Testopsy:

Dissecting your Testing

TEST NET

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Improve Quality Services

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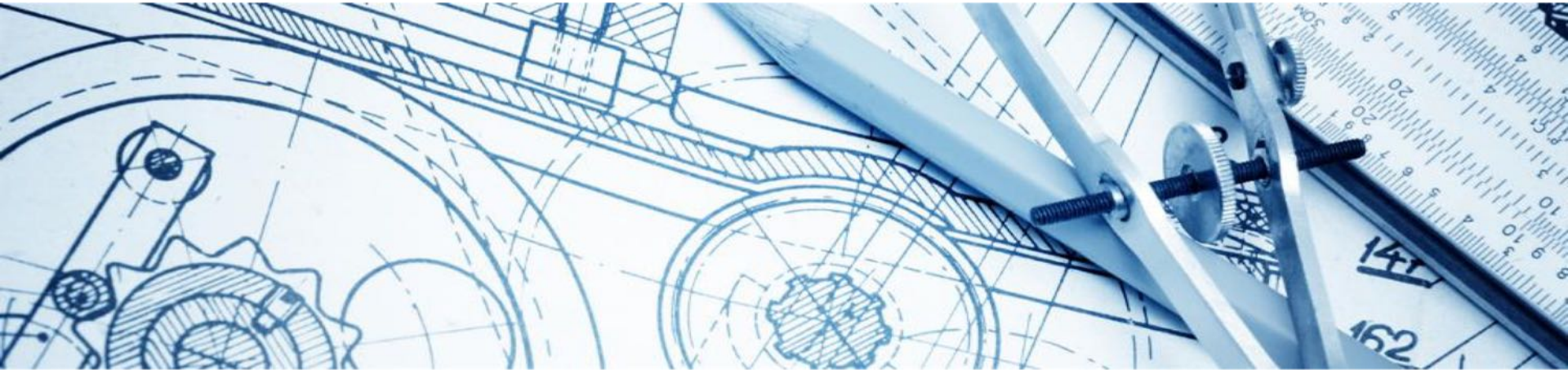
BREDEX

Introduction



Goals for today

- To become a better tester!
- Not by teaching you how to test, but by letting you experience what you do!
- We will teach you how to recognise what you do while you are testing
- You can use that as a learning tool to get better at testing

What do you do when you test?

Unplanned… unanticipated… unspoken work…

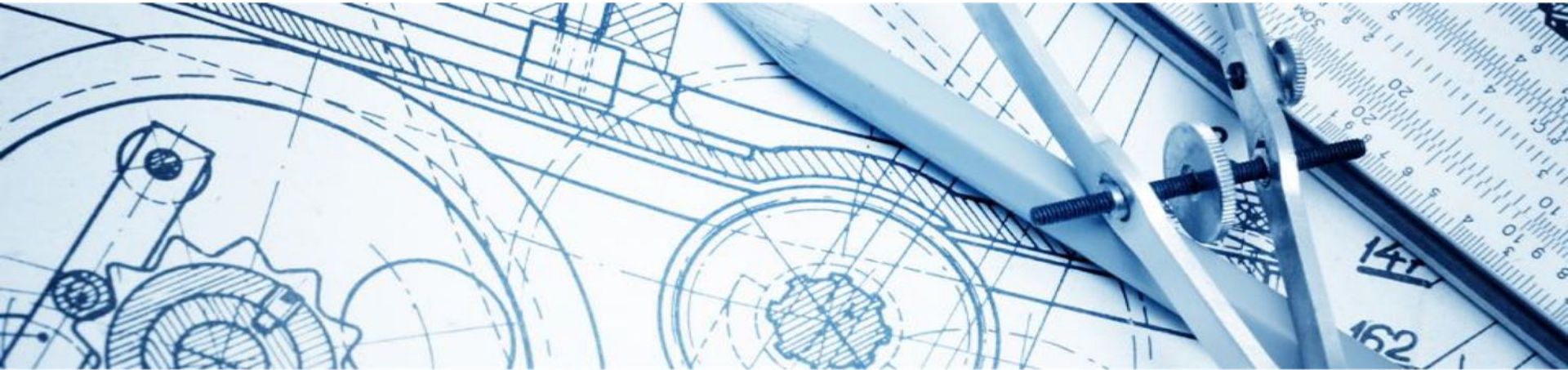
How do you learn?

