iPhone与iPad应用开发课程 精通iOS开发

第七讲 高级UI控件－导航控制器与表视图

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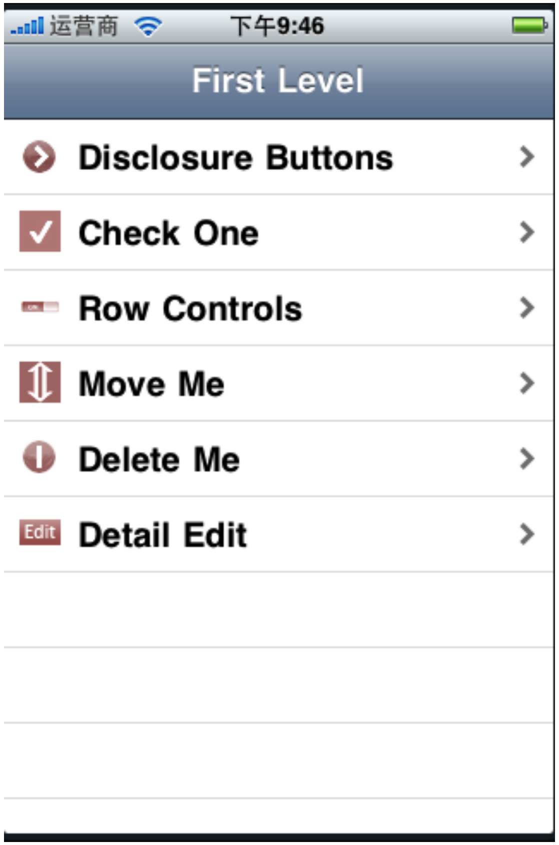
主要知识点

- 导航控制器
- 表视图
- 表视图控制器

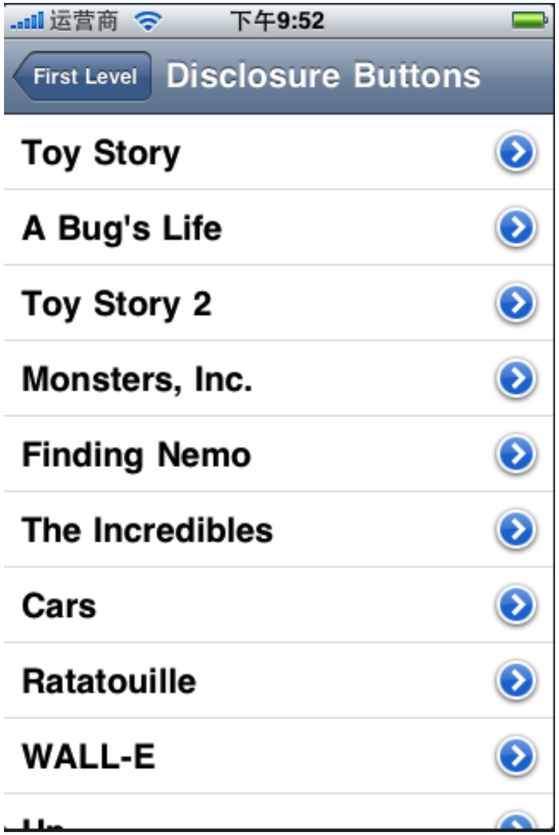
关于导航控制器和表视图

- 导航控制器和表视图密不可分。严格的说，要完成导航控制器的功能并不需要表视图。然而，在实际的应用程序中使用导航控制器时，几乎总是要实现至少一个表，并且通常多个表，因为导航控制器的强大之处在于它能够处理复杂的分层数据，在iPhone的小屏幕上，连续的使用表示分层数据最理想的方式。

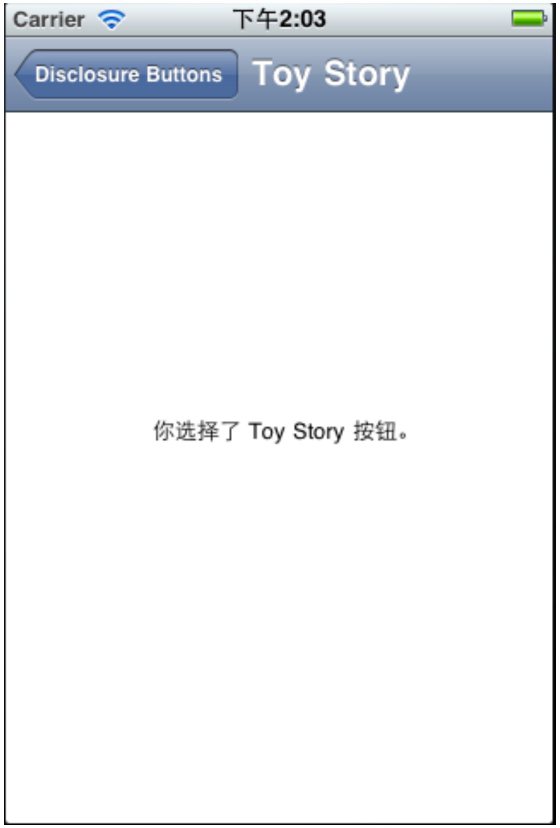
案例分析



根视图控制器



二级视图控制器



你选择了 Toy Story 按钮。

三级视图控制器

创建第一级控制器

- 一级控制器RootViewController还是一个UITableViewController,它并不是我们说的导航控制器，我们在委托Delegate中定义了导航控制器UINavigationController，事实上UINavigationController才真正意义的根控制器。

RootViewController.h

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

@interface RootViewController :
UITableViewController {
   NSArray *controllers;
}

@property (nonatomic, retain) NSArray
*controllers;

@end
```

RootViewController.m

```
@synthesize controllers;
- (void)viewDidLoad {
    self.title = @"First Level";
    NSMutableArray *array = [[NSMutableArray alloc] init];
    //增加控制器
    // ... ...
   self.controllers = array;
    [array release];
   [super viewDidLoad];
}

- (void)didReceiveMemoryWarning {
    [super didReceiveMemoryWarning];
}



- (void)dealloc {
    [super dealloc];
}
```

实现TableView数据源方法

```
// Customize the number of sections in the table view.
- (NSInteger)numberOfSectionsInTableView:(UITableView *)
tableView {
    return 1;
}


// Customize the number of rows in the table view.
- (NSInteger)tableView:(UITableView *)tableView
numberOfRowsInSection:(NSInteger)section {
    return [controllers count];
}
```

实现TableView数据源方法

```
// Customize the appearance of table view cells.
- (UITableViewCell *)tableView:(UITableView *)tableView
         cellForRowAtIndexPath:(NSIndexPath *)indexPath {

    static NSString *CellIdentifier = @"Cell";

    UITableViewCell *cell = [tableView
dequeueReusableCellWithIdentifier:CellIdentifier];
    if (cell == nil) {
        cell = [[[UITableViewCell alloc]
initWithStyle:UITableViewCellStyleDefault
                     reuseIdentifier:CellIdentifier] autorelease];
    }

