

**COMPARE AND CONTRAST RELATIONAL DATABASE
MODELING SCHEMA (RDBMS) AND OBJECT ORIENTED
DATABASE MODELING SCHEMA (OODBMS) AND USE OF OO
FEATURE IN RELATIONAL DATABASE DEVELOPMENT**

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Database modeling is one of the most important activities in efficient data management. Its impotency increases day by day according to the modern business requirements. There are two major database models; Relational Database Modeling and Object Oriented Database Modeling. Both models contain their own advantages as well as disadvantages. Each schema fixed with different application. The schema fixed with one application may not be suitable for another application. Hence, the selection of the best data model is very important for quality system. Incorporating the feature of these two models various database management systems (DBMS) such as relational database management system (RDMBS) and Object Oriented database management system (OODBMS) has been introduced and used. In general, features of DBMS are improved by applying the object oriented (OO) features on it and such DBMS is known as Object Relational Database Management System (ORDBMS).

The main objective of this study is to analyze the structure of RDBMS and OODBMS models, develop the code generator which provide SQL and JAVA code according to the given requirement and apply the encapsulation concept on RDBMS to enhance its features. In the first phase, RDBMS and OODBMS were compared using normal data analyzing techniques and develop a "code generator" using detected code structures. The code generator is a small system which display SQL and JAVA code for database construction according to given user requirements. Then based on the detected similarities and differences in two DBMSs structures "encapsulation" was incorporated by using the Object Relational Database (ORDB) features offered by SQL server management studio (SSMS). Finally, a set of OO functions were implemented over RDBMS to overcome the complexity of OODBMS.

The developed functionalities were tested for validating and test results indicated that they functions efficiency and reliably over RDBMS