**使用 LINQKit PredicateBuilder 解決動態LinQ查詢**

**前言:**

在業界實作時，常會發生一種情況是我們提供篩選條件方框給User搜尋，而程式接收到到前端傳回的篩選條件後，常見的做法是取得篩選調後另組SQL語法，這樣的處理方式本身沒有錯，但當我們使用的是像Entity Framework等ORM時，可能就需要使用Linq來處理搜尋條件，而LINQKit 也提供了PredicateBuilder這個方法，針對上面問題算是一個不錯的解決方案。

**AND累加條件範例:**

**using** (NorthwindEntities1 db = **new** NorthwindEntities1())

{

//And篩選

//True代表當沒有任何搜尋條件時，依然可以取得所有資料

**var** predicate = PredicateBuilder.True<Orders>();

//篩選EmployeeID == 1 的Order

predicate = predicate.And(p => p.EmployeeID == 1);

//在篩選ShipVia == 1 的Order

predicate = predicate.And(p => p.ShipVia == 1);

//搜尋出EmployeeID == 1 且 ShipVia == 1 的Order

**var** x = db.Orders.AsExpandable().Where(predicate).ToList();

}

等同於以下語法:

**var** x = db.Orders.Where(o => o.EmployeeID == 1 && o.ShipVia == 1).ToList();

**OR累加條件範例:**

**using** (NorthwindEntities1 db = **new** NorthwindEntities1())

{

//Or篩選

//False代表當沒有任何搜尋條件時，無回傳值

**var** predicate = PredicateBuilder.False<Orders>();

//篩選EmployeeID == 1 的Order

predicate = predicate.Or(p => p.EmployeeID == 1);

//在篩選EmployeeID == 2 的Order

predicate = predicate.Or(p => p.EmployeeID == 2);

//搜尋出EmployeeID == 1 或 EmployeeID == 2 的Order

**var** x = db.Orders.AsExpandable().Where(predicate).ToList();

}

等同於以下語法:

**var** y = db.Orders.Where(o => o.EmployeeID == 1 || o.EmployeeID == 2).ToList();

**OR及AND的累加條件範例:**

**using** (NorthwindEntities1 db = **new** NorthwindEntities1())

{

**var** Outer = PredicateBuilder.True<Orders>();

**var** Inner1 = PredicateBuilder.False<Orders>();

Inner1 = Inner1.Or(p => p.EmployeeID == 1);

Inner1 = Inner1.Or(p => p.EmployeeID == 2);

Outer = Outer.And(Inner1);

**var** Inner2 = PredicateBuilder.False<Orders>();

Inner2 = Inner2.Or(p => p.ShipVia == 1);

Inner2 = Inner2.Or(p => p.ShipVia == 2);

Outer = Outer.And(Inner2);

//搜尋EmployeeID = 1或2，且ShipVia = 1或2的訂單

**var** x = db.Orders.AsExpandable().Where(Outer).ToList();

}

**參考資料:**

<https://dotblogs.com.tw/wasichris/archive/2014/12/20/147734.aspx>  
<http://weisnote.blogspot.tw/2014/06/linq-linqkit-predicatebuilder-glimpse.html>