    NSInteger row = [indexPath row];
    SecondLevelViewController *controller = [controllers objectAtIndex:row];
    cell.textLabel.text =  controller.title;
    cell.imageView.image = controller.rowImage;
    cell.accessoryType = UITableViewCellAccessoryDisclosureIndicator;

    return cell;
}
```

解释

- cell.accessoryType属性设定表视图单元格扩展图标类型。单元格扩展图标类型：
- UITableViewCellAccessoryNone，没有扩展图标；
- UITableViewCellAccessoryDisclosureIndicator，扩展指示器，触摸该图标将切换到下一级表视图，图标为 ›
- UITableViewCellAccessoryDetailDisclosureButton，细节展示按钮，触摸该行将显示当前行的更多详细信息视图，图标为 ➲
- UITableViewCellAccessoryCheckmark，选中标志，当选中某一行时候标志该行，图标为 ✓

实现TableView委托方法

```
- (void)tableView:(UITableView *)tableView didSelectRowAtIndexPath:(NSIndexPath *)
indexPath {

        NSInteger row = [indexPath row];
        SecondLevelViewController *nextController =   [self.controllers objectAtIndex:row];
        [self.navigationController pushViewController:nextController animated:YES];
}
```

二级表视图控制器

- 由于二级控制器也是表视图控制器，而且我们需要在为每个页面指定一个图片，所以我们定义了一个父类SecondLevelViewController

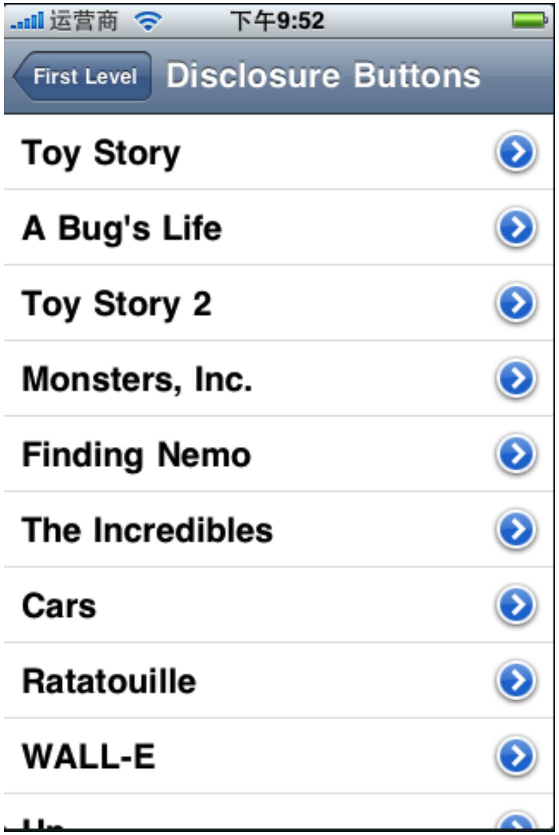
SecondLevelViewController

```
#import <UIKit/UIKit.h>
@interface SecondLevelViewController :
UITableViewController {
   UIImage *rowImage;
}
@property (nonatomic, retain) UIImage *rowImage;
@end
```

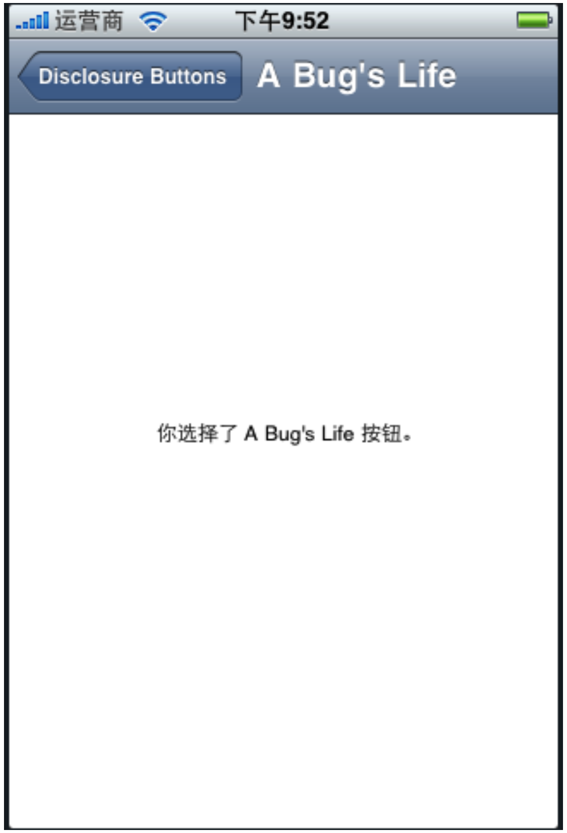
SecondLevelViewController.m

```
#import "SecondLevelViewController.h"
@implementation SecondLevelViewController
@synthesize rowImage;
@end
```

第一个二级控制器



- Toy Story
- A Bug's Life
- Toy Story 2
- Monsters, Inc.
- Finding Nemo
- The Incredibles
- Cars
- Ratatouille
- WALL-E
- Up



你选择了 A Bug's Life 按钮。

DisclosureButtonController.h

```
#import <Foundation/Foundation.h>
#import "SecondLevelViewController.h"
#import "DisclosureDetailController.h"

@interface DisclosureButtonController : SecondLevelViewController {
    NSArray *listData;
    DisclosureDetailController *childController;
}
@property (nonatomic,retain) NSArray *listData;
@property (nonatomic, retain) DisclosureDetailController *childController;

@end
```

DisclosureButtonController.m

```
@implementation DisclosureButtonController
@synthesize listData;
@synthesize childController;
- (void)viewDidLoad {
    NSArray *array = [[NSArray alloc] initWithObjects:@"Toy Story",
                      @"A Bug's Life", @"Toy Story 2", @"Monsters,
Inc.",
                      @"Finding Nemo", @"The Incredibles", @"Cars",
                      @"Ratatouille", @"WALL-E", @"Up", @"Toy Story
3",
                      @"Cars 2", @"The Bear and the Bow", @"Newt",
nil];
    self.listData = array;
    [array release];
    [super viewDidLoad];
}
- (void)viewDidUnload {
    self.listData = nil;
    self.rowImage = nil;
}
- (void)dealloc {
    [listData release];
    [rowImage release];
    [super dealloc];
}
```

实现TableView数据源方法

```
// Customize the number of sections in the table
view.
- (NSInteger)numberOfSectionsInTableView:
(UITableView *)tableView {
    return 1;
}


// Customize the number of rows in the table
view.
- (NSInteger)tableView:(UITableView *)tableView
numberOfRowsInSection:(NSInteger)section {
    return [listData count];
}
```

实现TableView数据源方法

```
// Customize the appearance of table view cells.
- (UITableViewCell *)tableView:(UITableView *)tableView
                cellForRowAtIndexPath:(NSIndexPath *)indexPath {
   static NSString *CellIdentifier = @"Cell”;
   UITableViewCell *cell = [tableView dequeueReusableCellWithIdentifier:CellIdentifier];
   if (cell == nil) {
       cell = [[[UITableViewCell alloc] initWithStyle:UITableViewCellStyleDefault
                                  reuseIdentifier:CellIdentifier] autorelease];
   }

       NSInteger row = [indexPath row];
       NSString *title = [listData objectAtIndex:row];
       cell.textLabel.text =  title;
       //cell.imageView.image = controller.rowImage;
       cell.accessoryType = UITableViewCellAccessoryDetailDisclosureButton;
   return cell;
}
```

实现TableView委托方法

```
- (void)tableView:(UITableView *)tableView didSelectRowAtIndexPath:(NSIndexPath *)indexPath {
   if (childController == nil) {
              childController = [[DisclosureDetailController alloc]
                                          initWithNibName:@"DisclosureDetailController"
                                          bundle:nil];
      }
      NSInteger row = [indexPath row];
      NSString *selectedMessage = [listData objectAtIndex:row];