If you don’t know what activities, tactics or skills you are using (or should use), how can you learn or train them?

Learn by experience:

- Concrete, challenging & achievable tasks
- Realistic application, processing & reflection
- Personal interpretation, exchange with others & constructive feedback
- Safe environment to experiment & make mistakes

Testopsies



What?

autopsy (n): a critical examination or dissection of a subject or work

testopsy (n): an autopsy of a testing session

Testopsy

A testopsy* is an examination of testing work, performed by watching a testing session in action and evaluating it.

Testopsies can help in training, assessment, and developing testing skill for novices and experienced testers alike.

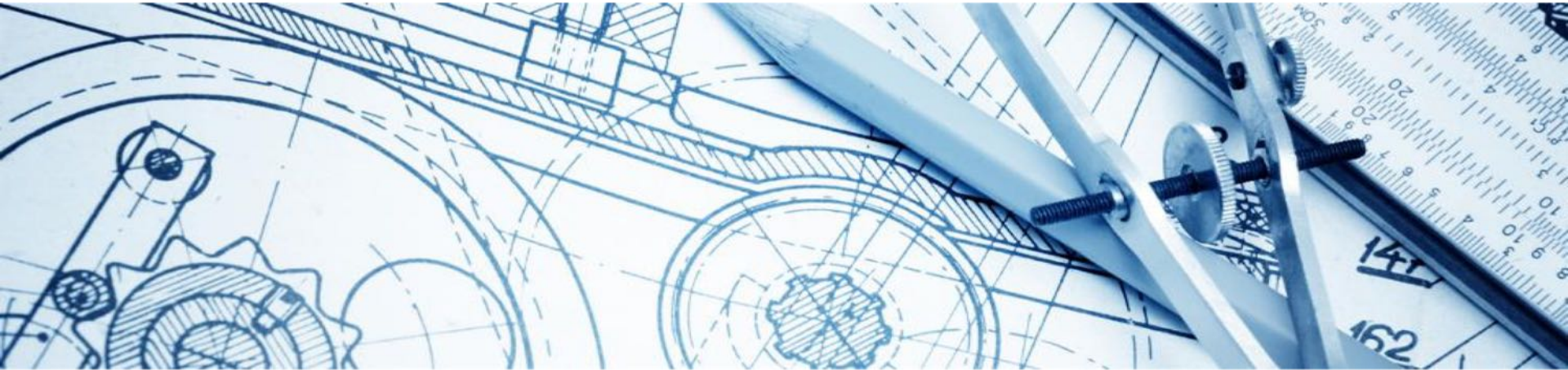
* The term testopsy is coined by James Bach

The Basic Idea

- Observe a testing session (your own or somebody else)
- Become aware of something interesting or complicated
- Name it and make it explicit
- Analyze it
  - When do you need to do it? When do you need to avoid it?
  - Do we like it? Do we want it?
- Close the loop intentionality:
  - Intend it - Do it - Explain it - Justify it


Product Analysis
(Factoring)

Demo
Test Session



Demo

Next you are going to observe a demo:
Alex is going to test an app for 3 minutes.

While observing:

- Try to see what is happening
- Take notes


LIVE DEMO
Part 1

Debrief

Demo

Next you are going to observe another demo: Alex is going to test the same app for another 3 minutes, now Alex will try to narrate what she is doing and Huib is going to “subtitle”.

