Abstract

Software plays an important role in today's computerized world. The programmer can use different languages to develop the software. In order to develop software, it needs several phases such as Analysis, Design, Implementation, Testing and Maintenance. Of these several phases, the analysis and design becomes essential, since these are the most essential feature in the development of the software. Now-a-days, most of the software is object-oriented, because the object-oriented languages provide easy way to develop and maintain the program. This object-oriented program consists of several divisions based upon the purpose. Each division performs some functions depending upon the code. All these divisions are then integrated to provide the single program. If any error occurred in any part of the program means, it is necessary to change the error in whole program. To avoid this kind of unnecessary change with long time duration, the developer has to overview and tests the initial phase such as analysis and design. These kinds of testing on analysis and design for an object-oriented program is carried out by a technology called OOAD (Object Oriented Analysis and Design). In this paper, a methodology has to be proposed to analysis the design to be carried out in the development of the program, before start to implement. The methodology also provides many essential features that are used to automate the process of testing on an object-oriented analysis and design. This can be done by implementing the configuration file for
detecting the error rate. Thus this paper provides efficient strategy for OOAD.

References

- Bandar Alshammari, Colin Fidge and Diane Corney, "A Hierarchical Security Assessment Model for Object-Oriented Programs", Faculty of Science and Technology, Queensland University of Technology, Australia, 11th International Conference on Software Quality, pp. 218-227, May 2011.
- Douglas C. Schmidt, Adam Porter, "Leveraging Open-Source Communities To Improve the Quality & Performance of Open-Source Software", Electrical & Computer Engineering Department Computer Science Department, University of California, Irvine University of Maryland, May 2011.
- D. R. Wallace and D. R. Kuhn, "Failure Modes in Medical Device Software: An Analysis of 15 Years of Recall Data", Int J Reliability, Quality and Safety Eng., vol. 8, no. 4, August 2001.
Computing Laboratory, University of Tennessee, Open System Laboratory, Indiana University, &quot;Open MPI: Goals, Concept, and Design of a Next Generation MPI Implementation&quot;, Sep 2004.
- Rudolf Ferenc, István Siket and Tibor Gyim´othy, University of Szeged, Department of Software Engineering, &quot;Extracting Facts from Open Source Software&quot;, pp 60-69, September 2004.

**Index Terms**

Computer Science

Software Engineering

**Keywords**

Analysis  Configuration File  Design  Error Rate  Implementation  Maintenance  OOAD  Object-Oriented  Phases  Software  Testing