Abstract

Software is an essential asset of an organization in organizing business process. Thus, demand for software gradually increase from day-to-day. However, due to the complex structure of a software and tedious software design has cause delays in making it to be available in market. Consequently it increases the needs for customizing software from existing system. Under those circumstances, software customization is influenced by the flexibility of software that indicates how easy the software is modified to suit the current environment. Thus, the easiness is determined by the flexibility point that resides in software. Since flexibility is a desirable software quality characteristic, determination of flexibility point is essential. In this case, user role transformation from one domain to another domain has been viewed as flexibility point that triggers changes into the software. To demonstrate flexibility point exist at
the user role, this study emphasize on the change of class design from Customer Relationship
Management System (CRMS) to Tuition Centre Management System (TCMS). As a result,
some slight modification on the user oriented class attributes and methods effect the changes
on other associated classes. Certainly, slight modification only can be made if the user-oriented
class definition is written as general purpose rather than dedicated to one system. Therefore,
proper definition of user-oriented class assists in promoting flexibility and at the same time it has
been view as software flexibility point.

References

- X. Zhu and S. Wang, "Software Customization Based on Model-Driven
  Architecture Over SaaS Platforms," 2009 International Conference on Management and
- C. Rohleder and A. Sciences, "Software customization with xml," vol. VI,
  no. 2, pp. 345–351.
- J. A. McCall and P. K. Richards, "Concept and Definitions of Software
- R. B. Grady, Practical Software Metrics for Project Management and Process
- D. D. Zeng and J. L. Zhao, "Achieving Software Flexibility via Intelligent
  Workflow Techniques," in Proceeding of the 35th Annual Hawaii International Conference
- R. Martinho and D. Domingos, "A Two-Step Approach for Modelling Flexibility in
  Software Processes," 23rd IEEE/ACM International Conference on Automated Software
- J. Niu, L. Shen, S. Peng, and F. Li, "A Measurement Method of Software
  Flexibility Based on BP Network," International Workshop on Intelligent Systems and
- S. Peng, L. Shen, H. Liu, and F. Li, "User-Oriented Measurement of Software
  Flexibility," in 2009 WRI World Congress on Computer Science and Information
- S. Wang and X. Liu, "A Study on Flexibility of ERP System Based on Grey

Index Terms

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