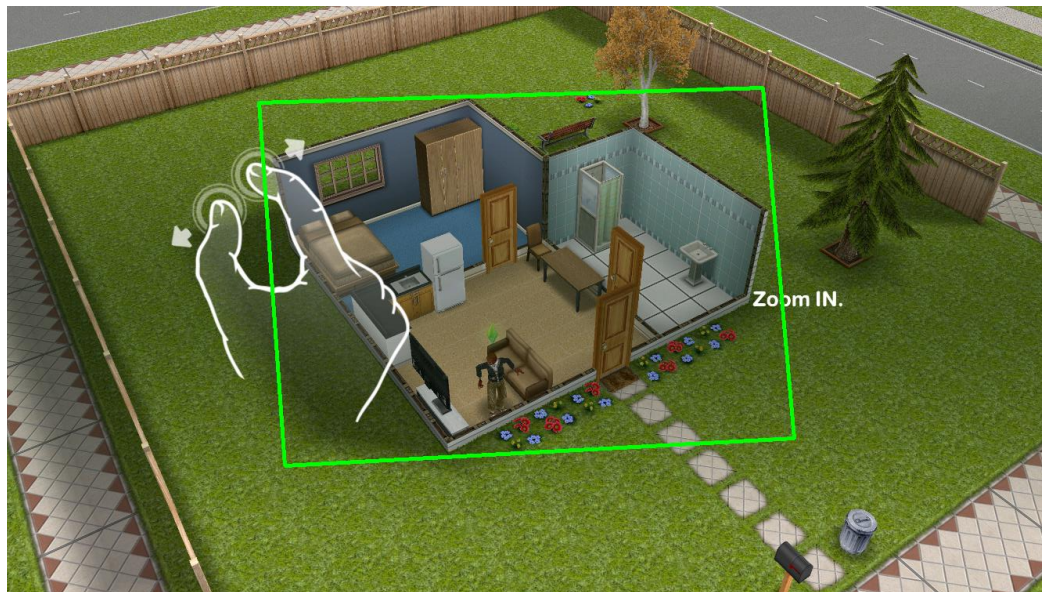
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- Mobile games automation

# 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

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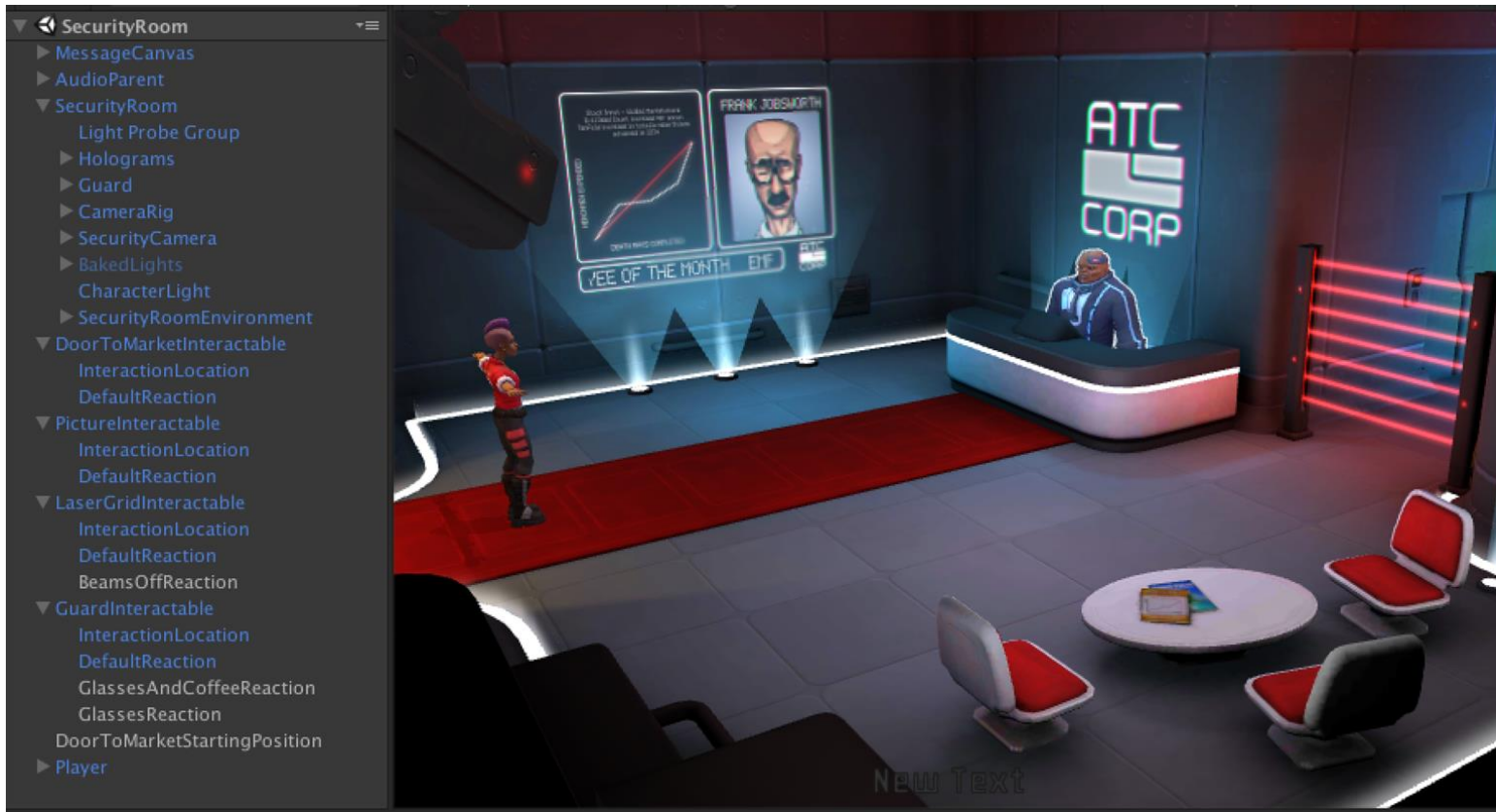
- Mobile games automation
- Web apps automation
- Automation using robots



