A Case Study of Using an Object-Relational Paradigm in Building a Web Database Application

J. Wenny Rahayu 1  David Taniel 2  Lee Nung Kion 3  Eric Pardede 1

1 Department of Computer Science and Computer Engineering
La Trobe University
Bundoora, Victoria 3083, Australia
Email: wenny@cs.latrobe.edu.au
E.Pardede@latrobe.edu.au

2 School of Business Systems
Monash University
PO Box 63B, Clayton, Victoria 3800, Australia
Email: David.Taniel@infotech.monash.edu.au

3 Faculty of Cognitive Science and Human Development
University Malaysia Sarawak
Address
Email: lnkion@pl.jaring.my

Abstract
In this paper, we would like to share our experiences in building a web database application using an object-relational paradigm. The system we built is basically an online system for casual tutors to claim their work for payment. At the design stage, we use an object-oriented design. Since the database backend is a relational database management system (i.e. Oracle), which also supports some object-oriented features, we need to apply a transformation methodology to map our object-oriented design into relational tables incorporating some object features in Oracle. Once the necessary object types and tables have been created, at the programming stage we use a PHP scripting language accessing the Oracle database where the data is stored.

Keywords
Object-Oriented Design, Object-Relational Databases, Web Databases, and Online Database Application.