



#### The Magic of Sherlock Holmes: Test Strategy In The Blink Of An Eye!



Huib Schoots Pekka Marjamaki Special Guest: Carsten Feilberg

# **The Magic of Sherlock Holmes** Test Strategy in the blink of an eye!

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Huib Schoots Pekka Marjamaki Featuring: Carsten Feilberg



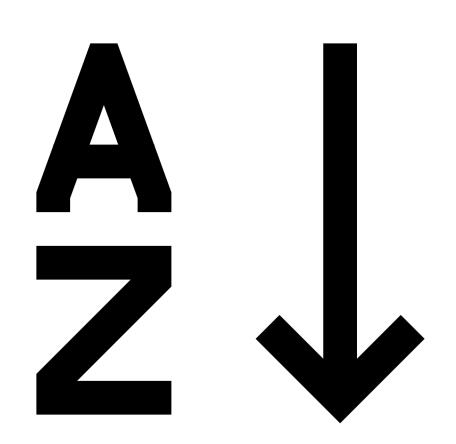


# **Exercise**:

# Sorting Game

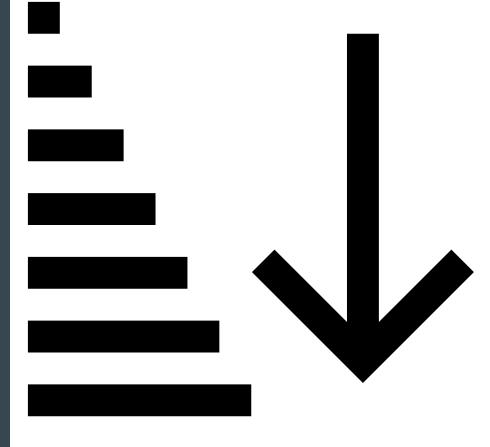
# Let's make groups & teams

- Stand in a circle with everybody in this workshop
- Sort yourself in alphabetical order based on your first name
- You have 3 minutes



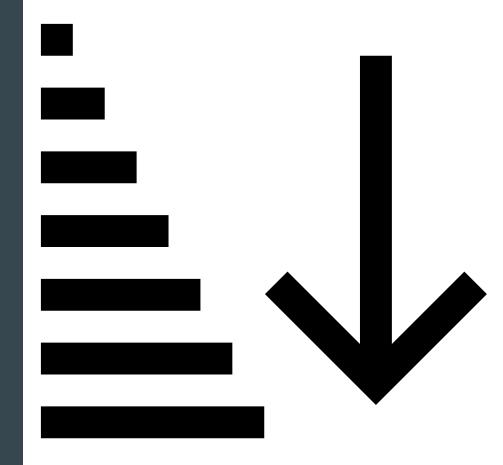
# Step 2: make groups

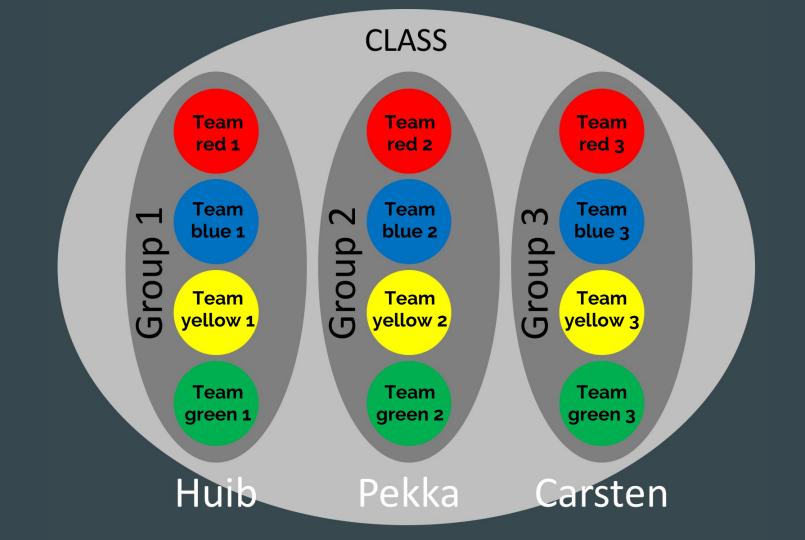
- Stand in a circle with everybody in this workshop
- Sort yourself in order based on # years of test experience
- You have 2 minutes



# Step 3: make teams

- Stand in a circle around group leader with everybody in your group
- Sort yourself in order based on # years of experience creating test strategies
- You have 2 minutes



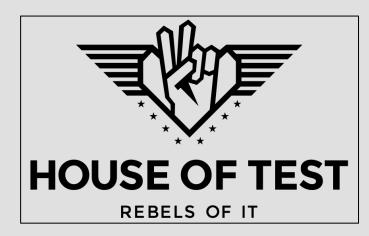


#### **Team introduction**



#### Who are we?

# Improve QUALITY SERVICES





# **Goal for today:**

Learn to create a test strategy rapidly so you can start testing as soon as possible...