      NSString *message = [[NSString alloc] initWithFormat:@"你选择了 %@ 按钮。",
selectedMessage];
      childController.message = message;
      childController.title = selectedMessage;

      [message release];

      [self.navigationController pushViewController:childController animated:YES];
}
```

解释

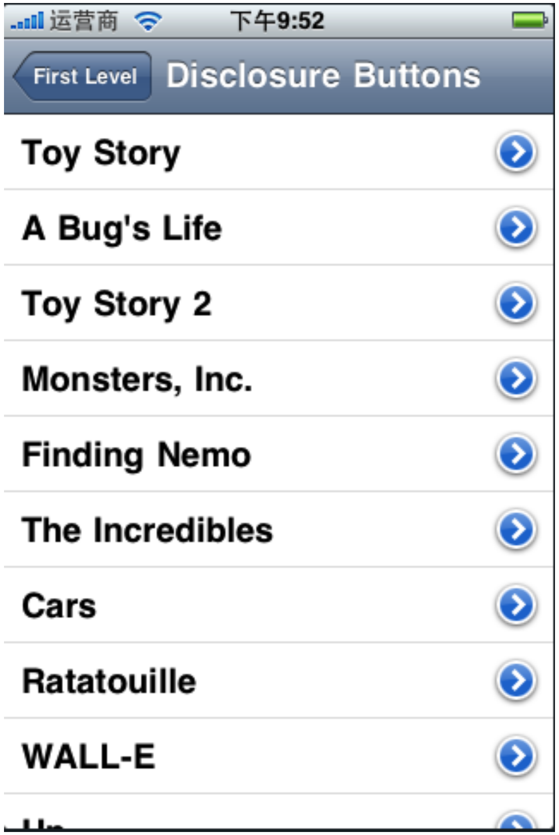
- 上面的委托方法，是用户选中单元格后触发的方法。
- [self.navigationController pushViewController:childController animated:YES];
- 是将详细视图控制器放置到导航控制器栈中，并以动画效果显示详细视图。

RootViewController中viewDidLoad方法

```
    //增加细节展示按钮控制器
    DisclosureButtonController *disclosureButtonController = [[DisclosureButtonController alloc]
                                          initWithStyle:UITableViewStylePlain];

    disclosureButtonController.title = @"Disclosure Buttons";
    disclosureButtonController.rowImage = [UIImage
imageNamed:@"disclosureButtonControllerIcon.png"];
    [array addObject:disclosureButtonController];
    [disclosureButtonController release];
     // ... ...
     self.controllers = array;
     [array release];
```

第一个三级控制器



Toy Story

A Bug's Life

Toy Story 2

Monsters, Inc.

Finding Nemo

The Incredibles

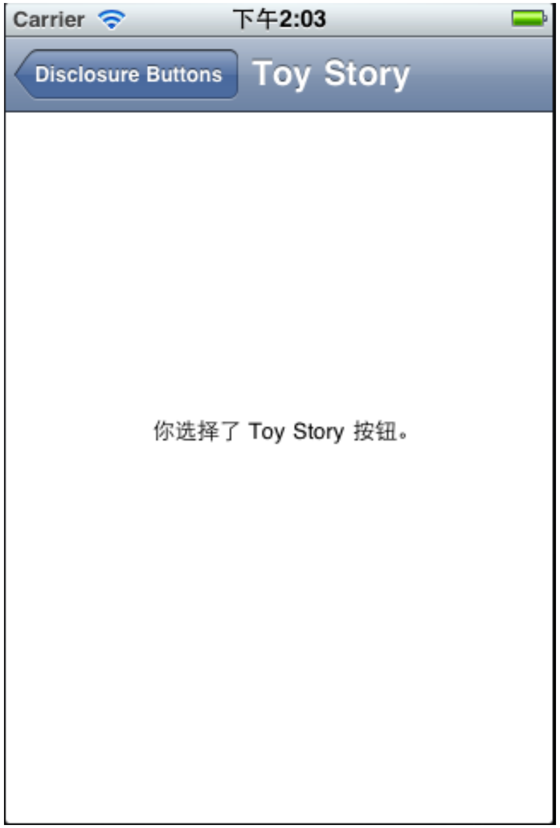
Cars

Ratatouille

WALL-E

Up

二级视图控制器



你选择了 Toy Story 按钮。

三级视图控制器

DisclosureDetailController.h

```
@interface DisclosureDetailController : UIViewController {
    UILabel *label;
    NSString *message;
}
@property (nonatomic, retain) IBOutlet UILabel *label;
@property (nonatomic, retain) NSString *message;

@end
```

解释

- message从上一个屏幕传递过来的消息
- label显示消息的控件。

m文件中的初始化方法

```
/*
- (void)viewDidLoad {
   lable.text = message;
}
*/

//屏幕显示时候触发方法
- (void)viewWillAppear:(BOOL)animated {
   label.text = message;
    [super viewWillAppear:animated];
}
```

解释

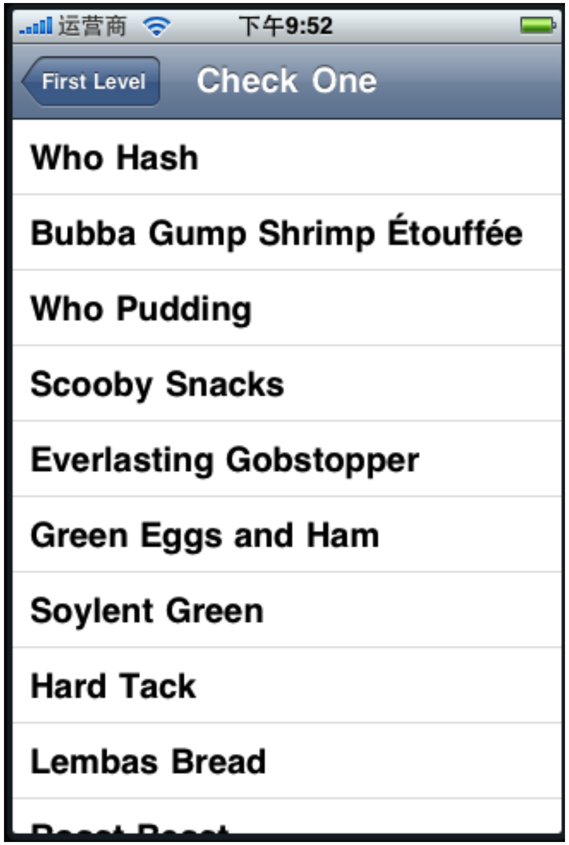
- 不要使用viewDidLoad 方法，而是使用viewWillAppear:animated:方法，该方法是在屏幕出现时候调用。

m文件中释放方法

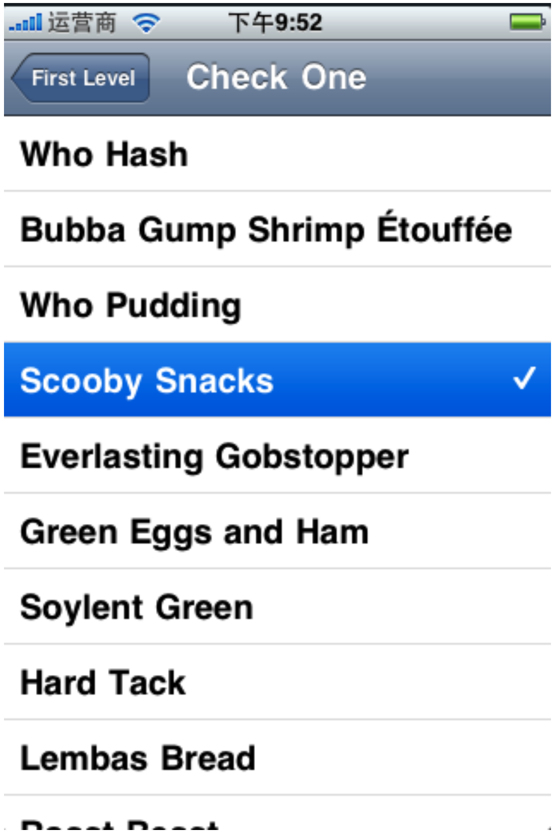
```
- (void)viewDidUnload {
    [super viewDidUnload];
     self.label = nil;
    self.message = nil;
}