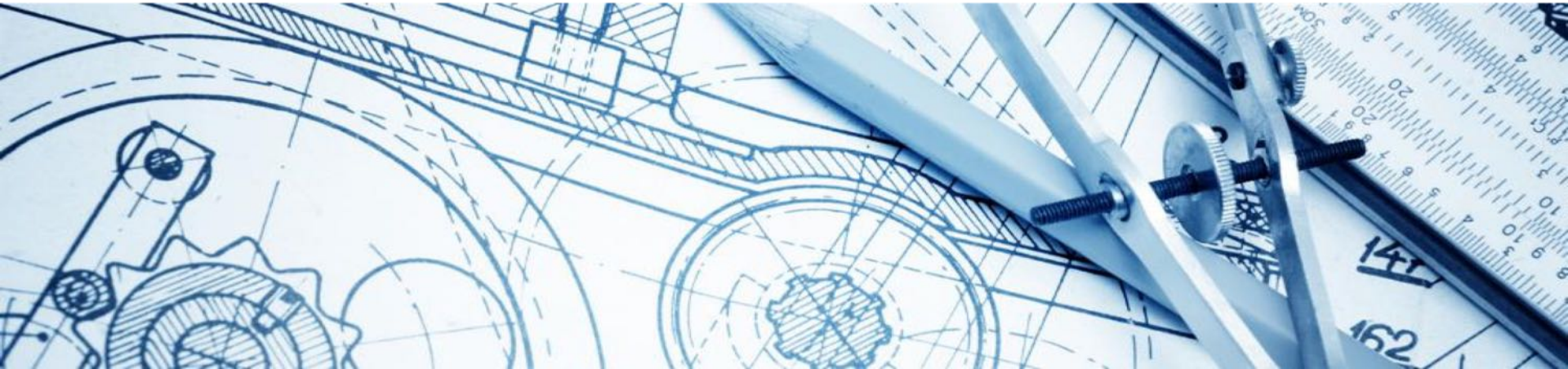
Again, while observing:

- Try to see what is happening
- Take notes


LIVE DEMO
Part 2

Debrief

Let's Test!
Exercise 1

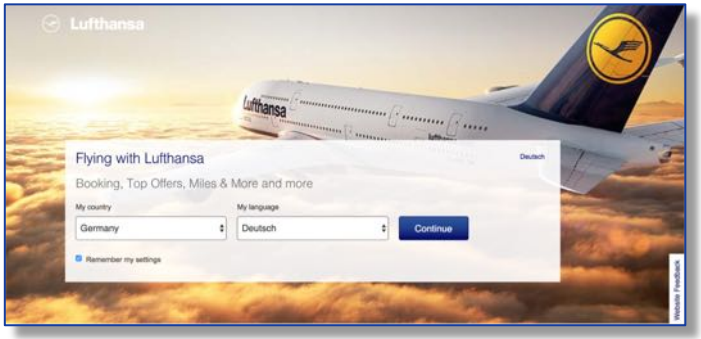


Exercise 1

Test http://www.lufthansa.com
Mission: discover what the website has to offer and find interesting areas to test deeper later.

Pair up: 1 tester and 1 observer

- Observe what the other is doing (10 mins)
- Take notes!



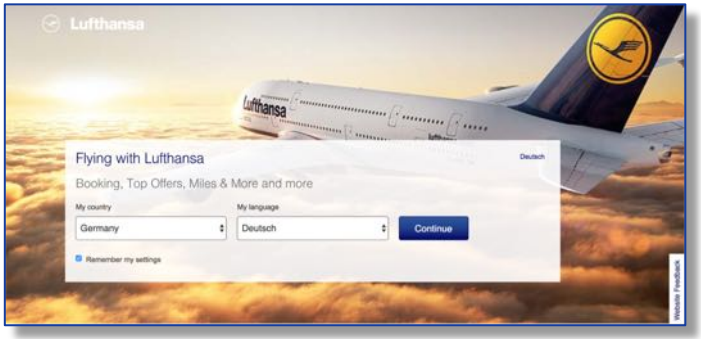
Debrief

Exercise 1

Test http://www.lufthansa.com
Mission: discover what the website has to offer and find interesting areas to test deeper later.