# Building testing tools

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- AltRunner
- WebUiChecker
- AltUnityTester



~~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

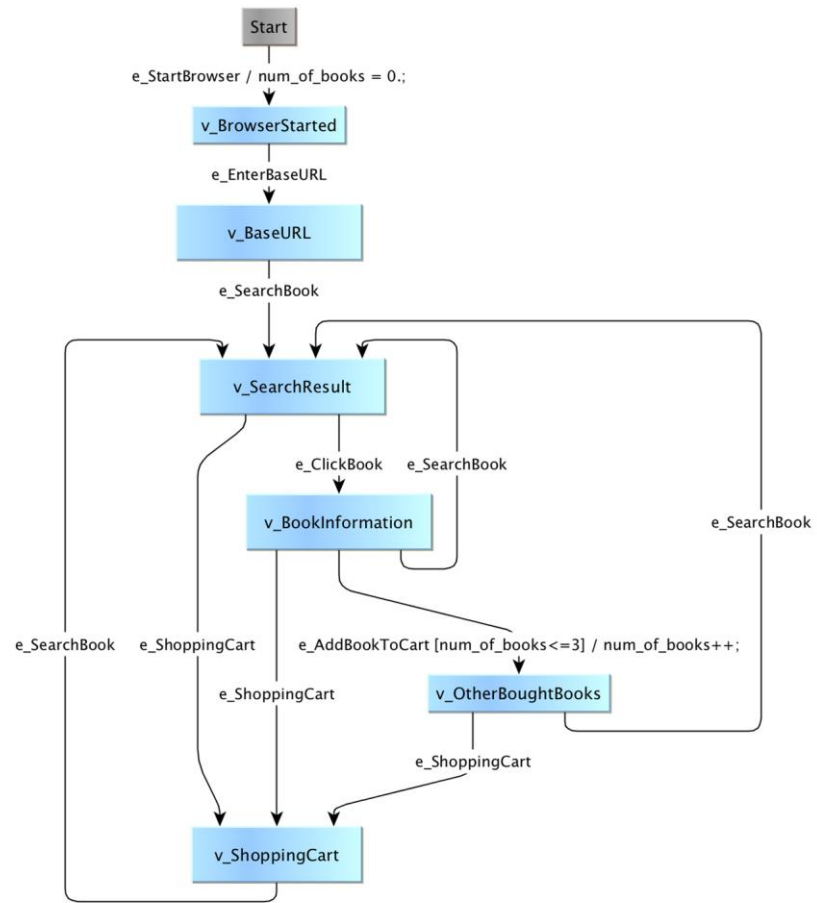
Testing is clicking at  
random places



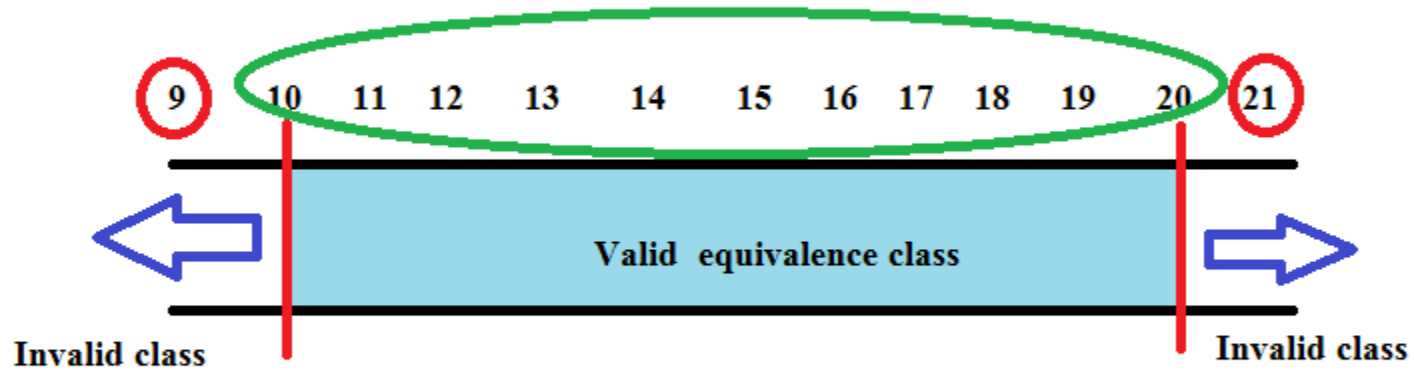


Photo: <https://www.guru99.com/monkey-testing.html>