- (void)dealloc {
     [label release];
     [message release];
    [super dealloc];
}
```

第二个二级表控制器



Who Hash
Bubba Gump Shrimp Étouffée
Who Pudding
Scooby Snacks
Everlasting Gobstopper
Green Eggs and Ham
Soylent Green
Hard Tack
Lembas Bread
Roast Beast



Who Hash
Bubba Gump Shrimp Étouffée
Who Pudding
Scooby Snacks ✓
Everlasting Gobstopper
Green Eggs and Ham
Soylent Green
Hard Tack
Lembas Bread
Roast Beast

CheckListController.h

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

@interface CheckListController :
SecondLevelViewController {
   NSArray *listData;
   NSIndexPath *lastIndexPath;
}
@property (nonatomic, retain) NSArray
*listData;
@property (nonatomic, retain) NSIndexPath
*lastIndexPath;

@end
```

CheckListController.m

```
- (void)viewDidLoad {
    NSArray *array = [[NSArray alloc] initWithObjects:@"Who Hash",
                      @"Bubba Gump Shrimp Étouffée", @"Who Pudding",
@"Scooby Snacks",
                      @"Everlasting Gobstopper", @"Green Eggs and
Ham", @"Soylent Green",
                      @"Hard Tack", @"Lembas Bread",  @"Roast Beast",
@"Blancmange", nil];
    self.listData = array;
    [array release];
}
- (void)viewDidUnload {
    self.listData = nil;
    self.lastIndexPath = nil;
}
- (void)dealloc {
    [listData release];
    [lastIndexPath release];
    [super dealloc];
}
```

实现TableView数据源方法

```
- (NSInteger)numberOfSectionsInTableView:
(UITableView *)tableView {
    return 1;
}
// Customize the number of rows in the table
view.
- (NSInteger)tableView:(UITableView *)tableView
numberOfRowsInSection:(NSInteger)section {
    return [listData count];
}
```

实现TableView数据源方法

```
-(UITableViewCell *)tableView:(UITableView *)tableView cellForRowAtIndexPath:
(NSIndexPath *)indexPath {
    static NSString *CellIdentifier = @"Cell";

    UITableViewCell *cell = [tableView
dequeueReusableCellWithIdentifier:CellIdentifier];
    if (cell == nil) {
        cell = [[[UITableViewCell alloc]
initWithStyle:UITableViewCellStyleDefault
                              reuseIdentifier:CellIdentifier] autorelease];
     }

    NSInteger row = [indexPath row];

    cell.textLabel.text = [listData objectAtIndex:row];

    return cell;
}
```

实现TableView委托方法

```
-(void)tableView:(UITableView *)tableView
didSelectRowAtIndexPath:(NSIndexPath *)indexPath {
    int newRow = [indexPath row];
    int oldRow = (lastIndexPath != nil) ? [lastIndexPath row] :
-1;

    if (newRow != oldRow) {
        UITableViewCell *newCell = [tableView
cellForRowAtIndexPath:indexPath];
    newCell.accessoryType = UITableViewCellAccessoryCheckmark;
    UITableViewCell *oldCell = [tableView
cellForRowAtIndexPath:lastIndexPath];
        oldCell.accessoryType = UITableViewCellAccessoryNone;

        lastIndexPath = indexPath;
    }
}
```

解释

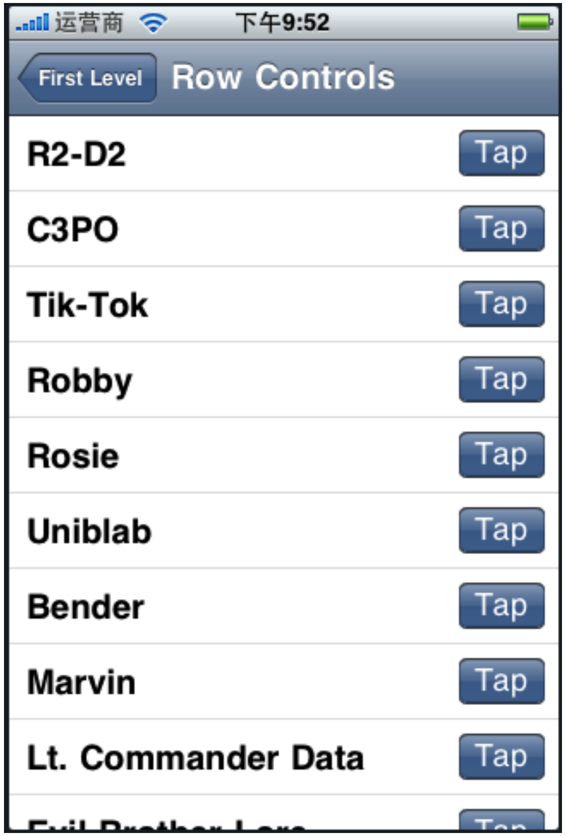
- int oldRow = (lastIndexPath != nil) ? [lastIndexPath row] : -1;
- 获得上次选择的单元格行，如果lastIndexPath为nil这设置为-1
- newCell.accessoryType = UITableViewCellAccessoryCheckmark;
- 设置新单元格为UITableViewCellAccessoryCheckmark
- oldCell.accessoryType = UITableViewCellAccessoryNone;
- 设置旧单元格为UITableViewCellAccessoryNone

RootViewController中viewDidLoad方法

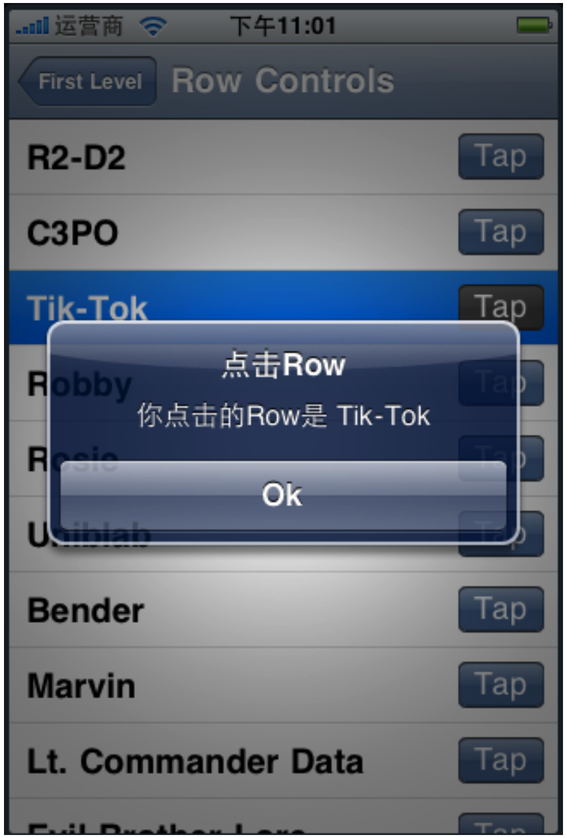
```
    //增加check控制器
    CheckListController *checkListController =
[[CheckListController alloc]
                       initWithStyle:UITableViewStylePlain];

    checkListController.title = @"Check One";
    checkListController.rowImage = [UIImage
imageNamed:@"checkmarkControllerIcon.png"];
    [array addObject:checkListController];
    [checkListController release];
```

