Requirements Specification Tool Research

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1 Rmtoo

http://www.flonatel.de/index.php?id=9

1.1 Description

Rmtoo is a text-based command line requirements specification tool. Rather than being all-inclusive tool-set, it tries to streamline the process of creating requirements and categorizing them.

1.2 Features

1. Plain-text file formats allow for easy version control integration.
2. Provides a unique way to categorize requirements ("topics")
3. Supports SCRUM development process
4. Command line access can be much more accessible to programmers.

1.3 Drawbacks

1. No GUI, so there is most likely more of a learning curve than other products.
2. Does not include UML or other diagramming tools, project would need to be supplemented with an external tool.

1.4 Thoughts

I'm personally very comfortable with command line tools, and would prefer on over a large, slow, bloated GUI. Less time should be spent tinkering with the requirements specification tool, but rather focus on quality content.

1.5 External Documents

1. Introduction/Readme:
   http://voxel.dl.sourceforge.net/project/rmtoo/v19/rmtooIntroductionV9.pdf

2. Example of generated document:
   http://voxel.dl.sourceforge.net/project/rmtoo/v19/requirements.pdf

2 Axiom

http://www.iconcur-software.com/solutions.html

2.1 Description

Axiom is a client-server type requirements and use case management tool. An Axiom server can be hosted on either Windows or Linux, but the client can only be run on Windows. Axiom is a completely GUI-based program that both manages requirements, and formats a specification.

2.2 Features

1. Users create "artifacts" which can be requirements, use cases, test cases, or any sort of document needed for the project.
2. Artifacts can be automatically generated based on filters and existing requirements.
3. Linking and categorizing of artifacts.
4. Summary and graphical views.

2.3 Drawbacks

Seems to be a large hassle to set up properly, the team would need a server to host the Axiom server software that allows all members to access it. May have too many features and complications that clutter real progress on a smaller-scale project.

2.4 Thoughts

I would personally rather use a slimmer application since our projects shouldn't get so large that they are unwieldly. Rmtoo would be a better choice in my opinion, but this would be fine.

3 Dia

http://projects.gnome.org/dia/

3.1 Description

From the Dia website: "It can be used to draw many different kinds of diagrams. It currently has special objects to help draw entity relationship diagrams, UML diagrams, flowcharts, network diagrams, and many other diagrams. It is also possible to add support for new shapes by writing simple XML files, using a subset of SVG to draw the shape."

3.2 Features

1. Create many types of diagrams, most importantly UML.
2. Very easy to use and extend.

3.3 External Documents

1. Example diagrams:
   http://projects.gnome.org/dia/exempl.html

3.4 Thoughts

I have used Dia in the past for UML and object-oriented class design, and liked the simplicity. While it may not have as many features as other diagramming tools, it makes up for it with its ease of use.