# Model Based Testing



# Domain Testing



# Risk Based Testing

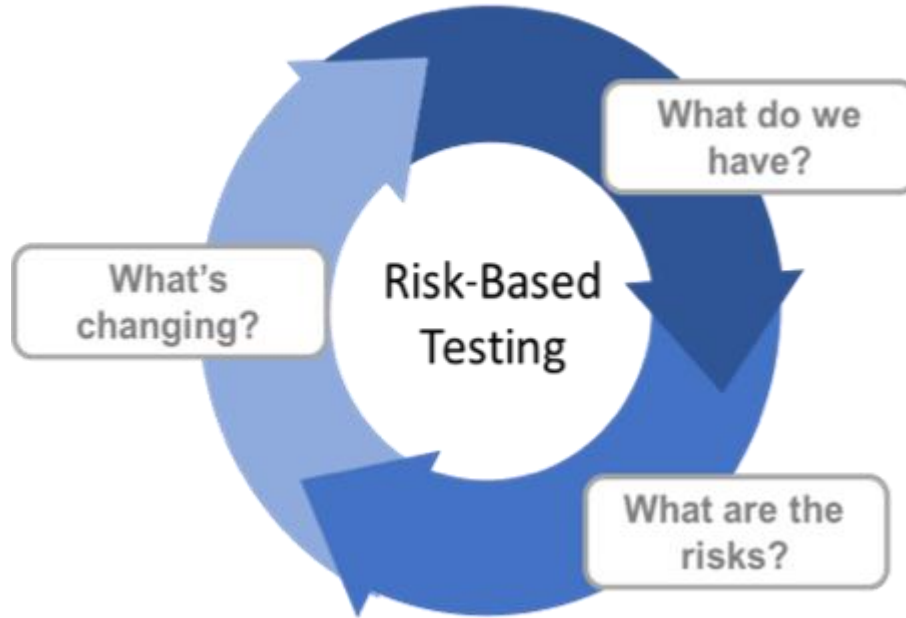


Photo: <https://www.worksoft.com/solutions/risk-based-testing>

~~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

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- 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?

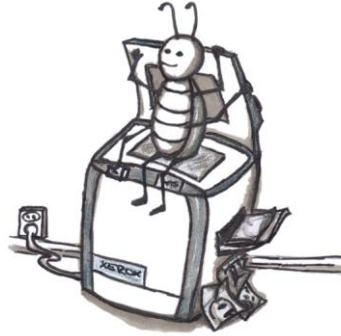
A tester's main job is  
to find bugs

“It doesn’t work!”