第三个二级表控制器

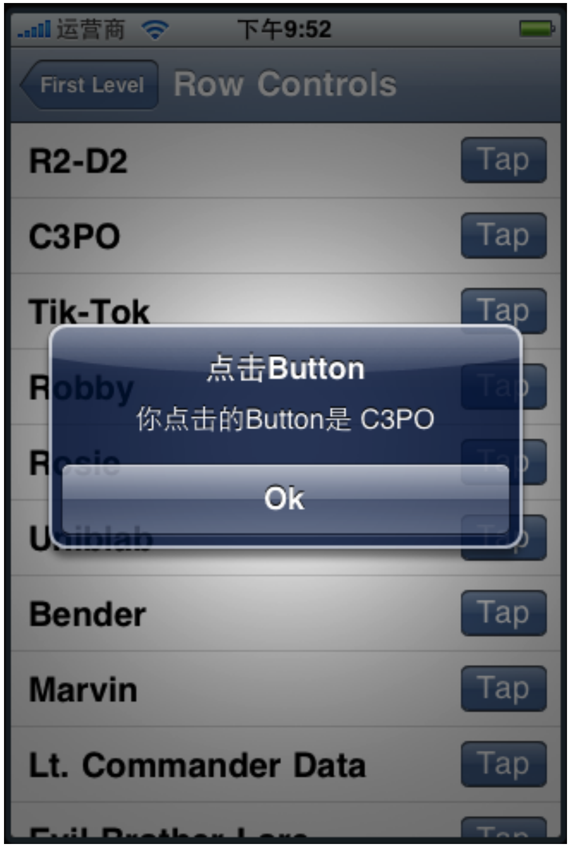


R2-D2 Tap
C3PO Tap
Tik-Tok Tap
Robby Tap
Rosie Tap
Uniblab Tap
Bender Tap
Marvin Tap
Lt. Commander Data Tap
Evil Brother Lore Tap



点击Row

你点击的Row是 Tik-Tok



点击Button

你点击的Button是 C3PO

RowControlsController.h

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

@interface RowControlsController :
SecondLevelViewController {
   NSArray *listData;
}

@property (nonatomic, retain) NSArray
*listData;
-(IBAction)buttonTapped:(id)sender;

@end
```

RowControlsController.m

```
- (void)viewDidLoad {
    NSArray *array = [[NSArray alloc] initWithObjects:@"R2-D2",
                      @"C3PO", @"Tik-Tok", @"Robby", @"Rosie",
@"Uniblab",
                      @"Bender", @"Marvin", @"Lt. Commander Data",
                      @"Evil Brother Lore", @"Optimus Prime",
@"Tobor", @"HAL",
                      @"Orgasmatron", nil];
    self.listData = array;
    [array release];
}
- (void)viewDidUnload {
    self.listData = nil;
}
- (void)dealloc {
    [listData release];
    [super dealloc];
}
```

实现TableView数据源方法

```
- (NSInteger)numberOfSectionsInTableView:
(UITableView *)tableView {
    return 1;
}
// Customize the number of rows in the table
view.
- (NSInteger)tableView:(UITableView *)tableView
numberOfRowsInSection:(NSInteger)section {
    return [listData count];
}
```

实现TableView数据源方法

```
- (UITableViewCell *)tableView:(UITableView *)tableView cellForRowAtIndexPath:
(NSIndexPath *)indexPath {
    static NSString *CellIdentifier = @"Cell";
    UITableViewCell *cell = [tableView 
dequeueReusableCellWithIdentifier:CellIdentifier];
    if (cell == nil) {
        cell = [[[UITableViewCell alloc] initWithStyle:UITableViewCellStyleDefault
                                     reuseIdentifier:CellIdentifier] autorelease];
       UIImage *buttonUpImage = [UIImage imageNamed:@"button_up.png"];
       UIImage *buttonDownImage = [UIImage imageNamed:@"button_down.png"];
       UIButton *button = [UIButton buttonWithType:UIButtonTypeCustom];
       button.frame = CGRectMake(0.0f, 0.0f, buttonUpImage.size.width, 
buttonUpImage.size.height);
       [button setBackgroundImage:buttonUpImage forState:UIControlStateNormal];
       [button setBackgroundImage:buttonDownImage forState:UIControlStateHighlighted];
       [button setTitle:@"Tap" forState:UIControlStateNormal];
       [button addTarget:self action:@selector(buttonTapped:) 
forControlEvents:UIControlEventTouchUpInside];
              cell.accessoryView = button;
    }
         NSInteger row = [indexPath row];
    NSString *rowTitle = [listData objectAtIndex:row];
    cell.textLabel.text = rowTitle;
    
    return cell;
}
```

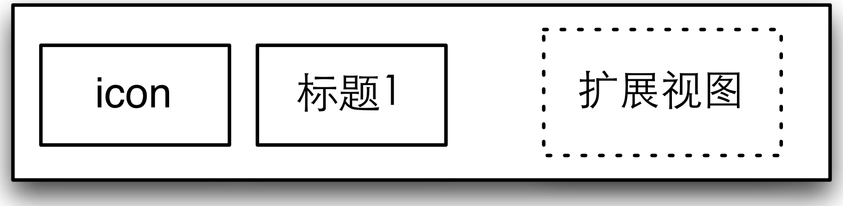
解释

- 由于我们没有nib文件，所以按钮要通过代码自己写按钮，如下：
- UIButton *button = [UIButton buttonWithType:UIButtonTypeCustom];
- 指定按钮的边框大小：
- button.frame = CGRectMake(0.0f, 0.0f, buttonUpImage.size.width, buttonUpImage.size.height);
- 设定按钮正常状态时候背景图片
- [button setBackgroundImage:buttonUpImage forState:UIControlStateNormal];
- 设定按钮高亮状态时候背景图片
- [button setBackgroundImage:buttonDownImage forState:UIControlStateHighlighted];

解释

- button setTitle:@"Tap" forState:UIControlStateNormal
- 设置按钮正常状态时候的title内容。
- [button addTarget:self action:@selector(buttonTapped:) forControlEvents:UIControlEventTouchUpInside];
- 由于没有nib文件按钮事件不能通过IB设计工具添加，要通过代码实现与按钮事件的处理。
- cell.accessoryView = button;
- 把按钮对象赋给单元格的accessoryView（扩展视图）。

表视图单元格



实现TableView委托方法

```
- (void)tableView:(UITableView *)tableView
didSelectRowAtIndexPath:(NSIndexPath *)indexPath {

