EXPLORATORY TESTING DRIVEN BY MIND MAPS

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- Product Development Team Lead
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- Business Analyst
- Teacher at School of Engineering, Universidad de la República

- Scrum Master
- Agile Testing Essentials tutorial with Janet Gregory & Lisa Crispin
- Rapid Software Testing course with Michael Bolton
- Using Risk to Guide Testing tutorial with Michael Bolton
- Foundations & Bug Advocacy courses, Association for Software Testing
- ISTQB Foundation
- Agile Test Automation Certification (ICP-ATA)
AGENDA

1. INTRODUCTION
2. USING MIND MAPS TO DRIVE AN EXPLORATORY TESTING APPROACH
3. LESSONS LEARNED
4. TIPS TO START USING MIND MAPS IN YOUR TEAM
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Exploratory testing is simultaneous learning, test design, and test execution.

James Bach
EXPLORATORY TESTING
SESSION BASED

MISSION
SESSION
USEFUL TO

- obtain results very quickly
- Identify bugs in places where we may not expect them
- focus on functional cycles
- learn about the product under test
CHALLENGE #1

Reusing the knowledge acquired during the different exploratory sessions in the different test cycles
CHALLENGE #2

Sharing the knowledge acquired during the different exploratory sessions at a team level
Mind maps to support exploratory testing
What is mind mapping?
A mind map to describe a mind map

YOU CAN RELATE MIND MAPS

ORG chart
Tree chart
Logic chart
Matrix
...

STRUCTURE

Mind map

YOU CAN USE

Colors
- to emphasize
- to group ideas

Images
- to clarify

Priority
- 1
- 2
- 3

Progress
- signed in
- anonymous

Symbols
- Authentication
- Grants
- Always
- Not always
- Never

Links
Hyperlinks
Notes

...
MIND MAPS HELP US

• Organize and visualize ideas
• Identify dependencies
• Discuss ideas
• Enhance creativity
• Share knowledge
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How do we design our mind maps?
We build a mind map for each feature
A mind map includes test conditions, ideas and variables to cover a feature
Let’s see an example!
GUIDELINES & STRUCTURE

CONVENTIONS TO

- Emphasize related test ideas
- Use symbols, notes and colors
- Represent cross-feature test conditions and dependencies

Define a ‘metalanguage’ to elaborate the mind maps as a team
How do we use our mind maps when applying an exploratory testing strategy?
We use mind maps as reference for exploratory sessions
We reuse mind maps to avoid re-thinking test ideas, conditions and variables from scratch.
Mind maps are extended or updated according to changes in the product
Tracking sessions
We track effort and charters to be covered with tasks in our tracking system
STORING THE MIND MAPS

- Repository
- File naming conventions
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MIND MAPS HELP

- Iterate over existing test ideas
- Identify test conditions and ideas better
- Have a common understanding of the features
- Share knowledge
Only track what is relevant for the team
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**TIPS**

- When defining the metalanguage, it is important to
  - select a functionality or module with **a lot of dependencies**
  - select a **complex** functionality or module

- Validate the metalanguage **at a team level**

- Do a **brainstorming** session before designing a mind map to cover a functionality or module
TIPS

• Elaborate mind maps **together with the developers** involved in the functionality or module

• Execute cross testing by including the persons who designed the mind map and other team members

• Appoint someone in the team to be the guardian of the strategy
All models are wrong, but some of them are useful

George E. P Box
KEEP CALM
AND
START MIND MAPPING 😊
Useful links for further reading

• Resources on Exploratory Testing, Metrics, and Other Stuff by Michael Bolton
  http://www.developsense.com/resources.html

• Explore It!: reduce risk and increase confidence with Exploratory Testing by Elisabeth Hendrickson
  https://www.amazon.com/Explore-Increase-Confidence-Exploratory-Testing/dp/1937785025/

• When the whole team owns testing: Building testing skills by Lisa Crispin
  http://lisacrispin.com/whole-team-owns-testing-building-testing-skills/

• Heuristic Testing Strategy Model by James Bach

• Using Mind Maps to Document Exploratory Testing by Samuli Lahnamäki

• Essential mind mapping: Rapid test design by Darren McMillan
  http://www.bettertesting.co.uk/content/?p=1438

• Part 1: using mind-mapping software as a visual test management tool by Aaron Hodder

• Part 2: using mind-mapping software as a visual test management tool by Aaron Hodder
Questions?

THANKS

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