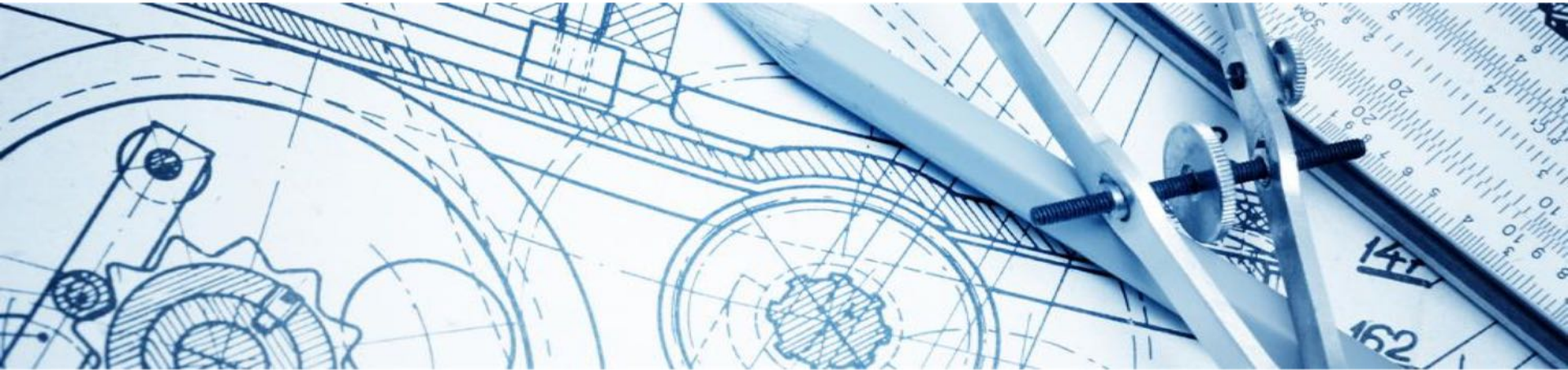
Same pairs, switch roles

- Observe what the other is doing (10 mins again)
- Take notes!



Debrief

Let's work!
Exercise 2



Coding system

A coding system, a map of out the activities that testers perform and the skills and tactics they apply, helps a in observing and analyzing the work.

Use the coding system to guide observation of a testing session. Record what happens, and discuss the activity. Finally refine the coding system.