   NSInteger buttonRow = [indexPath row];
   NSString *rowTitle = [listData objectAtIndex:buttonRow];

   UIAlertView *alert = [[UIAlertView alloc] initWithTitle:@"点
击Row"
          message:[NSString stringWithFormat:@"你点击的Row是
%@",rowTitle]
                     delegate:self
                     cancelButtonTitle:@"Ok"
                     otherButtonTitles:nil];
   [alert show];
   [alert release];
}
```

RowControlsController.m

```
-(IBAction)buttonTapped:(id)sender {
   UIButton *senderButton = (UIButton *)sender;
   UITableViewCell *buttonCell = (UITableViewCell *)
[senderButton superview];
   NSInteger buttonRow = [[self.tableView
indexPathForCell:buttonCell] row];
   NSString *rowTitle = [listData objectAtIndex:buttonRow];
   UIAlertView *alert = [[UIAlertView alloc]
initWithTitle:@"点击Button"
   message:[NSString stringWithFormat:@"你点击的Button是
%@",rowTitle]
         delegate:selfcancelButtonTitle:@"Ok"
         otherButtonTitles:nil];
    [alert show];
    [alert release];
}
```

解释

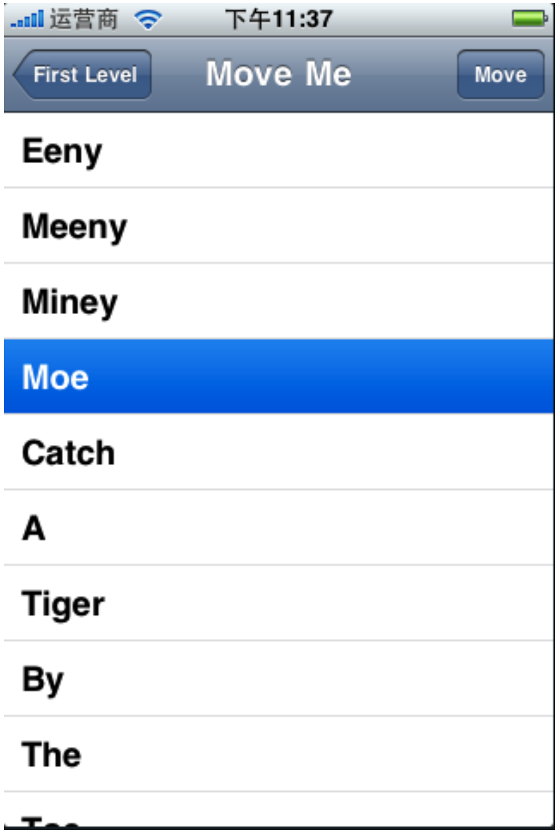
- buttonTapped:方法，是点击单元格中的按钮触发事件。
- UITableViewCell *buttonCell = (UITableViewCell *)[senderButton superview];
- 其中superview获得父控件，即表视图单元格。
- NSInteger buttonRow = [[self.tableView indexPathForCell:buttonCell] row];
- 其中获得选择的单元格中的按钮所在的单元格行数。

RootViewController中viewDidLoad方法

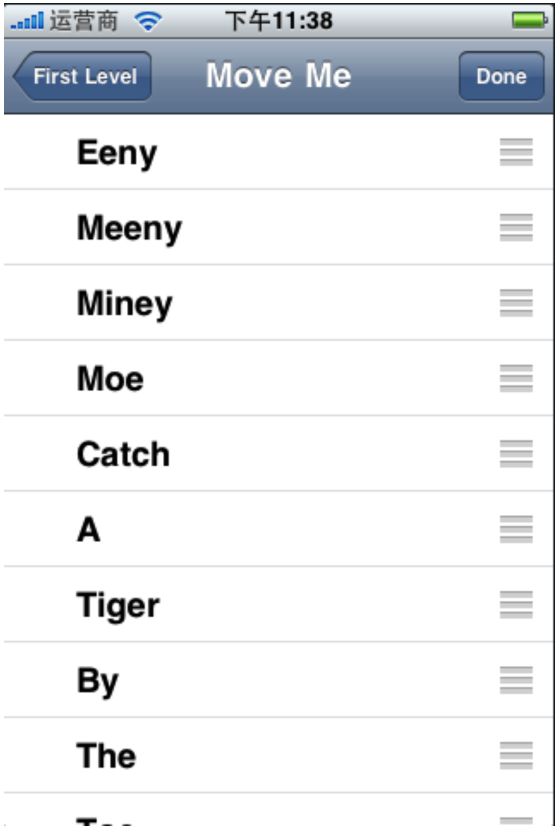
```
   //增加Row控制器
   RowControlsController *rowControlsController =
[[RowControlsController alloc]
                    initWithStyle:UITableViewStylePlain];

   rowControlsController.title = @"Row Controls";
   rowControlsController.rowImage = [UIImage
imageNamed:@"rowControlsIcon.png"];
   [array addObject:rowControlsController];
   [rowControlsController release];
```

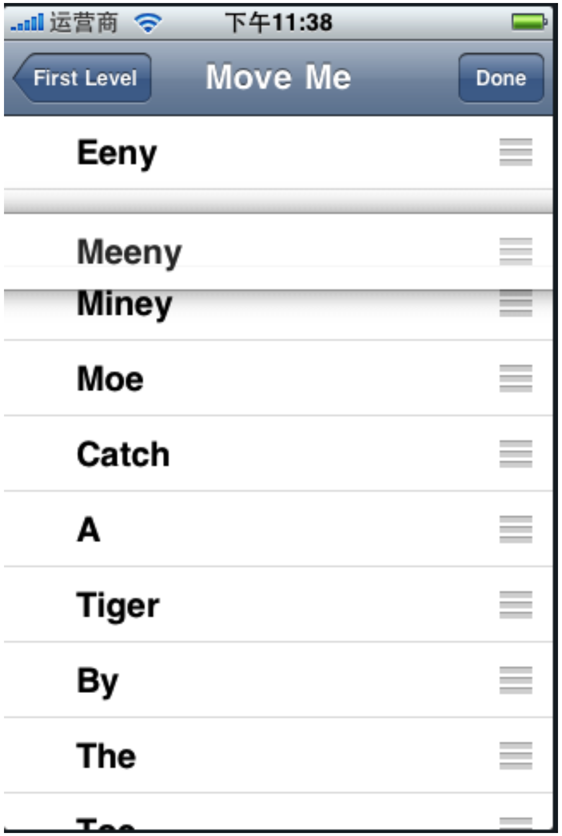
第四个表控制器



Eeny
Meeny
Miney
Moe
Catch
A
Tiger
By
The
Too



Eeny
Meeny
Miney
Moe
Catch
A
Tiger
By
The
Too



Eeny
Meeny
Miney
Moe
Catch
A
Tiger
By
The
Too

MoveMeController.h

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

@interface MoveMeController :
SecondLevelViewController {
   NSMutableArray *listData;
}
@property (nonatomic, retain)
NSMutableArray *listData;
-(IBAction)toggleMove;

@end
```

MoveMeController.m

```
@implementation MoveMeController
@synthesize listData;
-(IBAction)toggleMove {
   [self.tableView setEditing:!self.tableView.editing
animated:YES];
   if (self.tableView.editing) {
     [self.navigationItem.rightBarButtonItem setTitle:@"Done"];
   } else {
     [self.navigationItem.rightBarButtonItem setTitle:@"Move"];
   }
}
- (void)viewDidUnload {
    self.listData = nil;
}
- (void)dealloc {
   [listData release];
    [super dealloc];
}
```