# Way of working:

# Experiential workshop (with some short lectures)



This is an **experiential workshop**. Why? You will learn more from an experience than a lecture. And the learning will stick.

Experiential means you participate in exercises and simulations rather than sit in a dark room watching a slide show and listening to a lecture. An exercise or simulation speeds up time: six minutes participating in a simulation may trigger you to have the same experiences as six months in a project. The shorter duration enables you to see your experience what you did externally and what was happening internally. You can process your experiences and choose whether to continue making the same choices.

A thorough debrief of what happened during each exercise is part of its design. During the debrief, you will learn from us, the other participants, and -most of all- from yourself.



This text was stolen from Steven Smith - http://stevenmsmith.com/why-experiential-workshops/



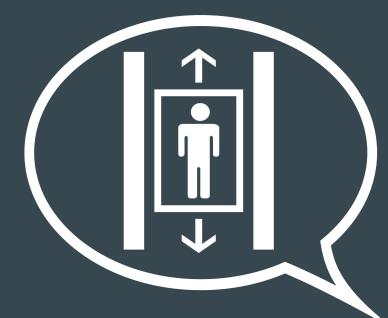


# What is a Test Strategy?

### Discuss in your team

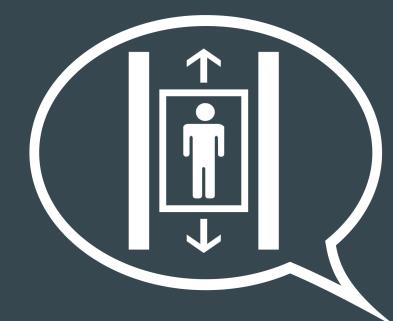
# What is a Test Strategy?

- Write a 'definition' on a flipchart
   Create a 1 min. elevator pitch
- 3. You have 10 minutes



# Debrief in groups What is a Test Strategy?

- 1. Present your elevator pitch to the other teams in your group
- 2. Ask clarifying questions
- 3. After 4 pitches: discuss in groups



## **Test Strategy**

#### Your solution to the problem

How to uncover the most important information about the system

Most efficiently & effectively

Within the constraints

With the resources available to you

While managing the risks to your testing

# **Creating a test strategy is like problem solving!**

- **1.** Define the testing problems (or test missions)
- 2. Define solutions to these problems
- 3. Communicate / capture / execute

A test strategy is a solution to a complex problem: How do we meet the information needs of the testers & stakeholders in the most efficient way possible?

# **Test Strategy**

- Strategy: the set of ideas that guide your test design
- Logistics: the set of ideas that guide your application of resources to fulfilling the test strategy
- Plan: the set of ideas that guide your test project

## **Test Strategy**

#### **Test Strategy**

- Test strategy contains the ideas that guide your testing effort; and deals with what to test, and how to do it. (Some people mean test plan or test process, which is unfortunate...)
- It is in the combination of WHAT and HOW you find the real strategy.
  - If you separate the WHAT and the HOW, it becomes general and quite useless.
- There is always a strategy, but seldom communicated
- It is not written in order to show how smart you are, it is written to communicate your ideas to (at least) two audiences:
  - Stakeholders
  - Testers

