

Better Platforms for Managing Requirements

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Are you using index cards, a word processor, or a spreadsheet to record and manage requirements information and think there might be a better way? You are right.

Yesterday, you had two choices for requirements management: **easy** (what you are doing now) or **capable**. Capable entailed using a medium to heavyweight requirements manager (RM) based on a database management system. Such tools provide a core set of requirements management capabilities (e.g., import, record, find/search, select, report, and export) plus additional functions such as change control and test management, but are not easy to use.

Today, you can have both easy and capable. Start with an outline processor (e.g. WhizFolders [1] or a personal information manager (e.g. TreePad) [2]. These tools help you create and change outlines easily and find/search and select outline entries.

You can use a grove of assorted fruit trees as an analogy to organize your requirements information, where each tree contains distinct information (e.g. user roles, use cases, acceptance test designs). Each piece of fruit represents an instance of a type, e.g., a specific user role. A piece of fruit can be in several states, e.g., unimplemented and superficially understood. A piece of fruit in one tree may be linked to pieces of fruit in other trees, e.g., a use case could be linked to its derived acceptance tests.

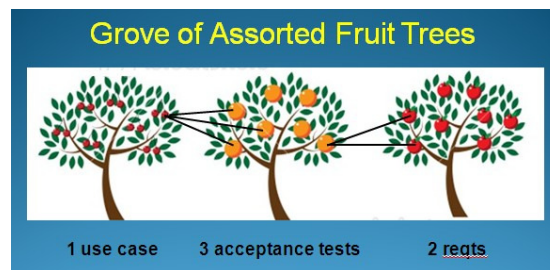


Figure 1 – A Grove

Using one of these platforms and this analogy, you can develop a multilevel template that reflects your choices for the types of trees to put in your grove (e.g. definitions, requirements conflicts, derivations), the types of fruit to put in each tree (e.g. 5 types of definitions), and the types of attributes and values to record for each type of fruit. You can record as much or as little as you find useful.

The result is an easy and capable requirements manager tailored to the needs of your project that satisfies the following requirements:

1. Must be able to choose the types of information to be recorded
2. Must be able to change information choices during a project at little cost

3. Must be easy to create and change outlines
4. Must be easy to describe and change states
5. Must be easy to link elements
6. Must have a Boolean search capability
7. Must be able to export/print search results
8. Must support creation and manipulation of tables
9. Must support distributed collaboration
10. Should be able to link to external information

	"Raw" Platforms			RM systems	
	Word Processor	Spreadsheet Processor	Outliner / Personal Info Mgr	Your Lightweight RM	Medium – Heavyweight RM
Reusable platform	✓	✓	✓	✓	
Easy to learn	✓	✓	✓	✓	
Easy to use	✓	✓	✓	✓	
Outlines supported	✓		✓	✓	✓
Boolean search			✓	✓	✓
(Outline) entry selection		✓	✓	✓	✓
Core RM capabilities				✓	✓
Change control					✓
Other functions (test mgmt)					✓

Figure 2. Feature Comparison Table

These suggestions are based on experience building such a lightweight RM [3]. You can too.

References

1. **Murtland, Chris (2008) "List of Outliners"** Available at www.outlinersoftware.com/topics/viewt/807/0/list-of-outliners
2. ... **"List of Personal Information Managers"** Available at en.wikipedia.org/wiki/List_of_personal_information_managers
3. www.literm.com