解释

- toggleMove方法，是点击导航控制器右边按钮时候触发事件，如果表单元格处于编辑状态时候，设为不可编辑，反之可以编辑单元格。

MoveMeController.m

```
- (void)viewDidLoad {
    if (listData == nil) {
      NSMutableArray *array = [[NSMutableArray alloc] initWithObjects:
             @"Eeny", @"Meeny", @"Miney", @"Moe", @"Catch", @"A",
             @"Tiger", @"By", @"The", @"Toe", nil];
      self.listData = array;
      [array release];
    }

    UIBarButtonItem *moveButton = [[UIBarButtonItem alloc]
                                    initWithTitle:@"Move"

    style:UIBarButtonItemStyleBordered
                                    target:self
                                    action:@selector(toggleMove)];
    self.navigationItem.rightBarButtonItem = moveButton;
    [moveButton release];
    [super viewDidLoad];
}
```

实现TableView数据源方法

```
- (NSInteger)numberOfSectionsInTableView:
(UITableView *)tableView {
    return 1;
}
// Customize the number of rows in the table
view.
- (NSInteger)tableView:(UITableView *)tableView
numberOfRowsInSection:(NSInteger)section {
    return [listData count];
}
```

实现TableView数据源方法

```
- (UITableViewCell *)tableView:(UITableView *)tableView
      cellForRowAtIndexPath:(NSIndexPath *)indexPath {
    static NSString *CellIdentifier = @"Cell";

    UITableViewCell *cell = [tableView
dequeueReusableCellWithIdentifier:CellIdentifier];
    if (cell == nil) {
        cell = [[[UITableViewCell alloc]
initWithStyle:UITableViewCellStyleDefault

reuseIdentifier:CellIdentifier] autorelease];
    }
    NSInteger row = [indexPath row];
   cell.textLabel.text = [listData objectAtIndex:row];
    return cell;
}
```

实现TableView数据源方法

```
// Override to support rearranging the table view.
- (void)tableView:(UITableView *)tableView
    moveRowAtIndexPath:(NSIndexPath *)fromIndexPath
    toIndexPath:(NSIndexPath *)toIndexPath {

   NSInteger fromRow = [fromIndexPath row];
   NSInteger toRow = [toIndexPath row];
   id object = [listData objectAtIndex:fromRow];

   [listData removeObjectAtIndex:fromRow];
   [listData insertObject:object atIndex:toRow];
}
```

实现TableView数据源方法

```
// Override to support conditional rearranging of
the table view.
- (BOOL)tableView:(UITableView *)tableView
canMoveRowAtIndexPath:(NSIndexPath *)indexPath {
    // Return NO if you do not want the item to be
re-orderable.
    return YES;
}
```

解释

- 控制单元格行是否可以移动，本例中我们是可以移动所有行。

实现TableView委托方法

```
- (UITableViewCellEditingStyle)tableView:
(UITableView *)tableView
       editingStyleForRowAtIndexPath:(NSIndexPath
*)indexPath {
   return UITableViewCellEditingStyleNone;
}
```

解释

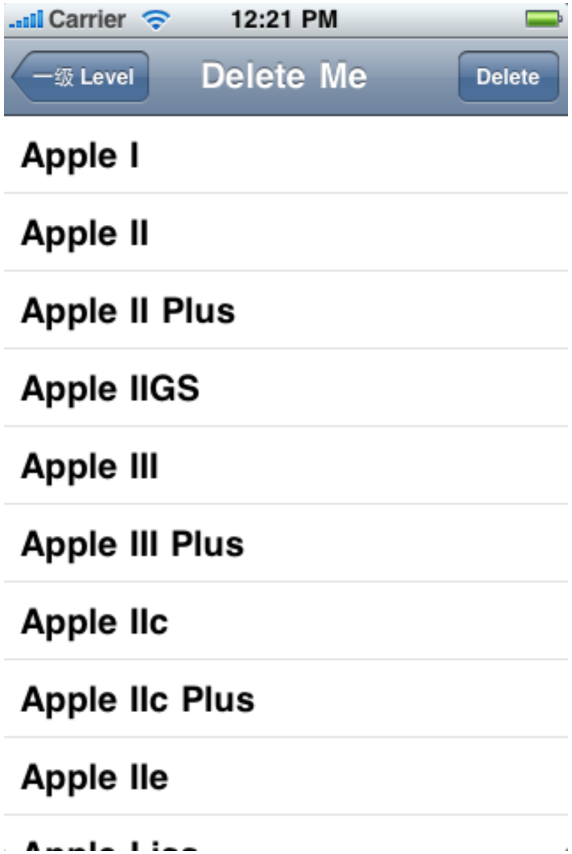
- 我们希望能够对行重新排序，不过不希望用户能够删除或插入行，因此，我们实现了上面的委托方法，通过这个方法，表视图可以询问指定的行是否可以被删除，或是否可以将新行插入到指定的位置。通过为每一行返回UITableViewCellEditingStyleNone，表示我们不支持插入或删除任何行。

RootViewController中viewDidLoad方法

```
    //增加Move控制器
    MoveMeController *moveMeController = [[MoveMeController 
alloc] initWithStyle:UITableViewStylePlain];

    moveMeController.title = @"Move Me";
    moveMeController.rowImage = [UIImage 
imageNamed:@"moveMeIcon.png"];
    [array addObject:moveMeController];
    [moveMeController release];
```