Exercise 2

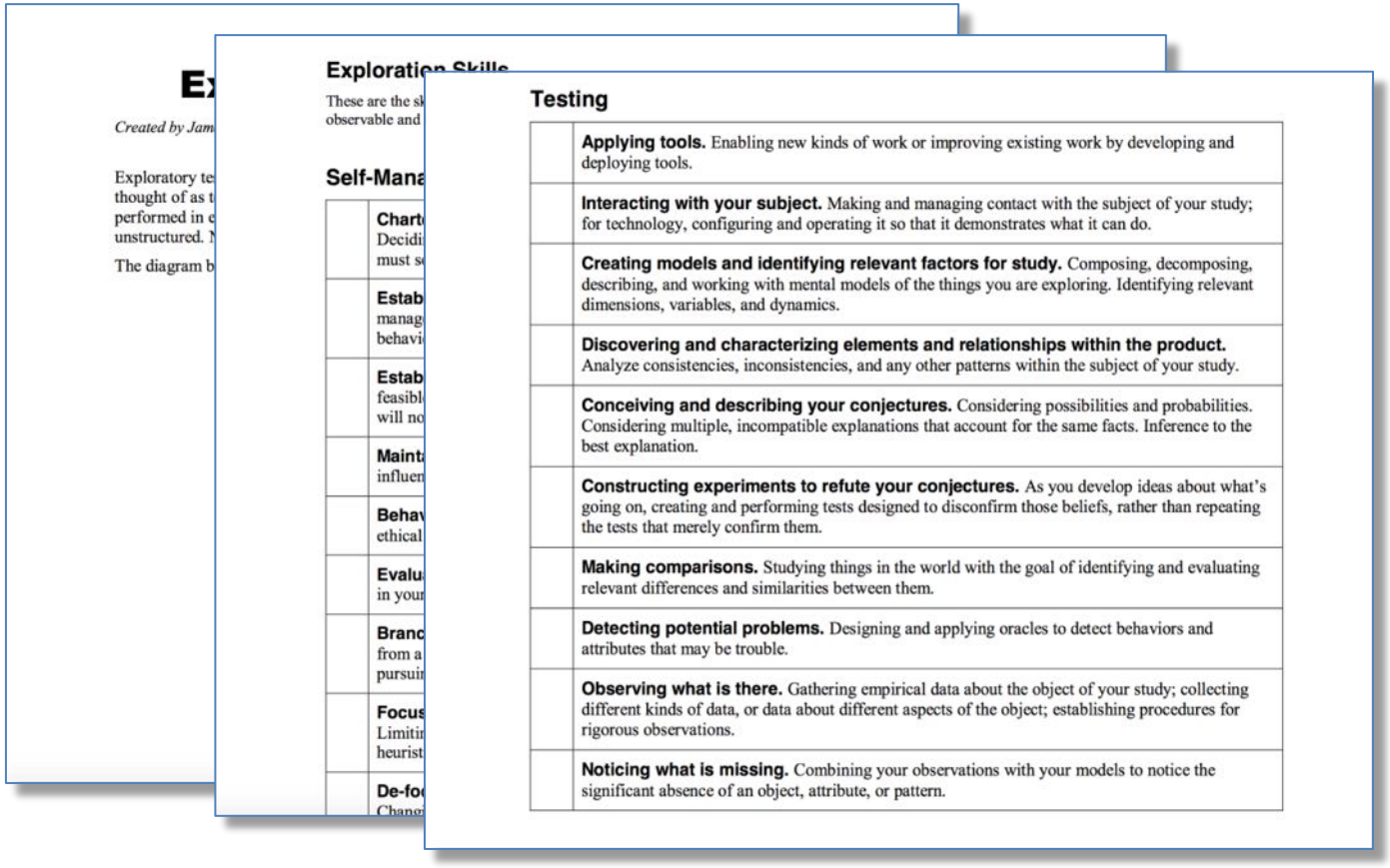
Groups of 4 (two pairs)

Create list of activities, tactics and skills you do while you're testing

Write them on stickies and put them on a flipchart

Debrief

Example Coding system



Testing

	Applying tools. Enabling new kinds of work or improving existing work by developing and deploying tools.
	Interacting with your subject. Making and managing contact with the subject of your study; for technology, configuring and operating it so that it demonstrates what it can do.
	Creating models and identifying relevant factors for study. Composing, decomposing, describing, and working with mental models of the things you are exploring. Identifying relevant dimensions, variables, and dynamics.
	Discovering and characterizing elements and relationships within the product. Analyze consistencies, inconsistencies, and any other patterns within the subject of your study.
	Conceiving and describing your conjectures. Considering possibilities and probabilities. Considering multiple, incompatible explanations that account for the same facts. Inference to the best explanation.
	Constructing experiments to refute your conjectures. As you develop ideas about what's going on, creating and performing tests designed to disconfirm those beliefs, rather than repeating the tests that merely confirm them.
	Making comparisons. Studying things in the world with the goal of identifying and evaluating relevant differences and similarities between them.
	Detecting potential problems. Designing and applying oracles to detect behaviors and attributes that may be trouble.
	Observing what is there. Gathering empirical data about the object of your study; collecting different kinds of data, or data about different aspects of the object; establishing procedures for rigorous observations.
	Noticing what is missing. Combining your observations with your models to notice the significant absence of an object, attribute, or pattern.

