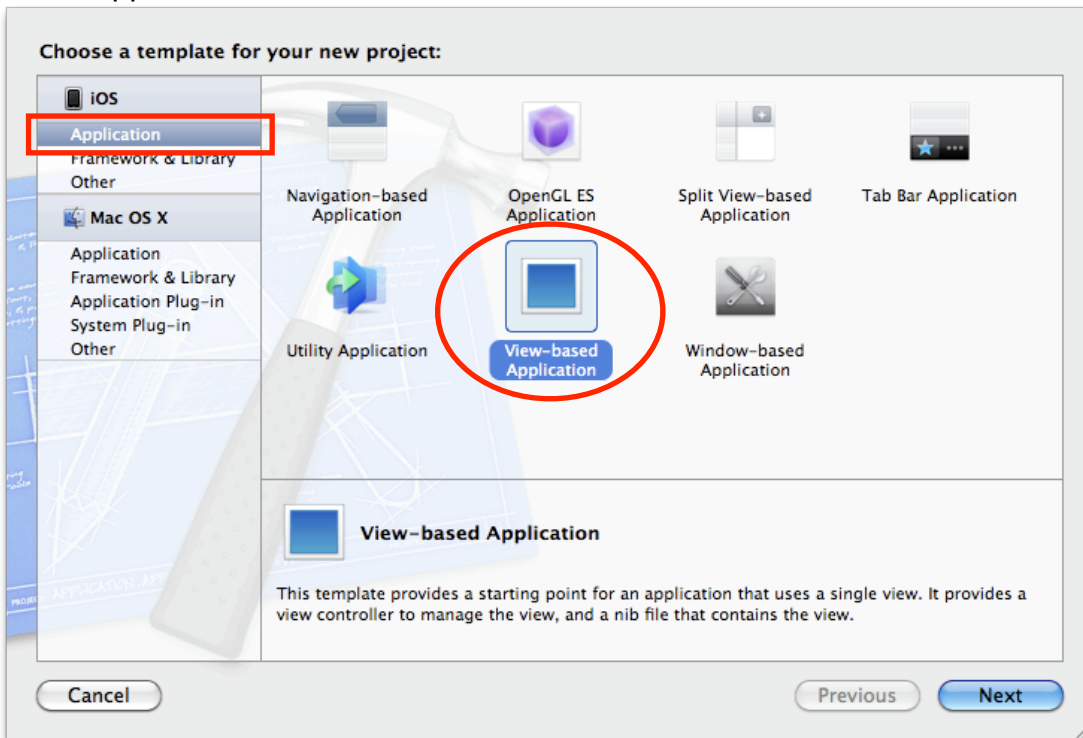


Lab ValueAndPredicate

Step 1. 在File>New>New Project開啓一個新的專案, 在iOS的Application目錄裡面選擇 view based application

