Using Mind Mapping Techniques in Testing

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In this group led discussion, Marie will demonstrate mind mapping techniques which can be used from test planning through to test closure activities. These techniques have been around for a while, with origins going back several hundred years. Mind mapping in testing has become popular in recent years as it assists in lateral thinking and allows complex information to be presented in a simplified visual form, making important relationships visible. This can assist teams with key tasks including: creating test plans, designing test scenarios, and choosing effective test data.
What are mind maps?

"Mind map": A mainly-hierarchical diagram used to organize information, ideas and understanding of a topic. It is a type of diagram that can aid visual thinking, learning, planning and creativity. ¹

A mind map is a diagram for representing tasks, words, concepts, or items linked to and arranged around a central concept or subject. ²

A mind map uses a non-linear graphical layout that allows the user to build an intuitive framework around a central concept. A mind map can turn long list of monotonous information into a colorful, memorable and highly organized diagram that works in line with your brain's natural way of doing things. ²

¹ Source: http://www.mind-mapping.org/mindmapping-and-you/Knol-on-mind-mapping.html
² Source: http://www.mindmapping.com/mind-map.php
Origins of mind maps

“Visual mapping” can be traced back to 3rd Century CE by Greek philosopher Porphyry of Tyre’s Tree of Porphyry:

[Diagram of Porphyry’s Tree]

Source: http://www.mind-mapping.org/blog/mapping-history/roots-of-visual-mapping/
Further historical use

- 692 CE - graphical representation of the outline of the Bible
- 1527 - Dante’s *Divine Comedy* published by Panganino & Alessandro Paganin
- 16th Century - “Treatise on the virtues of excellence, and how one may acquire them.” by d’Anguerrande
- 1664 – religious visual representation by John Bunyan, of *Pilgrim’s Progress* fame
- 1957 – Walt Disney produced a visual representation of his business model and relationships between organisational units
- 1974 – Tony Buzan on BBC television series “Use Your Head” introduced the term “Mind Map”

Source: http://www.mind-mapping.org/blog/mapping-history/roots-of-visual-mapping/
The term “Mind Map” became popular in 1974, however, other visual diagrams which have been widely used for centuries include:

- Spider diagrams
- Spidergrams
- Spidergraphs
- Webs
- Mind webs
- Webbing
- Concept Map
- etc
Techniques to mapping

The five essential characteristics of a Mind Map:

- The main idea, subject or focus is crystallized in a central image.
- The main themes *radiate* from the central image as 'branches'.
- The branches comprise a key image or key word drawn or printed on its associated line.
- Topics of lesser importance are represented as 'twigs' of the relevant branch.
- The branches form a connected nodal structure.

Mapping Guidelines

Mind Mapping in Software Testing

Where can you use mind mapping in software testing?

- Test Planning
- Test Strategy design
- Test Plan design
- Test Case Design
- Test Data planning

**ANYWHERE** where thought, creativity, analysis, design, planning, etc is required
Test Strategy Mind Map

Example

Source: http://www.xmind.net/embed/WhWe/
Test Case Design

Source: http://testerstrek.blogspot.co.uk/2011/05/creating-maps-where-do-i-begin.html
Test Parameters

Figure 3: Map identifying equivalences related to a date field

Group Activity
Mind Mapping ATM Testing
Questions
References

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Thank you

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