Handmatig vs. geautomatiseerd testen:

Een gezonde balans in je teststrategie

Rowena Belt

sogeti
Part of Capgemini

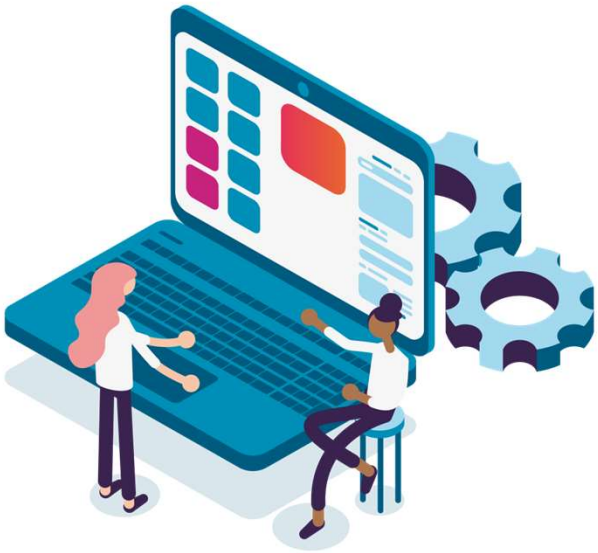
1

1. Manual vs Automated testing
2. Test strategy
3. Quality is a team effort

Company Confidential © 2023 Sogeti. All rights reserved

2

Manual vs Automated testing



3

Manual Testing

"Slow and expensive, often the bottleneck"

"Not tested properly"

Pros

- Exploratory testing
- Combining testing elements
- Code under construction

Cons

- Test execution takes time
- Testing is experience-dependent
- Repetition is problematic

Company Confidential © 2023 Sogeti. All rights reserved

4

Automated Testing

"Automate everything!"

"Less prone to human error"

Pros

- Useful for regression testing
- Reusability
- Speeds up test execution

Cons

- Expensive to set up
- Requires ongoing maintenance
- Requires a stable environment

Company Confidential © 2023 Sogeti. All rights reserved

5

Manual testing

- Perceived as bottleneck
- Very flexible
- Unsuited for repetitive tasks

Automated testing

- Automate everything!
- Fast & reusable
- Continuously expensive

Company Confidential © 2023 Sogeti. All rights reserved

6

Goal
Mitigate Risk
Give insight in Quality

Manual Testing
Finding Bugs
Gaining trust

Exploration

Tester intuition

Automated Testing
Proof that bugs don't return

Repetition

Coding perspective

Manual & Automated testing both hightlight different sides of an application!

Company Confidential © 2023 Sogeti. All rights reserved

7

Complement each other

Ensure product meets the required quality standards

Ask questions about the quality

Trying to get the whole team to care about quality

Company Confidential © 2023 Sogeti. All rights reserved

8

9

Test strategy

- Risk based
- What you tests and why
- 4 steps
  - Overview
  - Scoring
  - Reflect
  - Strategy

Company Confidential © 2023 Sogeti. All rights reserved

10

Overview

What do we have?

Are we missing anything?

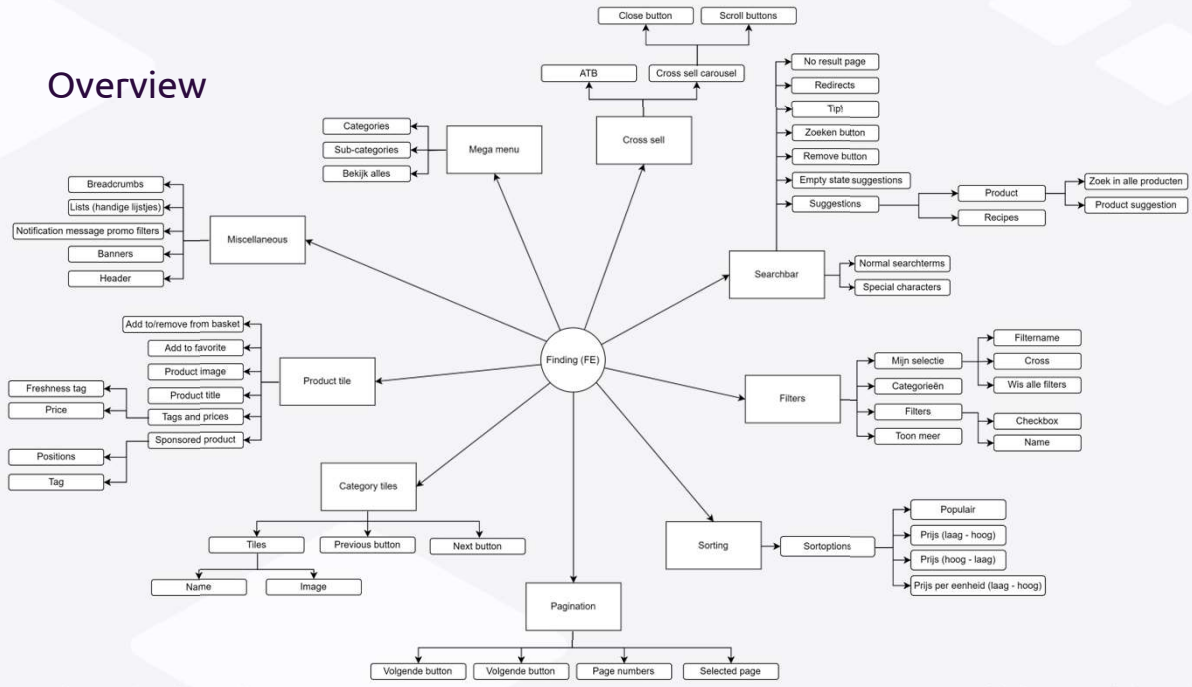
Why?

