



## **W8**

Test Strategy, Planning, Metrics  
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1:45 PM

# **Mindmapping: A General Purpose (Test) Planning Tool**

Presented by:

**Bob Galen**

Zenergy Technologies

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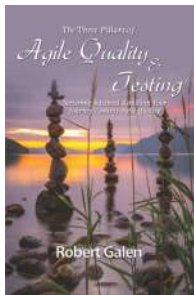
# Bob Galen

## Zenergy Technologies

An agile methodologist, practitioner, and coach, Bob Galen helps guide leaders and teams in their pragmatic adoption and organizational shift toward Scrum and other agile methods. Bob is often called “Coach of Coaches” because of his deep and broad experience in the agile arena. He is director, agile practices at Zenergy Technologies; president of RGCG, LLC; and a frequent speaker at international conferences and professional groups on topics of agile software development. Bob authored “Three Pillars of Agile Quality and Testing, Scrum Product Ownership, and Agile Reflections. A prolific writer, blogger, and podcaster, Bob can be reached at [bob@rgalen.com](mailto:bob@rgalen.com) or at LinkedIn.

# Mindmapping

## A General Purpose (Test) Planning Tool



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## Introduction

### Bob Galen



- Independent Agile Trainer & Coach at [RGCG, LLC](#)
- Director, Agile Practices at 
- Somewhere “north” of 30 years overall experience ☺
- Wide variety of technical stacks and business domains
- Roots of a software developer
- Senior/Executive software development leadership for 20+ years
- Agile “Coach of Coaches” and Leaders
- Deep XP, Lean, Scrum, and Kanban experience since 2000
- From Cary, North Carolina, dog lover, grandfather, husband

**Bias Disclaimer:**  
**Agile is THE BEST Methodology**  
**for Software Development...**  
**However, NOT a Silver Bullet!**



## Risk Based Testing

### How to Manage Risks During Test Planning



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## Risk-Based Testing Background

- It starts with the realization that you can't test everything – ever!  
*100% coverage being a long held myth in software development*
- There are essentially 5 steps in most of the models
  1. Decompose the application under test into areas of focus
  2. Analyze the risk associated with individual areas – technical, quality, business, schedule
  3. Assign a risk level to each component
  4. Plan test execution, based on your SDLC, to maximize risk coverage
  5. Reassess risk at the end of each testing cycle

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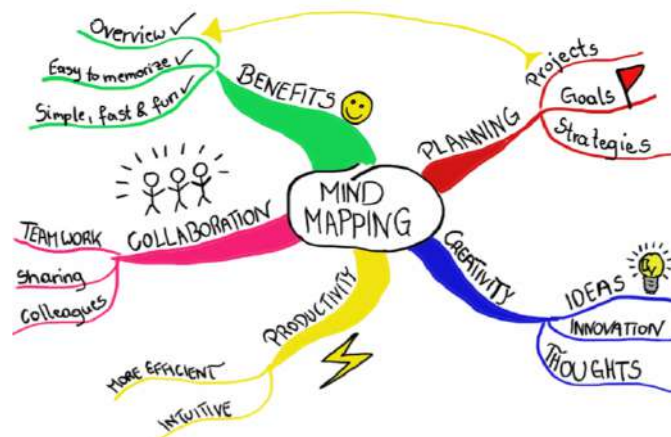


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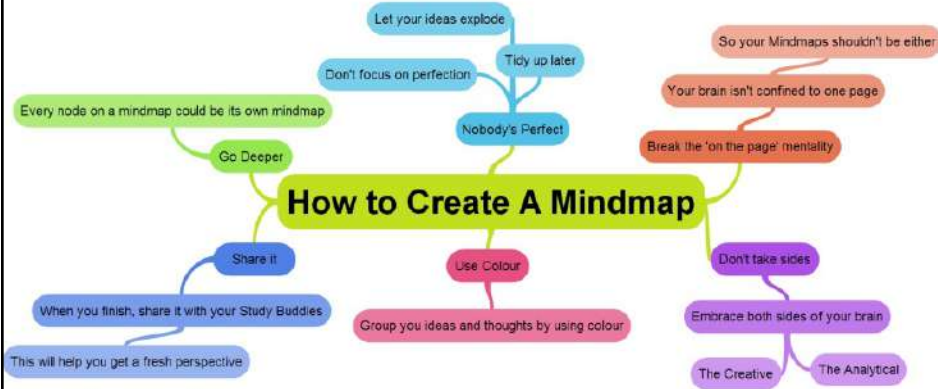
## Risk-Based Testing Background

- Risk-Based Testing is effectively a risk mitigation technique
  - Not a prevention technique
- It's about trade-offs
  - Human and physical resources
  - Ratio's between Producers (Developers) and Consumers (Testers)
  - Time
  - Rework (retesting & verification)
  - Quality – Coverage vs. Delivery
  - Visibility into the trade-offs