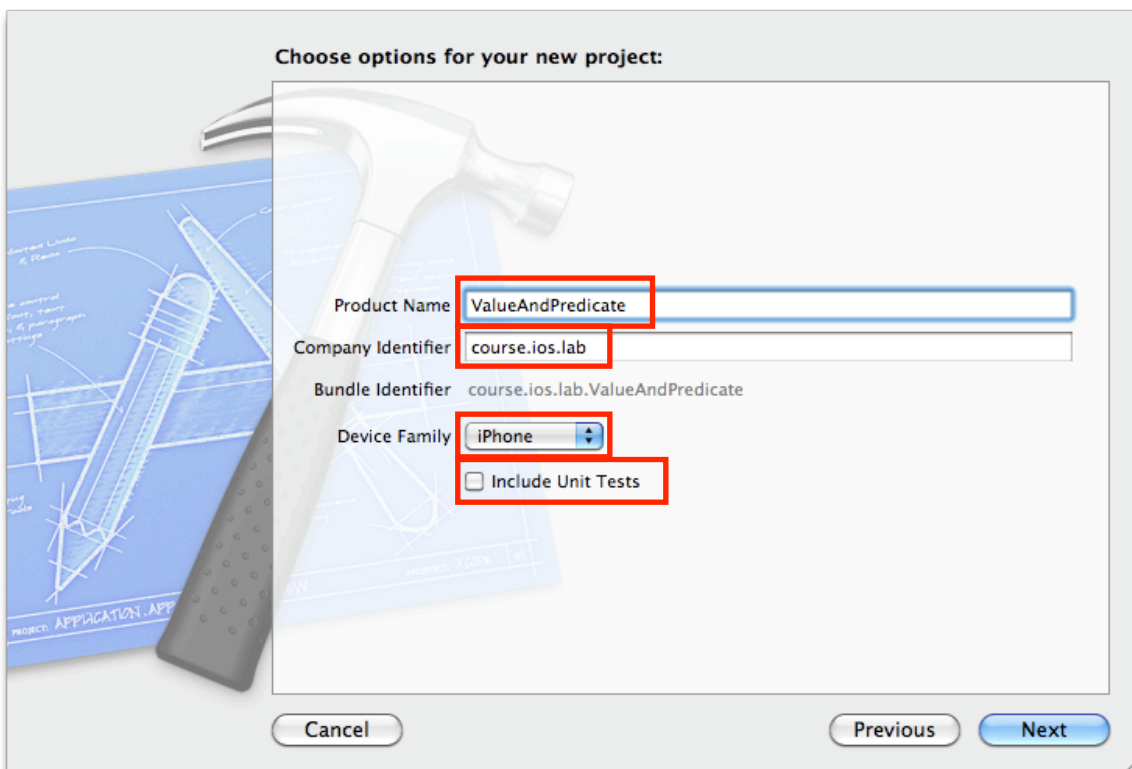


Step 2. 並將此專案命名為 **ValueAndPredicate**

Company Identifier是填入Bundle的名稱,在此統一填入**course.ios.lab** (也可自行填入)

Device Family選擇**iPhone**

Include Unit Tests是做語意邏輯測試用,可勾選也可不勾選,在此我們統一不勾選, 存檔



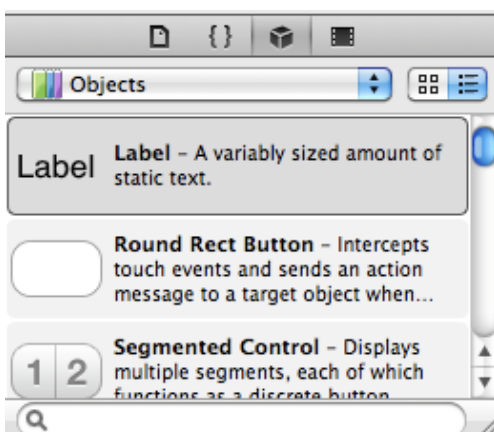
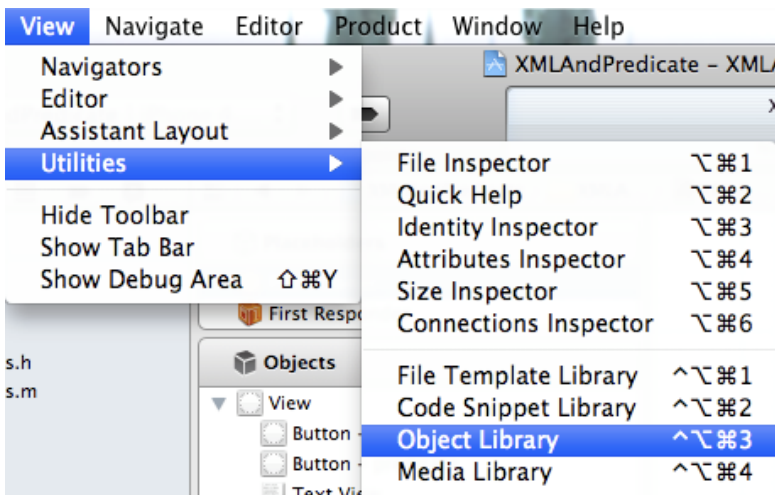
Step 3. 開啓 ValueAndPredicateViewController.h, 加入三個IBOutlet元件,包括兩個 UITextField和一個UITextView, 再加入一個NSMutableArray來放置Parse出來的資訊, 最後再加入兩個IBAction去抓取想要的資訊, 還有一個Method去init一個Array來放資訊

```
#import <UIKit/UIKit.h>
```