You can’t determine coverage if you don’t know the 100%

Company Confidential © 2023 Sogeti. All rights reserved

11

Overview



Company Confidential © 2023 Sogeti. All rights reserved

12

Overview

Test cases	Search	Mega menu	Category tiles	Categories	Filters	Sorting	Pagination	Why not automated
TC1	●			X				Covered by other TC
TC2	●				X			Covered by other TC
TC3	●					X		Covered by other TC
TC4	✓						X	
TC5	✓			X	X			
TC6	✓			X	X	X		
TC7	●			X	X	X	X	Too complicated
TC8	●			X		X		Covered by other TC
TC9	✓			X		X	X	

✓ Automated

● Not automated

X Elements that are part of the test case

Company Confidential © 2023 Sogeti. All rights reserved

13

Scoring

What does it all mean?

How can I decide riskiness?

Why?

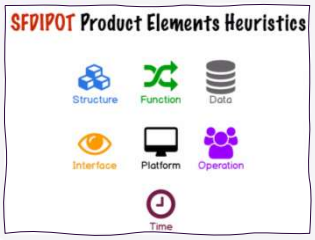
Because not all elements are as important

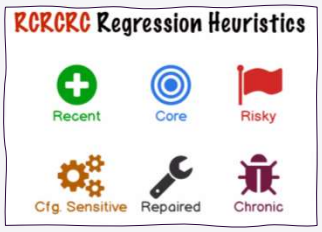
Company Confidential © 2023 Sogeti. All rights reserved

14

Scoring

- How to determine risk?
  - How much is it being used
  - What is the impact if it's not working
  - Recovery time if it breaks
- Test Heuristics





Company Confidential © 2023 Sogeti. All rights reserved

15

16

Scoring

Group	Functionality	Recent	Core - customer	Core - client	Repaired	Configuration sensitive	Risk	Chronic		Priority	Risk	Score
Searchbar												
	[illegible]	4	5	5	5	1	3	2		14	22	308
	[illegible]	1	3	1	1	1	3	1		5	12	60
	[illegible]	1	5	2	1	1	3	1		8	12	96
	[illegible]	4	5	3	1	1	1	1		12	8	96
	[illegible]	4	5	3	1	1	1	1		12	8	96
	[illegible]	4	5	1	1	1	1	1		10	8	80
	[illegible]	1	1	1	1	1	1	1		3	8	24
	[illegible]	4	5	4	1	1	1	1		13	8	104
	[illegible]	1	1	3	1	1	1	1		5	8	40
Filterbar												
	[illegible]	4	5	5	1	2	1	1		14	10	140
	[illegible]	4	5	3	1	2	1	1		12	10	120

Company Confidential © 2023 Sogeti. All rights reserved

17

Reflect

What is the value of my current test set?

Why?

If you don't know where the holes are,
you can't plug them

Company Confidential © 2023 Sogeti. All rights reserved

18

Reflect

Searchbar		Filterbar		Sorting		Pagination		Mega menu		Cross Sell		Product page		Category Tiles		Miscellaneous	
✓ TC1	Searchbar	✓ TC1	Mijn selectie - filter	✓ TC1	Single sortoption	✓ TC1	Page numbers	✓ TC1	Categories	TC1	Product tile - name	✓ TC1	Tags	TC1	Image	✓ TC1	Breadcrumbs
✓ TC2	Cross	✓ TC2	Mijn selectie - cross	TC2	Multiple sortoptions	✓ TC2	Next button	✓ TC2	Subcategories	TC2	Product tile - image	✓ TC2	Sponsored	✓ TC2	Name	✓ TC2	Terug breadcrun
✓ TC3	Zoeken button	✓ TC3	Mijn selectie - Wis alle filters			✓ TC3	Previous button	TC3	Toon alles	✓ TC3	Quantity selector	✓ TC3	ATB	✓ TC3	Next button	TC3	Social Lists
TC4	Product suggestions	✓ TC4	Filters							TC4	Buttons	✓ TC4	Click productimage	✓ TC4	Previous button	✓ TC4	Header
TC5	Recipe suggestions	TC5	Checkbox							✓ TC5	Close button	✓ TC4	Click productname			TC6	Shelftexts
TC6	Empty state suggestions	✓ TC6	Filtername									TC5	Banners			TC7	Notifications
✓ TC7	Enter	✓ TC7	(sub)Categories														
TC8	One result	✓ TC8	Toon meer														
✓ TC9	Zero results																
TC10	Redirects																

Company Confidential © 2023 Sogeti. All rights reserved

19

Strategy

What are you going to test?