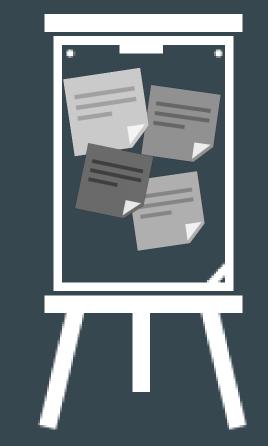




# What influences a test strategy?

#### Create a list in your team

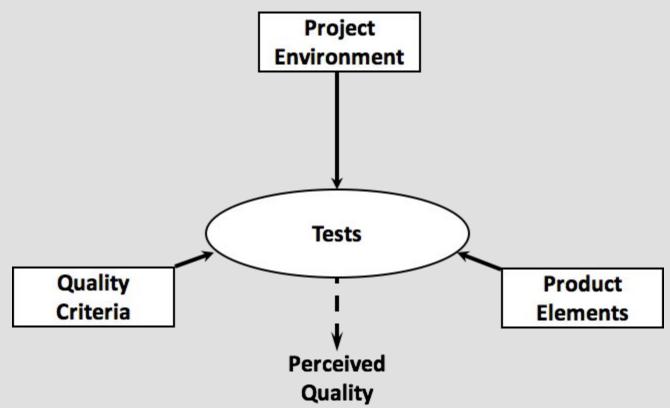
# Make stickies of everything that influences a test strategy! <u>Put them on a flipchart on the wall</u>



# **Categories**

- Missions
- Product
- Context
- Quality Criteria
- Risks
- Testing

# **Heuristic Test Strategy Model**



Source: Heuristic Test Strategy Model by James Bach

# **Project Environment: ways to understand our context**

Mission - The set of things we must do in order to satisfy our clients.
Information - Information about the product or project that is needed for testing.
Developer relations - How you get along with the programmers.
Test team - Anyone who will perform or support testing.
Equipment & tools - Hardware, software, or documents required to administer testing.
Schedule - The sequence, duration, and synchronization of project events.
Test Items - The product to be tested.
Deliverables - The observable products of the test project.



# Quality Criteria - identifying value and threats to it...

Capability Reliability Installability Security Performance Development Usability Charisma Compatibility Scalability

# **CRISP DUCCS**

Source: Rapid Software Testing by James Bach & Michael Bolton

### **Product Elements: want to cover the product?**

Function Data nterfaces Platform **Operations** - how it's used Time

- **Structure** what it's made of
  - what it does
    - what it does it to
    - what ways we can interact with it
    - what it depends upon

    - how it's affected by time

SFDIPOT

#### "Ways to test..." : General Test Techniques

**Function testing Domain testing Stress testing Flow testing Scenario testing Claims testing User testing Risk testing Automatic checking** 

# **FDSFSCURA**

Source: Rapid Software Testing by James Bach & Michael Bolton

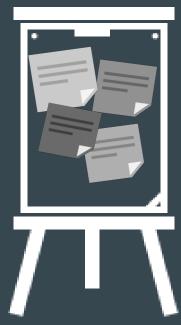




# What influences a test strategy? Categories

#### **Debrief: stuff that matters using categories**

# Using the categories: sort the factors from the last exercise.







# **Create a Test Strategy**

#### Create a test strategy with your team

### **Product** : <u>tinyurl.com/SherlockES</u>

Use your whiteboard, flipcharts and/or stickies You have 20 min



### **Test Mission**

Casies is webshop build with the Wix platform where customers can buy a case for their mobile phone. Your mission is to find problems we want to fix before release. The owner of the website needs information to decide if this webshop can be released.



### Important aspects

Most important quality criteria:

- Usability & charisma
- Reliability and security of the purchase process
- Functionality
  - Find, sort & filter
  - Purchase, cart, payment
  - Bestsellers
  - Contact
- Performance



### Debrief in groups

## 4 rounds:

- 1. summarize test strategy in 5 min
- 2. Other teams ask questions, challenge and discuss for 5 min.



#### Lunch! Be back and ready at 13:59

# Welcome back!



#### **Reflect on the exercise in teams**

#### What got in the way of doing this right?

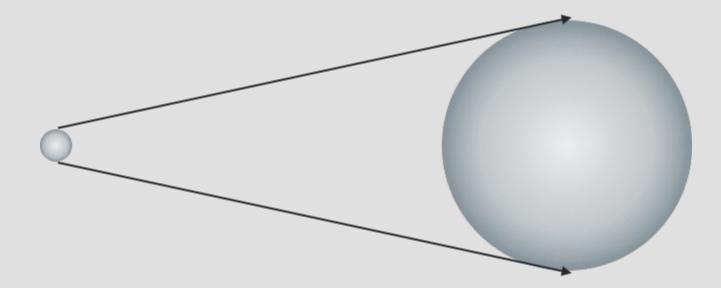
What would help to do the strategy better and faster next time?