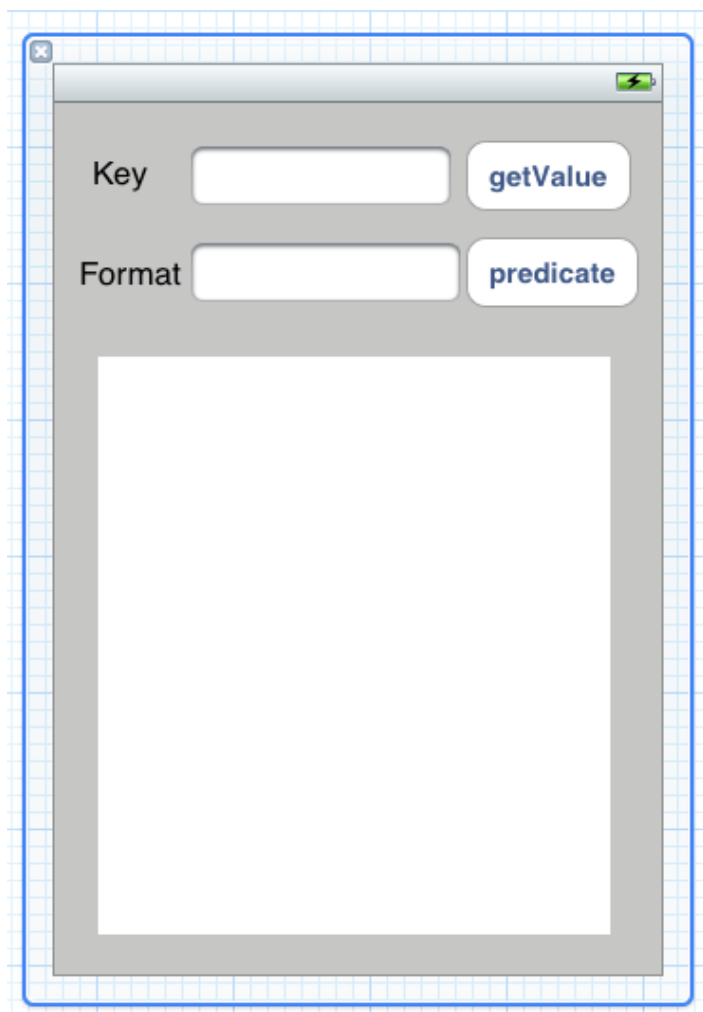
```
@interface ValueAndPredicateViewController : UIViewController {
    IBOutlet UITextField *inputKey;
    IBOutlet UITextField *inputPredicate;
    IBOutlet UITextView *resultView;

    NSMutableArray * arrayWithDict;
}
- (IBAction)getValue;
- (IBAction)predicateResult;
- (void)initArrayWithCarNumber:(NSInteger)dicts;
@end
```

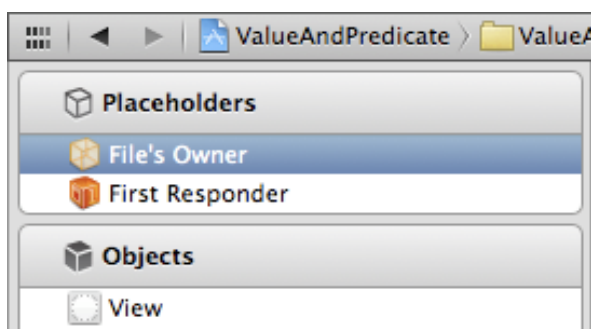
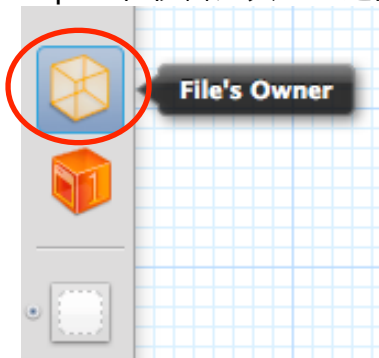
Step 4. 開啓ValueAndPredicateViewController.xib, 在Xcode視窗右上角選擇顯示視窗點下 View右邊按鈕,或是View > Utilities 裡選擇任意選擇一個選項即會打開這個視窗分頁,在此選擇Object Library來方便選擇和新增UI元件



