GRAT:
GROUPWARE SUPPORTED REQUIREMENTS ANALYSIS TOOL

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Abstract

This research provides an environment for requirements analysis process to be conducted utilizing the Internet without jeopardizing on the collaborative involvement of the stakeholders. The result of the research was a web-based groupware supported requirements analysis tool, named Groupware Supported Requirements Analysis Tool or GRAT for short. GRAT supports the requirements analysis stage in a typical Software Development LifeCycle (SDLC) to review on what the proposed system will do and how it will fit into the target environment. The major activity of this stage is to review and confirm the documents that define the system, called the Functional Requirement Document or FRD. Being web-based, the constraint on time and space is very much reduced if not eliminated. In pursuit to reaching the objective, literature review was carried out focusing on requirements analysis methods and the tools that support the respective methodologies. Along the way, a very modular requirements analysis methodology was chosen to be used as the framework for the requirements analysis tool. This requirements analysis methodology was introduced by Ian Sommerville and has been the *de facto* standard in the commercial software development industry. The analysis and the design for GRAT were based on the object-oriented paradigm with the use of use-case diagrams, class diagrams and interaction diagrams. The implementation was carried out using Lotus Notes/Domino Release 5 as the back end and Microsoft Internet Explorer version 5 and above for the front end. The system was tested by two different groups of students who use the tool to cater for their class project and assignment. The result of the testing was captured through a number of questionnaires needed to be answered by the participants. The result were analyzed in order to understand the useful features of GRAT and to identify the areas for GRAT is to be improved or further developed in future.

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