# “It doesn’t work!”

Just the first step

REPLICATE



REPLICATE



ISOLATE



REPLICATE



ISOLATE



MAXIMIZE



REPLICATE



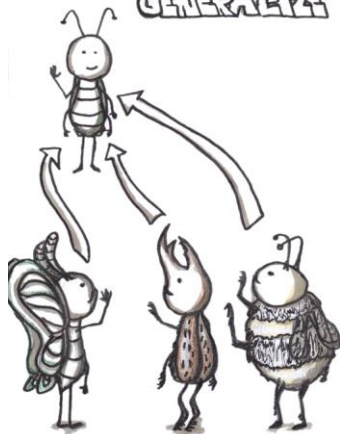
ISOLATE



MAXIMIZE



GENERALIZE





REPLICATE



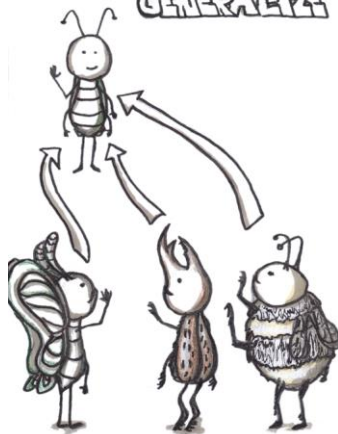
ISOLATE



MAXIMIZE



GENERALIZE



EXTERNALIZE



REPLICATE



ISOLATE



MAXIMIZE



GENERALIZE



EXTERNALIZE



USE A NEUTRAL TONE

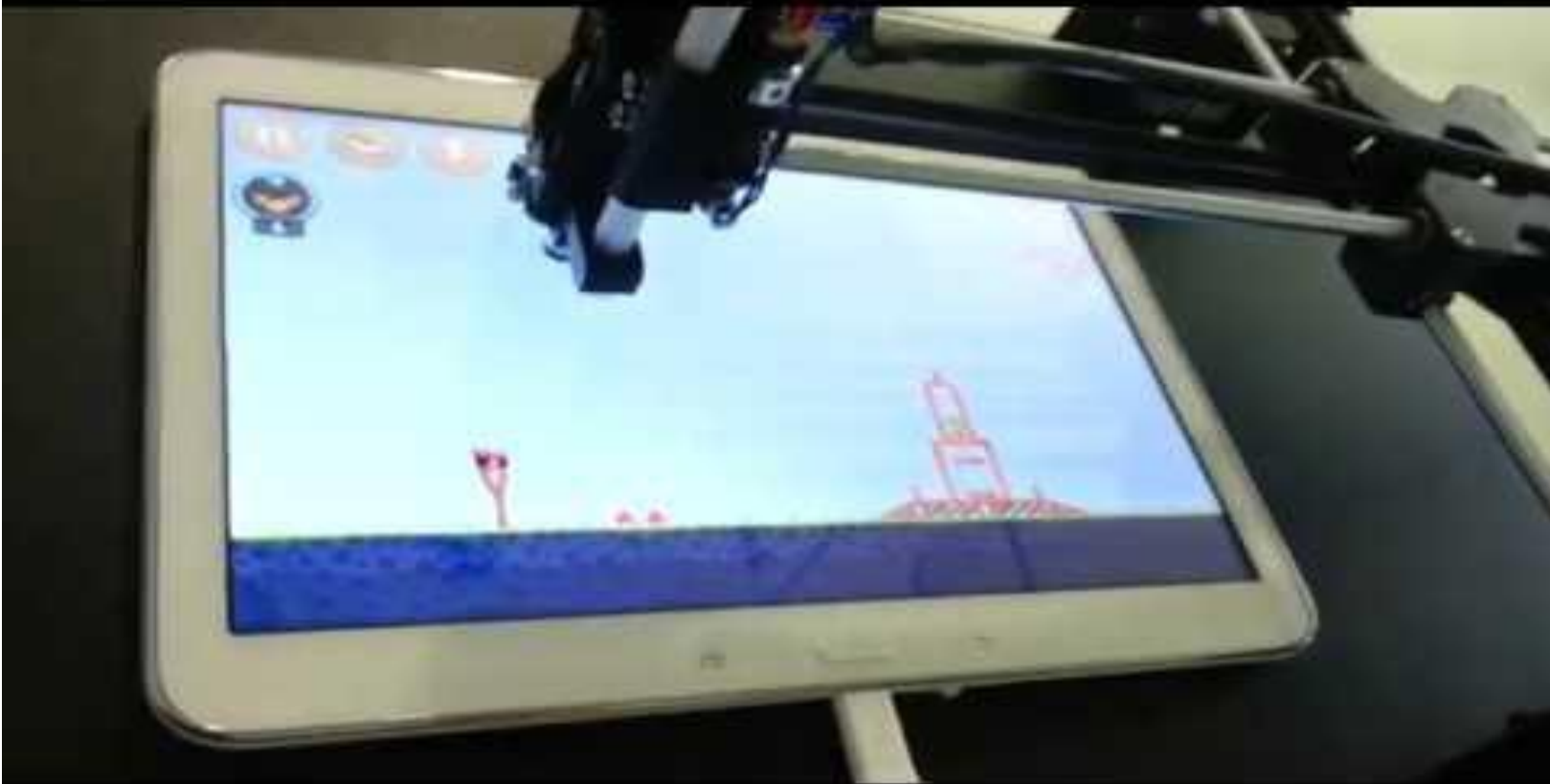


# Beyond bugs

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

A tester's main job is  
to find information

# Testing is boring











~~Testing is boring~~

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

# True or False?

“It depends”

# Resources

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- 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!