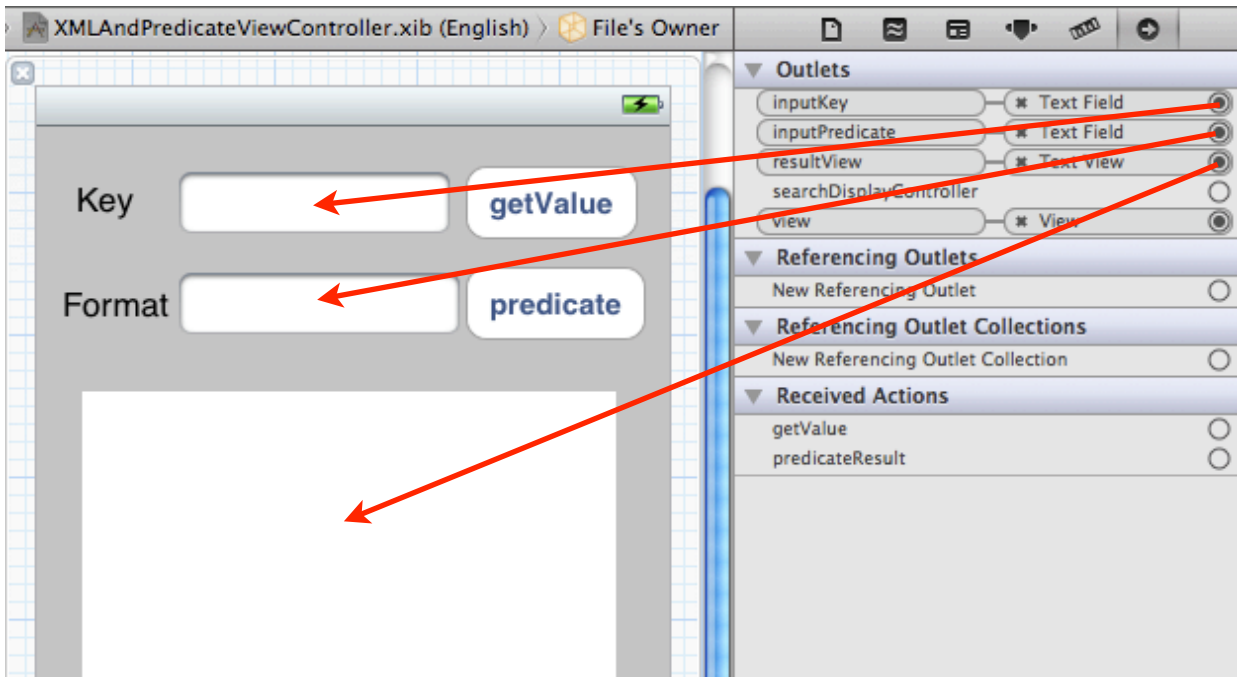
如下在View上加入兩個Label作為Title分別叫做Key和Format, 再加入兩個TextField, 兩個Button, 以及在下方加入一個TextView來顯示出想要的資訊,把TextView原先預設的內容刪掉



