```
//
//  ViewController.m
//  Catalogue
//
//  Created by kcfancher on 8/3/12.
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//

#import "ViewController.h"
#import "Book.h"
#import "CD.h"
#import "ItemCell.h"

@interface ViewController ()

@end

@implementation ViewController
@synthesize itemsTableView;
@synthesize items = _items;

- (void)viewDidLoad
{
    [super viewDidLoad];

    // Instantiate items using NSMutableArray's class method array which is short for
          [[NSMutableArray alloc] init]
    self.items = [NSMutableArray array];

    // We are adding some Book and CD instances to our items array
    [self.items addObject:[Book bookWithTitle:@"Objective-C" author:@"Keli" price:1.99
          identificationNumber:100]];
    [self.items addObject:[Book bookWithTitle:@"Objective-C 2.0" author:@"Keli" price:1.99
          identificationNumber:100]];

    [self.items addObject:[Book bookWithTitle:@"Cocoa Is Fun"
                                       author:@"Keli C. Fancher"
                                        price:2.99
                         identificationNumber:100]];

    [self.items addObject:[CD cdWithArtist:@"Keli C. Fancher"
                                     label:@"Rhapsody in C, Objective-C"
                                     price:0.00
                      identificationNumber:101]];

    [self.items addObject:[Book bookWithTitle:@"UITableView's are not so hard"
                                       author:@"Steven Sikes"
                                        price:2.99
                         identificationNumber:102]];

    [self.items addObject:[CD cdWithArtist:@"Aragorn"
                                     label:@"I am King"
                                     price:1.99
                      identificationNumber:103]];

    [self.items addObject:[Book bookWithTitle:@"iOS, Now What"
                                       author:@"Yoda"
                                        price:3.33
                         identificationNumber:104]];

    [self.items addObject:[CD cdWithArtist:@"Gandalf"
                                     label:@"Magic, what magic?"
                                     price:7.77
                      identificationNumber:105]];

    [self.items addObject:[Book bookWithTitle:@"Sandboxing"
                                       author:@"Sam, yeah that Sam"
                                        price:8.99
                         identificationNumber:106]];

    [self.items addObject:[CD cdWithArtist:@"Iluvatar"
                                     label:@"The Music is from me"
                                     price:99.99
                      identificationNumber:107]];

    [self.items addObject:[Book bookWithTitle:@"Objective-C 2.0"
                                       author:@"Stephen Kochan"
                                        price:3.99
                         identificationNumber:108]];

    [self.items addObject:[CD cdWithArtist:@"Tom Bombadil"
                                     label:@"Hey dol! merry dol!"
                                     price:9.99
                      identificationNumber:109]];

}

- (void)viewDidUnload
{
    [self setItemsTableView:nil];
    [super viewDidUnload];
    // Release any retained subviews of the main view.
}

- (BOOL)shouldAutorotateToInterfaceOrientation:(UIInterfaceOrientation)interfaceOrientation
{
    return (interfaceOrientation != UIInterfaceOrientationPortraitUpsideDown);
}

// Here are the two required UITableViewDataSource Methods

// Every TableView can have a number of different sections
// An example is the letter heading in the Contacts application
// This method returns the number of rows that are in each section
// For an app with no sections this method just returns the total number of rows
- (NSInteger)tableView:(UITableView *)tableView numberOfRowsInSection:(NSInteger)section
{
    // We want there to be one row for each item in our items array
    return self.items.count;
}

// tableView:cellForRowAtIndexPath returns a UITableViewCell that has been customized
// for each tableViewCell in our TableView (This method is called once per row/cell in our
     tableview)
- (UITableViewCell *)tableView:(UITableView *)tableView cellForRowAtIndexPath:(NSIndexPath *)
     indexPath
{
    // We first have to create a UITableViewCell instance
    // We use UITableView's insntance method -(UITableViewCell *)dequeueReusableCellWithIdentifier
          to
    // Return a TableViewCell that is memory efficient
    // We pass it the same string that we have used as an identifier in our Interface
    ItemCell *cell = [tableView dequeueReusableCellWithIdentifier:@"ItemCell"];

    // First we have to get the Item for the current row
    // IndexPath is an object that has both a section and a row property
    // Our catalogue stores both Book's and CD's - but since both are subclasses
    // of Item we can declare it universally as a Item
    Item *instance = [self.items objectAtIndex:indexPath.row];

    // Next we need to test if the Item is a Book or a CD to set the labels appropriately

    // If the Item is a Book we will use the Book's properties for the label
    if ([instance isMemberOfClass:[Book class]]) {
        Book *book = (Book *) instance;
        cell.mainLabel.text = book.title;
        cell.smallLabel.text = book.author;
        cell.rightLabel.text = [NSString stringWithFormat:@"$%.2f",book.price];
        // Set the image property on the cells itemImage using book.png (book@2x.png will
               automatically be used on retina displays)
        cell.itemImage.image = [UIImage imageNamed:@"book.png"];
    }
    // If the Item is a CD we will use the CD properties for the label
    else if ([instance isMemberOfClass:[CD class]]) {
        CD *cd = (CD *) instance;
        cell.mainLabel.text = cd.label;
        cell.smallLabel.text = cd.artist;
        cell.rightLabel.text = [NSString stringWithFormat:@"$%.2f",cd.price];
        // Set the image property on the cells itemImage using cd.png (cd@2x.png will automatically
               be used on retina displays)
        cell.itemImage.image = [UIImage imageNamed:@"cd.png"];
    }

    // Return the customized cell
    return cell;
}

@end
```