## Mind Mappings



# MindMaps



# Outlining

workflow Search [ ] Completed: Visible Help Saved

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- Identify the key problem
  - Why does your boss care? How is the lack of this product holding the organization back?
  - Talk to various stakeholders: Other people in your department, anyone else who'd be using the product, etc.
  - Get quotes and numbers—data is key!
  - Talk to customers who already use this product
    - Ask salesperson, but also do independent research
      - You want a range of opinions.
- Develop implementation plan
  - Figure out when onboarding/training will take place
  - How will this tool integrate into/replace existing tools?
  - How will you physically get it on devices? Does it need to be downloaded? Is it a cloud app?
- Prepare detailed cost/benefit analysis
  - First, calculate how much money & time you're losing without this product (use what you found in Step #1)
  - Next, calculate how much money and time you'll spend buying this product and training the team to use it
  - Come up with a 'net savings' number
- Present to your boss
  - Use what you know about his or her communication style
    - Big, formal presentation versus casual, drop-by-my-office style
    - Are they quantitative? Use more stats. Qualitative? Use social proof.
  - Bring samples of product in action
    - Screenshots
    - Videos

## MindMaps

- A mindmap is:
  - A diagram used to visually organize information. It can be called a visual thinking tool.
  - Allows complex information to be presented in a simplified visual form.
  - Created around a single concept. The concept is represented as an image in the center to which the associated ideas are added.
  - Major ideas are connected directly to the central concept, and other ideas branch out from those.
  - Is a great for note taking, planning, studying, brainstorming etc.
  - Literally 'maps' out your thoughts, using associations, connections and triggers to stimulate further ideas.

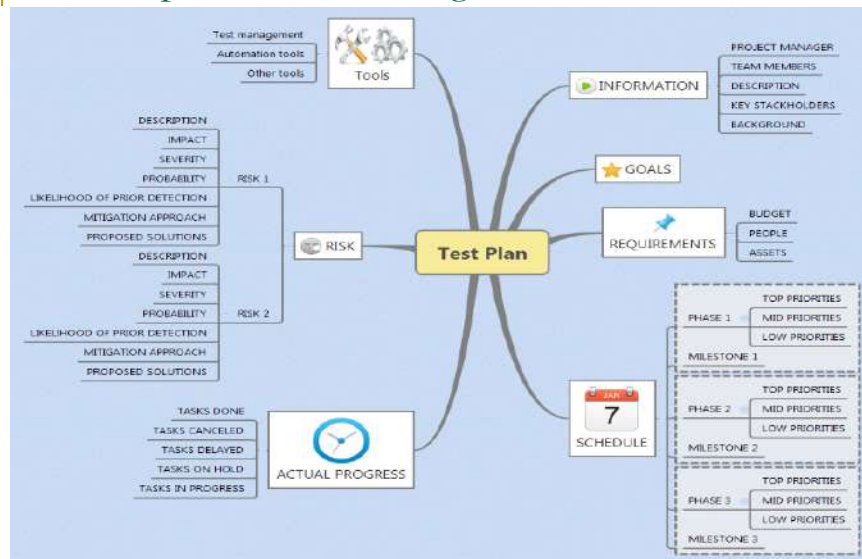
## MindMaps in Testing

- Mindmaps can be used for:
  - ✓ **Test Planning**
  - ✓ Requirement analysis
  - ✓ Impact analysis
  - ✓ Task allocation
  - ✓ **Test case design**
  - ✓ **Traceability**
  - ✓ Test reporting -Quick test reports

## MindMaps – Test Planning

- Test planning:
  - Draw an initial mindmap keeping in mind the list of tasks, schedules, tools, roles, responsibilities, milestones etc.
  - Present the mindmap and discuss it with your stakeholders.
  - Modify the mindmap if any changes are required.
  - All you might have to do is to add or remove a node/branch.
- The final mind map shows you the scope of testing in one glance.
- This mindmap can be used as a blueprint and later converted into a plan. This ensures that no test activity is missed.

