Abstract

The Integrated Development Environment (IDE) based tools are popular and madethe task of project development easier and comparably faster. These tools help developer to design Graphical User Interface (GUI) just by using Drag and Drop (DND) tool box with specification of the properties. Some of these tools are .NET framework, Windows Builder, etc to design the forms. But, none of these utilities embed "Business Logic" (BL) automatically in code. In routine development process it becomes very time consuming to do the repeated task of coding for same events. There are certain vendor specific tools like Oracle Application Express (OAE) from ORACLE and some similar tools from IBM mainframe to design the product and do analysis and reporting but these tools are too much vendor specific and strictly
need the proprietary DB to develop the project. For instant, OAE needs strictly ORACLE as a backend for its development. Our tool - &quot;Rapid Project Builder&quot; (RPB) is used to avoid time consumed for coding the same business logic repeatedly. The tool will also perform Automatic Code Generation (ACG) in specific language of developer's requirement. The developer can design the application's frontend GUI using RPB with DND along with the specification of form and fields. After adding control like add, delete, search or modify buttons to the application, RPB adds the BL automatically to these controls along with complete language specific code. The automatic generation of backend DBMS is done with the help of specification given as the properties in the form design which is stored as XML semantics.

References

- Automatic C Code Generation for Parallel Compilation, Amit Barve & Brijendra Kumar Joshi
- Effort Reduction by Automatic Code Generation, Sukhvir Singh, Neeraj Kumar
- Transformation Of Uml Sequence Diagram To Java Code, Harshal D. Gurad, Prof. V. S. Mahalle
- Automating Reuse In Web Application Development, Automating Reuse In Web Application Development, Josip Maras 2014, Printed By Arkitektkopia, Västerås, Sweden
- A Simple Implementation of UML Sequence Diagram to Java Code Generation through XMI Representation, George. T. Vadakkumcheril, M. Mythily, M. L. Valarmathi
- The Effect of Automatic Code Generation on Developer Job Satisfaction, Stephen Cullum, Department of Computing, Faculty of Mathematics, Computing and Technology The Open University, Walton Hall, Milton Keynes, MK7 6AA, United Kingdom
- Auto Generation Of Code And Table Tool, Mr. Sandeep Agarwalla, Ms. Priyanka Roy, IJCSMC, Vol. 4, Issue. 4, April 2015, pg. 487 – 492.
- UML 2. 0 in a Nutshell, By Dan Pilone, Neil Pitman, Publisher: O&apo;Reilly, ISBN: 0-596-00795-7, Pages: 234
- Java and XML Data Binding, Brett McLaughlin, O&apo;Reilly, ISBN 0-596-00278-5, Pages 214
- http://www.interdynbmi.com/microsoft-dynamics-crm

Index Terms

Computer Science  Software Engineering

Keywords
Ide  Gui  Dnd  Rpb  Acg  Bl  Adc  Oae.