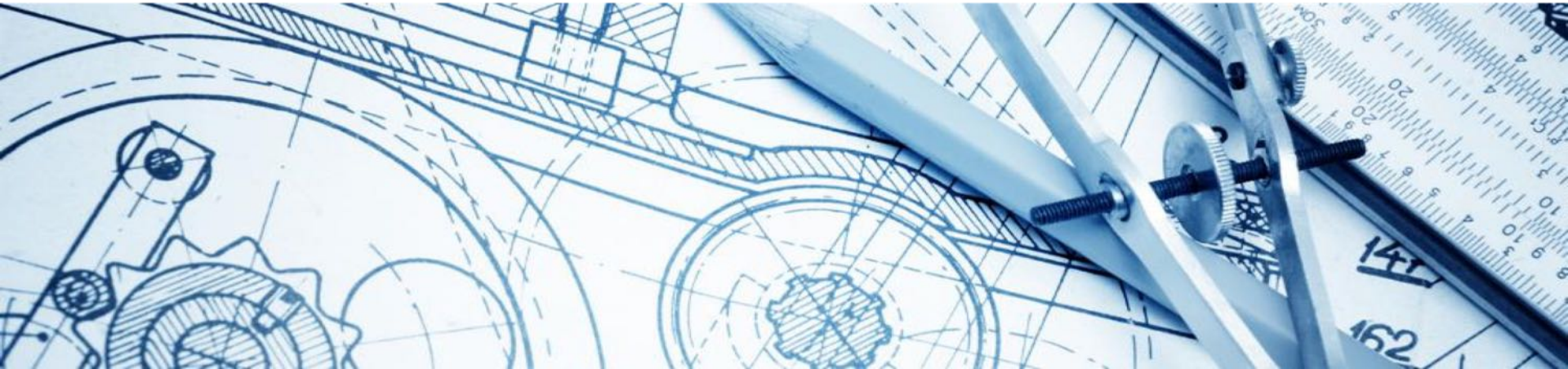
Coding system handout

Download the handouts we used here:

bit.ly/cd1_testnet

bit.ly/cd2_testnet

Let's Test!
Exercise 3

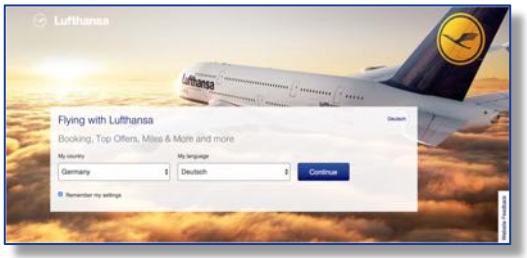


Exercise 3

Test http://www.lufthansa.com again
Mission: go deep on one of the areas you discovered earlier.

Pair up: 1 tester and 1 observer
Observes what the other is doing (10 mins)
Use your coding system!

- Tick off the things on your list (checklist/coding system) you see
- Add new activities, tactics and skills you discover



