

## Applications for Accounting of Inherited Object-Oriented Class Members

**Authors :** Jehad Al Dallal

**Abstract :** A class in an Object-Oriented (OO) system is the basic unit of design, and it encapsulates a set of attributes and methods. In OO systems, instead of redefining the attributes and methods that are included in other classes, a class can inherit these attributes and methods and only implement its unique attributes and methods, which results in reducing code redundancy and improving code testability and maintainability. Such mechanism is called Class Inheritance. However, some software engineering applications may require accounting for all the inherited class members (i.e., attributes and methods). This paper explains how to account for inherited class members and discusses the software engineering applications that require such consideration.

**Keywords :** class flattening, external quality attribute, inheritance, internal quality attribute, object-oriented design

**Conference Title :** ICCIE 2016 : International Conference on Computer and Information Engineering

**Conference Location :** Istanbul, Türkiye

**Conference Dates :** April 19-20, 2016