How much are you testing?

Why?

Because you can't test everything

Company Confidential © 2023 Sogeti. All rights reserved

20

Strategy

Risk level	Activities
Low	Max 5 minutes of testing
0-100	Max 1 Automated test cases for component
	Max 3 Automated test cases for E2E
Medium	Max 10 minutes of testing
101-150	Max 2 Automated test cases for component
	Max 5 Automated test cases for E2E
High	Max 15 minutes of testing
150 +	Max 5 Automated test cases for component
	Max 10 Automated test cases for E2E

Company Confidential © 2023 Sogeti. All rights reserved

21

Quality is a team effort

22

Why is Quality a Team Effort?

Everybody has impact on quality

Everybody has a perspective on quality

Everybody has a perspective on risk

Company Confidential © 2023 Sogeti. All rights reserved

23

Risk poker

Planning poker, but for risks

1. Pick a story
2. Estimate together
3. Discuss differences

Goal: create risk awareness!

Company Confidential © 2023 Sogeti. All rights reserved

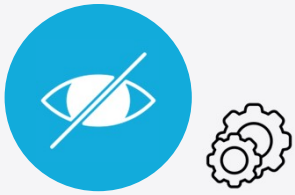
24

Pitfalls

No action after feedback

Description
Team members do not pick up the results of testing

Issue
- Effort on testing is wasted
- Technical debt increases



Ignoring the test results

Description
Team members do not look at the test results

Issue
- Tests becomes redundant
- Technical debt increases

Company Confidential © 2023 Sogeti. All rights reserved

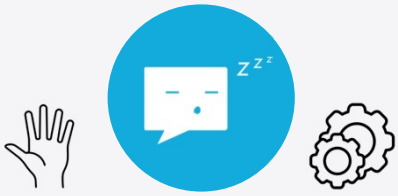
25

Pitfalls

Entropy

Description
Test cases lose their meaning over time

Issue
- Not clear what you are testing
- Results don't mean anything



No reviews

Description
Team members do not evaluate their work

Issue
- Possibility of duplication

Company Confidential © 2023 Sogeti. All rights reserved

26

Pitfalls

Not reflecting on the strategy

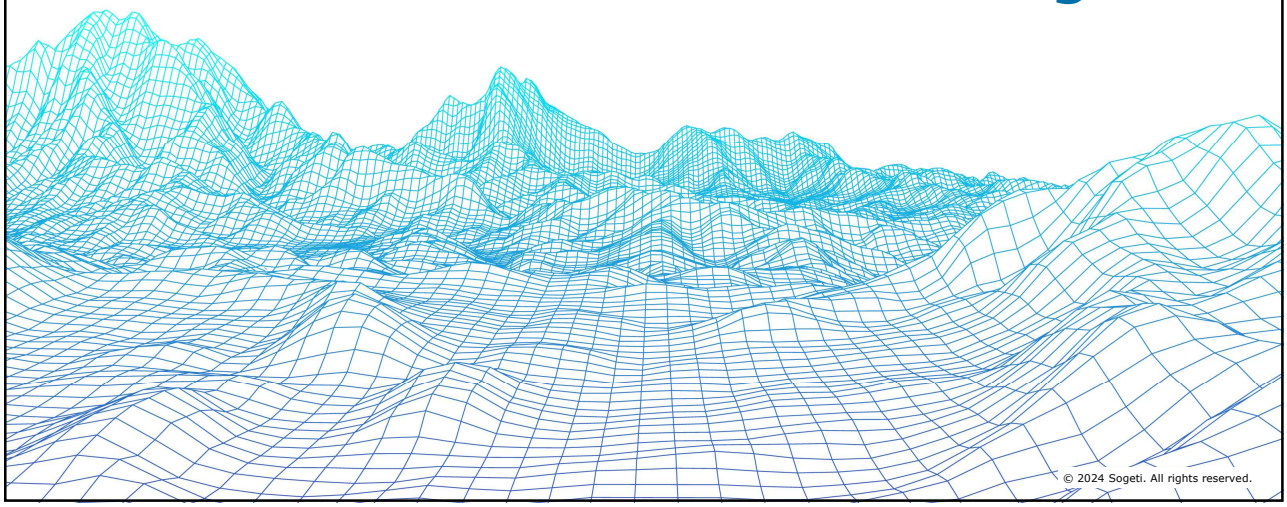
Description
Team members do not evaluate the test strategy

Issue
- Strategy gets outdated
- Focus on the wrong test cases

Company Confidential © 2023 Sogeti. All rights reserved

27

Manual & Automated Testing



© 2024 Sogeti. All rights reserved.

28

Manual testing

- New features
- Exploratory testing
- UI/UX testing

- Complexity

&

Automated testing

- Stable features
- Regression
- Performance

- Repetitive tasks
- Consistency

Manual and automated testing go together

Company Confidential © 2023 Sogeti. All rights reserved

29

Bedankt voor jullie aandacht!

Rowena Belt
Test Automation Expert
rowena.belt@sogeti.com

© 2024 Sogeti. All rights reserved.

30