## MindMaps – Test Planning

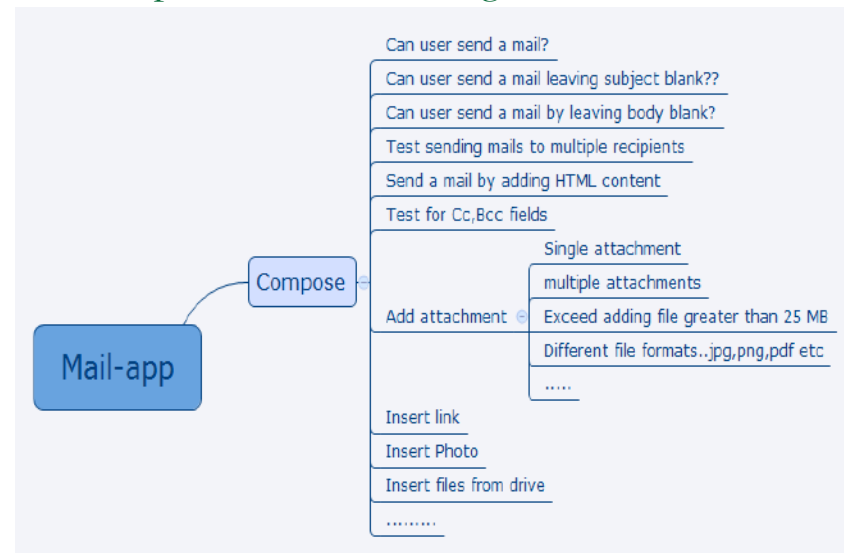




## MindMaps – Test Case Design

- Test Case Design:
  - An efficient way of creating lean test cases.
  - It reduces the time required for creating test cases yielding better results.
  - Easy to maintain and are flexible to changing requirements.
- Draw branches from every user story/epic and associate all its functionalities as sub-nodes.
- Start adding test case for each functionality.

## MindMaps – Test Case Design



## MindMaps – Traceability Mindmap

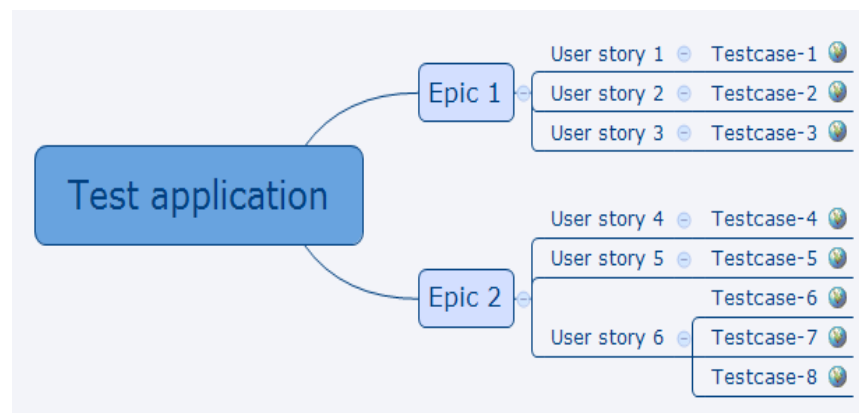
### ■ A traceability matrix is

- An essential tool for every tester to analyze and improve the test coverage. You can use a mindmap instead of a tabular traceability matrix.
- Ensures that you have not missed out writing test cases for any user story
- Gives you the birds-eye view of your test coverage. You can identify the areas where you need to strengthen your coverage.

### ■ To create a traceability mindmap

- Add nodes of all the Epics
- Draw branches from every module and associate all its user stories as subsequent nodes.
- Now link the test cases for every functionality. You can link the requirement number of the test management tool.

## MindMaps – Traceability Mindmap



## MindMaps – Not Only for Testers

- Because of the visual nature
- Because of the simplicity
- Because of the collaborative nature
  
- MindMaps are ideal for Whole-Team
  - ✓ Ideation
  - ✓ Brainstorming
  - ✓ Problem-solving
  - ✓ Sprint / Release level Planning
  - ✓ Option analysis
  - ✓ Retrospectives

## MindMaps – Tools

- There are tons of commercial and open-source tools that lets you visualize your ideas as a mindmap.
  - <https://lifehacker.com/five-best-mind-mapping-tools-476534555>
  
- I prefer MindMup as my tool and we'll be using it for this workshop
  - <https://www.mindmup.com/>

## Exercise – Mind Mapping

- Break into groups of 3
- Go to MindMup and start a mind map
- We're going to be planning the testing of a well known application, you could pick:
  - Microsoft Word, Microsoft PowerPoint
  - Google
  - Or another application of the teams choice
- Start collaborating as a team to build a mind map that identifies the critical test areas / activities for your app. Focus on going 3-levels deep. (~30 minutes)
- We'll debrief learnings as a group...

## Wrap-up



Final questions or discussion?

Thank you!



## Contact Info

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training, coaching &  
consulting**

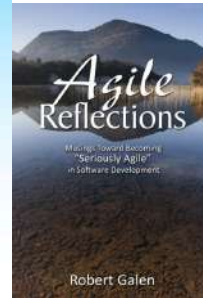
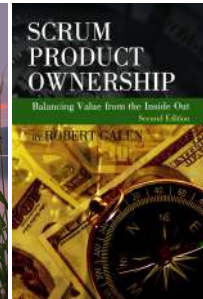
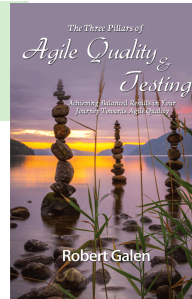
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