Debrief

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Same pair, now switch roles
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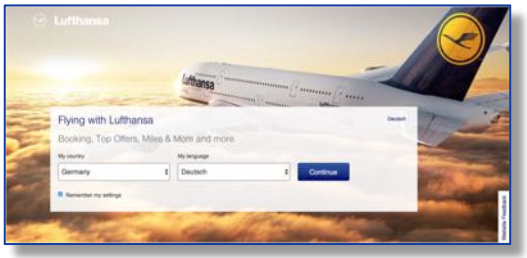
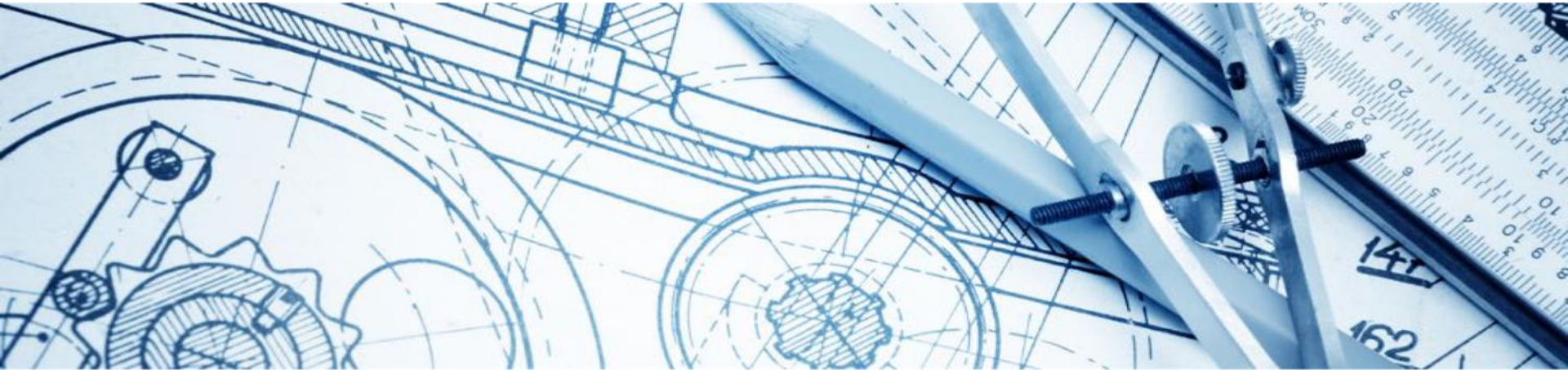


Debrief

Wrap-up



How to do a Testopsy at home?

1. Record a session of your testing
2. Go through the recording and note every single activity that you did. Put specific words to each activity
3. Explain why you did what you did

You can do this for a 10 minute session or a two-hour session. We feel that very short sessions that are rich in product learning and test design are the most interesting to study.

What does a Testopsy bring?

1. Learn new skills
2. Discover what you need to practice
3. Improve your skills like:
    - Teaching
    - Narrating/framing
    - Observing
4. Understand (and even appreciate) yourself
5. Ability to explain what you're doing

How about a team exercise?

1. Show off your amazing skills :-)
2. Have more fun while pairing (coaching colleague tester)
3. Teach testing to your colleagues
4. Learn from your colleagues
5. Promote deeper understanding of testing
6. Finding commonalities in thinking patterns

QUESTIONS,
YOU HAVE,
HMM?

References Testopsy

- Exploratory Testing Skills & Dynamics (in RST Appendices) – http://www.satisfice.com/rst-appendices.pdf
- Skills mind map - http://goo.gl/VCQ0IN
- Podcast explaining Testopsy - http://www.qualitestgroup.com/The-Testing-Show/testopsies/
- Report of a Testopsy - http://patternsofproof.wordpress.com/2015/03/07/on-performing-an-autopsy/
- Report of a Testopsies workshop - http://www.brendanconnolly.net/testopsies/

Other references

- Tacit and Explicit Knowledge and Exploratory Testing - http://steveo1967.blogspot.nl/2013/06/tacit-and-explicit-knowledge-and.html
- Shapes of Actions - http://www.developsense.com/blog/2011/12/shapes-of-actions/
- Testing Unexplained - http://goo.gl/nG0RZ6
- ET with Subtitles (video) - http://youtu.be/Vy0I2SB5OLo

Acknowledgements

- Some slides shown are taken from Rapid Software Testing and are used with permission.
- Rapid Software Testing is developed by James Bach and Michael Bolton. Also see: http://www.satisfice.com/info_rst.shtml

Rapid Software Testing (RST) is a mind-set and a skill-set focused on performing testing more quickly and less expensively while still completely fulfilling the mission of testing.

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