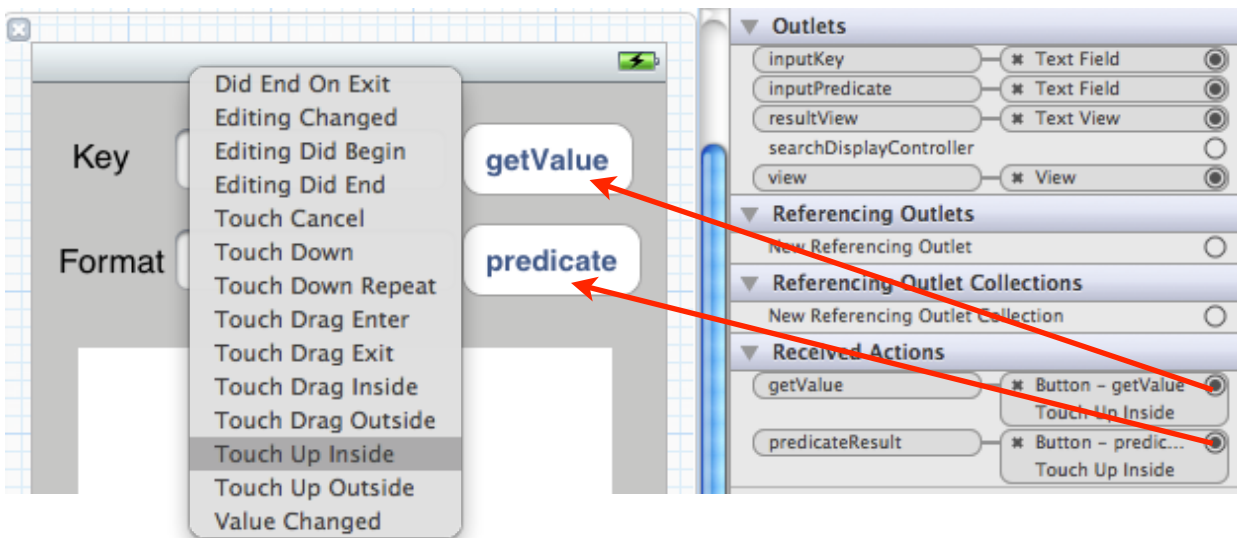
Step 5. 在視窗分頁左邊選擇File's Owner,來開啓File's Owner的Inspector



Step 6. 將三個IBOutlet的元件和View上的元件作連結



Step 7. 將兩個IBAction和View上的兩個Button的Touch Up Inside作連結



Step 8. 開啓 ValueAndPredicateViewController.m , 找到 viewDidLoad將Mark去掉,加入下面的程式,去init一個NSMutableArray來放多個NSMutableDictionary去存price和year兩份資料

```
- (void)viewDidLoad
{
    [super viewDidLoad];
    NSInteger numDicts = 3;
    [self initArrayWithCarNumber:numDicts];
}
```

Step 9. 同樣在 ValueAndPredicateViewController.m , 實作 `-(void)`

`initWithCarNumber:(NSInteger) dicts{}` 來新增和加入我們的資訊

```
-(void)initWithCarNumber:(NSInteger)dicts{
    arrayWithDict = [[NSMutableArray alloc] init];
    for (int i = 0 ; i < dicts ; i++) {
        NSInteger price = arc4random() % 100;
        NSInteger year = arc4random() % 100;

        year = year + 1900;

        NSDictionary * item = [NSDictionary
dictionaryWithObjectsAndKeys:[NSNumber
numberWithInteger:price],@"price",[NSNumber
numberWithInteger:year],@"year", nil];
        [arrayWithDict addObject:item];
    }
}
```

Step 10. 同樣在 ValueAndPredicateViewController.m , 找到 `-(void)dealloc{}` , 加入下面程式,讓在dealloc時把一些我們新增的元件release掉

```
- (void)dealloc
{
    [inputKey release];
    [inputPredicate release];
    [resultView release];
    [arrayWithDict release];
    [super dealloc];
}
```

