

On the case tools in the software development life cycle

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2018, Institute of Advanced Scientific Research, Inc.. All rights reserved. In this paper we present a overview of the implemented CASE tool for an identification of the necessary system properties of the software and hardware applications to provide customers with the options which best suit their needs. The CASE tool uses telemetry allowing developers to remotely identify and process the required characteristics of workstations for the appropriate software and hardware parts of the network. The received characteristics of the workstations allow the developer to make an appropriate decision in the choice of technologies and tools in the design and development of the future software products. This CASE tool forms an integrated development environment that provides a computer aided development of various applications in the relevant field. The integrated environment which we consider in our paper represents the combination of SWI-PROLOG, C# and Data Base Management System (DBMS) PostgreSQL. As a result of the research we received the most necessary and important characteristics of workstations that affect the integration and implementation of software product.

Keywords

C#, CASE tools, Expert system, Software, SWI-PROLOG and postgresQL database management system

References

- [1] P. Habarov: PROLOG – The language of Intelligent and expert systems development: a study guide. SPGLTU, Saint-Petersburg, 2013.
- [2] Burnashev, R.A., Gubajdullin, A.V., Enikeev, A.I. Specialized Case Tools for the Development of Expert Systems/ Advances in Intelligent Systems and Computing/Volume 745, 2018, P.-599-605
- [3] Zainullina A. R., Larionov G. V., Burnashev R. A., Development of the Prototype Expert System Data Base Recommender//Journal Of Fundamental And Applied Sciences.-2017.-Vol.9, Is..-P.1417-1429.
- [4] Yuriy F. Telnov: Intelligent information systems. Moscow International Institute of Econometrics, Computer Science, Finance and Right. Moscow, 2004.
- [5] Hausi A. Muller, Ronald J. Norman, Jacob Slonim: Computer Aided Software Engineering, Springer US,1996
- [6] Kamalov A.M, Burnashev R.A., Development of the Expert System Prototype «Medexpert» for Differential Disease Diagnostics // Astra Salvensis. – 2017. – Vol.2017, Is.. – P.55-64.
- [7] Salahaldin Juba, Achim Vannahme, Andrey Volkov “Learning PostgreSQL”, Packt Publishing Ltd, 2015
- [8] Jeremy Keith, «HTML5 for Web Designers», A Book Apart, 2015
- [9] M. Schaffer, P. Schartner, and S. Rass. Universally Unique Identifiers: How to ensure Uniqueness while Preserving the Issuer’s Privacy. In S. Alissi and H. R. Arabnia, editors, Proceedings of the 2007 International Conference on Security & Management – SAM’07, pages 198–204. CSREA Press, 2007.