Abstract

In the current scenario of modeling, object-oriented modeling has completely replaced the structured modeling approach. Software industries are slowly-slowly shifting their old structured based softwares into the object-oriented based softwares, for e. g. Foxpro has been changed into the Visual Foxpro. From the literature, it is observed that various researchers are proposing the software models based on the object-oriented technology. It is a big challenge whether the proposed design is correct or reliable for a long time. For solution of this problem, the present work deals with a proposal of Unified Modeling Language (UML) model for a real case study of Mobile Bill Deposit System (MBDS) By the use of UML, class and activity models are designed for static and dynamic representation of the problem. For validation purpose the activity model is validated by the use of Finite State Machine (FSM) technique and results are presented in the form of test cases. When the size of the model becomes complex then presented technique shall help for validation of the complex model.
- Salleh, M. F., Ibrahim, N., Ling, Y. L., "Design of Tool or Generating UML Analysis Class Diagram", Presented in International Conferences on Computational Intelligence for Modelling, Control and Automation, Intelligent Agents, Web Technologies and Internet Commerce and Innovation in Software Engineering, Date 10-12 Dec, 2008.
- Alsaadi, A., "Checking Data Integrity via the UML Class Diagram", Presented in International Conference on Software Engineering Advances (ICSEA'06), Page 37, Nov 2006.
- Chaurasia, P., K and Saxena, V., "Mobile Based Electricity Bill Deposit System

- Saxena, V. and Kumar, S., &quot;Object-Oriented Database Connectivity for Hand Held Devices&quot;, Published in Journal of Software Engineering and Applications, Volume 5, Page 314-320, Date 5 May 2011.

Index Terms

Computer Science

Databases

Keywords

Object-oriented modeling  UML  Class  Activity  Test Cases  Validation.