#### **Creating a test strategy**

- 1. Missions for your testing
- 2. Product analysis
- 3. Oracles & information sources
- 4. Quality characteristics
  - 5. Context: project environment
  - 6. Test strategies

#### Test strategies grow over time



Over time we learn & discover more.

#### **Creating a test strategy: an example by Rikard Edgren**

#### Screen Pluck 0.3 - Test analysis

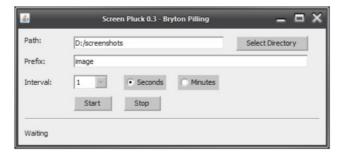
This is a test analysis written by Rikard Edgren, version 0.4.

It is done for educational purposes, the idea is that it should provide an example of how to think in order to get the basis for testing a product well.

It is a very small application, that's why it is possible to go into detail also with the documentation. The thought processes are roughly the same as for more complex software, but also totally different.

#### Introduction

Screen Pluck is an application that takes screen captures at time intervals specified by user.



The user specifies file names and folder location, the software will add an increasing number.

Test Analysis example by Rikard Edgren - http://thetesteye.com/examples/ScreenPluck\_TestAnalysis.pdf

15 min of sharing experiences using this by Pekka & Carsten - facilitated by Huib





### How to make a Testing Strategy?

#### **Discuss in teams**

We are about to give you another product to test. It can be anything.



1. How would you use what we just told you to create/discussing/developing a test strategy for this product?

2. How would you do that differently from the earlier exercise?





## Create a Test Strategy For a Restaurant Reservation System

#### Create a test strategy with your team

The system has not been build yet Read the documentation Use your whiteboard, flipcharts and/or stickies You have 30 min to prepare Present your work in a 'science fair'



#### Science fair



Walk around and look at other people's strategies. One or two people remain at their work to explain. Discuss what you see. Ask questions about the strategies. Challenge other people.





#### **References & more information**

- Thinking Strategically About Testing EuroSTAR Fiona Charles <u>https://youtu.be/O4d0Hbtd68s</u>
- EuroStar tutorial "Test Strategy Next Level" by Rikard Edgren -<u>http://thetesteye.com/presentations/Edgren\_Tutorial\_TestStrategyNextLevel.pdf</u>
- Heuristic Test Strategy Model by James Bach <u>http://www.satisfice.com/tools/htsm.pdf</u>
- Test Strategy Checklist <u>http://thetesteye.com/posters/TestStrategyChecklist.pdf</u>
- Test Analysis example by Rikard Edgren <u>http://thetesteye.com/examples/ScreenPluck\_TestAnalysis.pdf</u>
- Context-free questions for testers <u>http://www.developsense.com/blog/2010/11/context-free-questions-for-testing/</u>
- Book: Lessons Learned in Software Testing by Kaner, Bach & Pettichord
- Basics Revisited: Test Strategy by Fiona Charles <u>http://www.quality-intelligence.com/articles/BasicsRevisited-TestStrategy.pdf</u>
- The Little Black Book on Test Design by Rikard Edgren <u>http://www.thetesteye.com/papers/TheLittleBlackBookOnTestDesign.pdf</u>
- Sharing testing with non-testers in an agile team by Katrina Clokie -<u>http://nordictestingdays.eu/files/files/katrina\_clokie-sharing\_testing\_with\_nontesters\_in\_an\_agile\_team.pdf</u>
- Test Strategy Retrospective by Katrina Clokie <u>http://katrinatester.blogspot.co.nz/2014/04/test-strategy-retrospective.html</u>
- What is a good test strategy by Rikard Edgren <u>http://thetesteye.com/blog/2013/09/what-is-a-good-test-strategy</u>
- A Question About Test Strategy by James Bach <u>http://www.satisfice.com/blog/archives/63</u>
- Experiential Workshops by Steven Smith <u>http://stevenmsmith.com/why-experiential-workshops/</u>
- Low tech dashboard <u>http://www.satisfice.com/presentations/dashboard.pdf</u>
- Session Based Test Management <u>http://www.satisfice.com/sbtm/</u>
- Mind maps in testing http://www.huibschoots.nl/downloads/Mind%20Maps%20Tutorial%20ATD%202012.pdf
- More links on test strategy <u>http://www.huibschoots.nl/wordpress/?page\_id=441#strategy</u>



## **Contacts:**

# huib.schoots@improveqs.nl pekka.marjamaki@solita.fi Carsten.Feilberg@houseoftest.dk