Step 11. 同樣在 ValueAndPredicateViewController.m , 實作我們加入的兩個IBAction

```
- (IBAction)getValue{
    if ([inputKey.text isEqualToString:@""]) {
        resultView.text = [arrayWithDict description];
    }else {

        NSString * theKey = inputKey.text;
        NSArray * values = [arrayWithDict valueForKey:theKey];
        NSString * resultString = [NSString stringWithFormat:@"%@\n%@",
theKey, values];
        resultView.text = resultString;
    }
    [inputKey endEditing:YES];
}
```

```

- (IBAction)predicateResult{
    if ([inputPredicate.text isEqualToString:@""]) {
        resultView.text = [arrayWithDict description];
    }else {

        NSString * inputFormat = inputPredicate.text;
        NSPredicate * myFavor = [NSPredicate
predicateWithFormat:inputFormat];

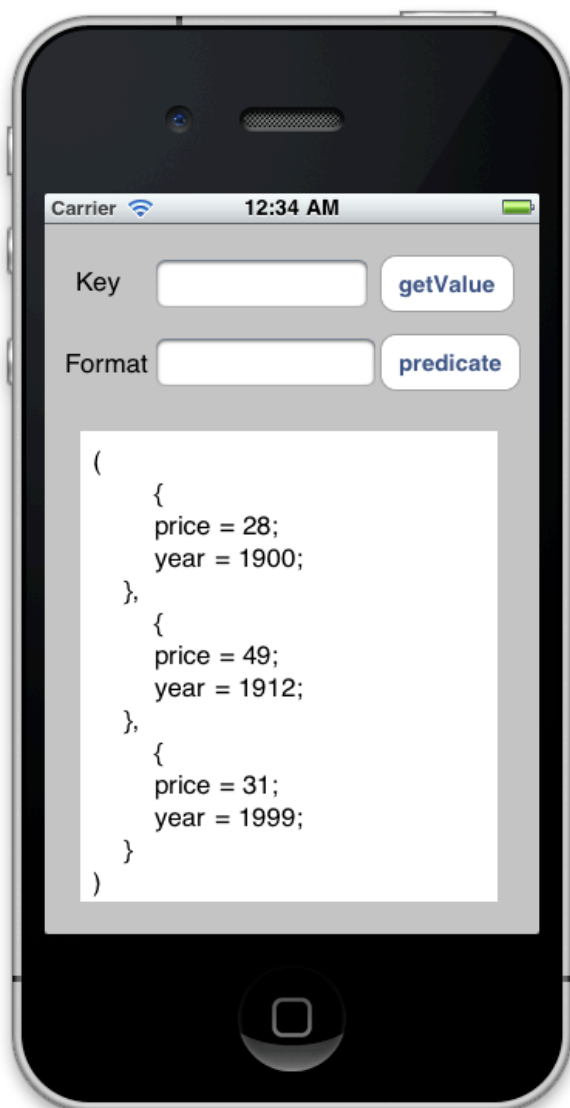
        NSArray * values = [arrayWithDict
filteredArrayUsingPredicate:myFavor];
        NSString * resultString = [NSString stringWithFormat:@"%@\n%@",
inputFormat, values];
        resultView.text = resultString;

    }
    [inputPredicate endEditing:YES];
}

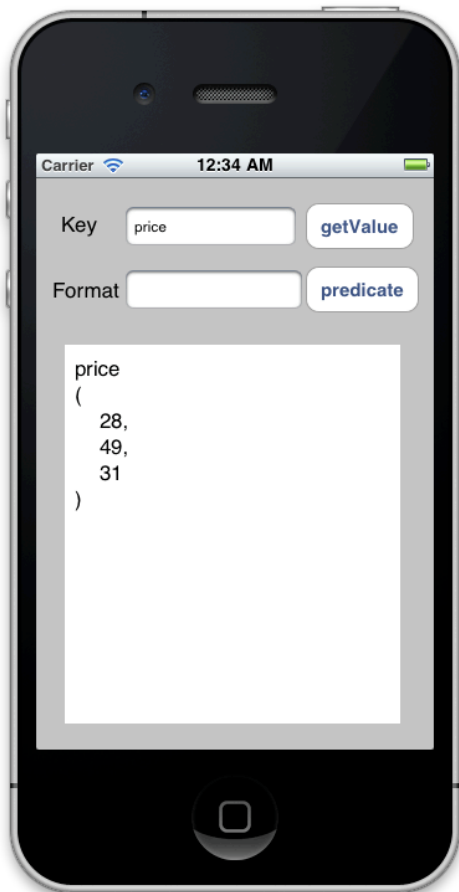
```

Step 12. Run (⌘+R)

開啓後,若不在兩個TextField任一個輸入字串的話, 按兩個Button其中一個都可以印出整個Array裡面的資料



如果Key裡面輸入price就會在下面的TextView去找每個item的裡的price的資訊全部列印出來



如果Format裡面輸入year > 1950的話就會把year這個element大於1950的列印出來