第五个表视图控制器



Apple I

Apple II

Apple II Plus

Apple IIGS

Apple III

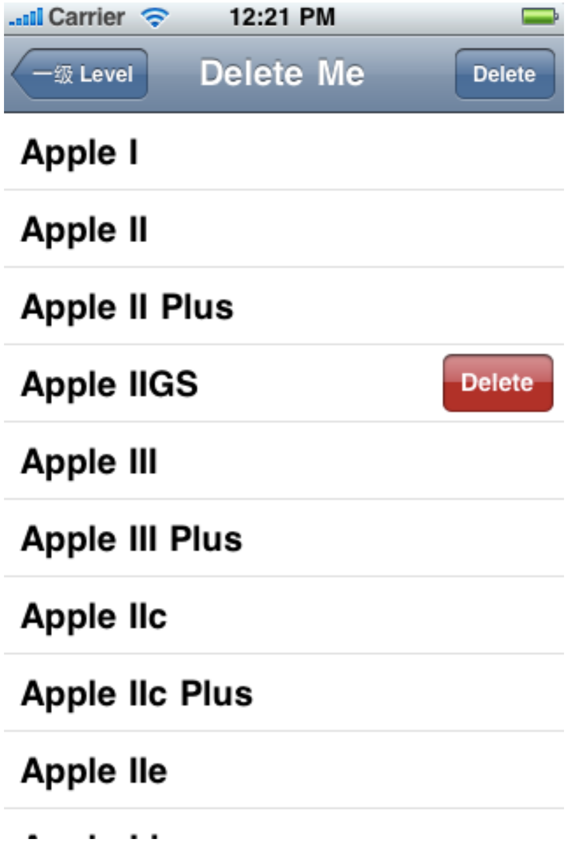
Apple III Plus

Apple IIc

Apple IIc Plus

Apple IIe

Apple Lisa



Apple I

Apple II

Apple II Plus

Apple IIGS Delete

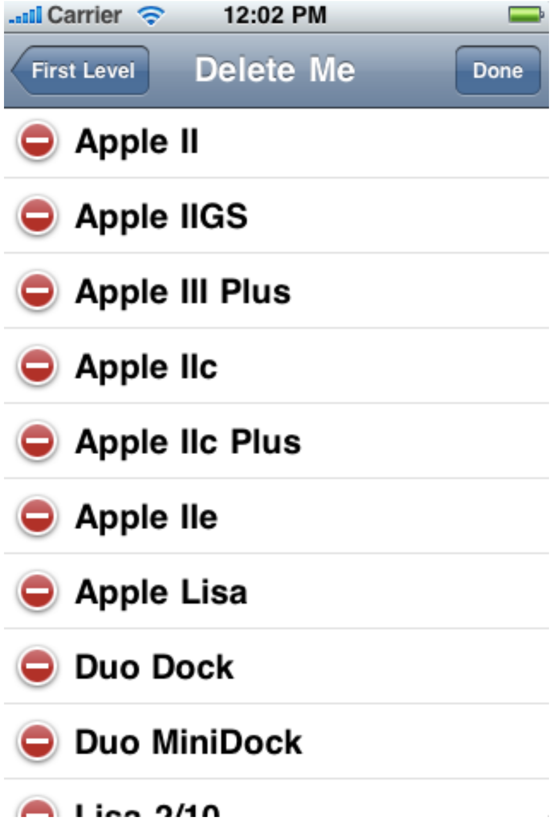
Apple III

Apple III Plus

Apple IIc

Apple IIc Plus

Apple IIe



Apple II

Apple IIGS

Apple III Plus

Apple IIc

Apple IIc Plus

Apple IIe

Apple Lisa

Duo Dock

Duo MiniDock

Lisa 2/10

删除（Delete Me）、
详细和编辑（Detail Edit）

DeleteMeController.h

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

@interface DeleteMeController :
SecondLevelViewController {
   NSMutableArray *listData;
}

@property (nonatomic, retain) NSMutableArray
*listData;
-(IBAction)toggleMove;

@end
```

DeleteMeController.m

```
@implementation MoveMeController
@synthesize listData;
-(IBAction)toggleMove {
   [self.tableView setEditing:!self.tableView.editing
animated:YES];
   if (self.tableView.editing) {
     [self.navigationItem.rightBarButtonItem setTitle:@"Done"];
   } else {
     [self.navigationItem.rightBarButtonItem setTitle:@"Move"];
   }

}- (void)viewDidUnload {
    self.listData = nil;
}
- (void)dealloc {
   [listData release];
    [super dealloc];
}
```

解释

- toggleMove方法，是点击导航控制器右边按钮时候触发事件，如果表单元格处于编辑状态时候，设为不可编辑，反之可以编辑单元格。

DeleteMeController.m

```
-(void)viewDidLoad {
    if (listData == nil) {
        NSString *path = [[NSBundle mainBundle]
pathForResource:@"computers" ofType:@"plist"];
        NSMutableArray *array = [[NSMutableArray alloc]
initWithContentsOfFile:path];

        self.listData = array;
        [array release];
    }

    UIBarButtonItem *editButton = [[UIBarButtonItem alloc]
initWithTitle:@"Delete"
                      style:UIBarButtonItemStyleBordered
                      target:self
                      action:@selector(toggleMove)];
    self.navigationItem.rightBarButtonItem = editButton;
    [editButton release];
}
```

实现TableView数据源方法

```
- (NSInteger)numberOfSectionsInTableView:
(UITableView *)tableView {
    // Return the number of sections.
    return 1;
}
- (NSInteger)tableView:(UITableView *)tableView
numberOfRowsInSection:(NSInteger)section {
    // Return the number of rows in the section.
    return [listData count];
}
```

实现TableView数据源方法

```
-(UITableViewCell *)tableView:(UITableView *)tableView
cellForRowAtIndexPath:(NSIndexPath *)indexPath {
    static NSString *CellIdentifier = @"Cell";

    UITableViewCell *cell = [tableView
dequeueReusableCellWithIdentifier:CellIdentifier];
    if (cell == nil) {
        cell = [[[UITableViewCell alloc]
initWithStyle:UITableViewCellStyleDefault
      reuseIdentifier:CellIdentifier] autorelease];
    }

    NSInteger row = [indexPath row];
   cell.textLabel.text = [listData objectAtIndex:row];

    return cell;
}
```

实现TableView数据源方法

```
-(void)tableView:(UITableView *)tableView
commitEditingStyle:(UITableViewCellEditingStyle)
editingStyle forRowAtIndexPath:(NSIndexPath *)indexPath
{
    if (editingStyle ==
UITableViewCellEditingStyleDelete) {
      NSInteger row = [indexPath row];
      [self.listData removeObjectAtIndex:row];
        // Delete the row from the data source
        [tableView deleteRowsAtIndexPaths:[NSArray
arrayWithObject:indexPath] withRowAnimation:YES];
    }
}
```

解释

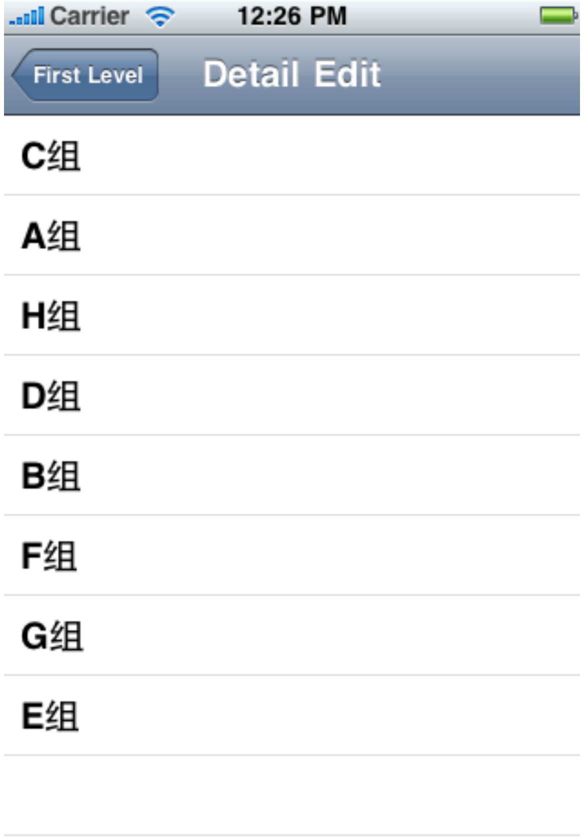
- -(void)tableView:(UITableView *)tableView commitEditingStyle:(UITableViewCellEditingStyle)editingStyle forRowAtIndexPath:(NSIndexPath *)indexPath
- 该委托方法是实现删除和插入功能。

RootViewController中viewDidLoad方法

```
   //增加Delete控制器
   DeleteMeController *deleteMeController = 
[[DeleteMeController alloc]
                initWithStyle:UITableViewStylePlain];

   deleteMeController.title = @"Delete Me";
   deleteMeController.rowImage = [UIImage 
imageNamed:@"deleteMeIcon.png"];
   [array addObject:deleteMeController];
   [deleteMeController release];
```

第六个表视图控制器



C组

A组

H组

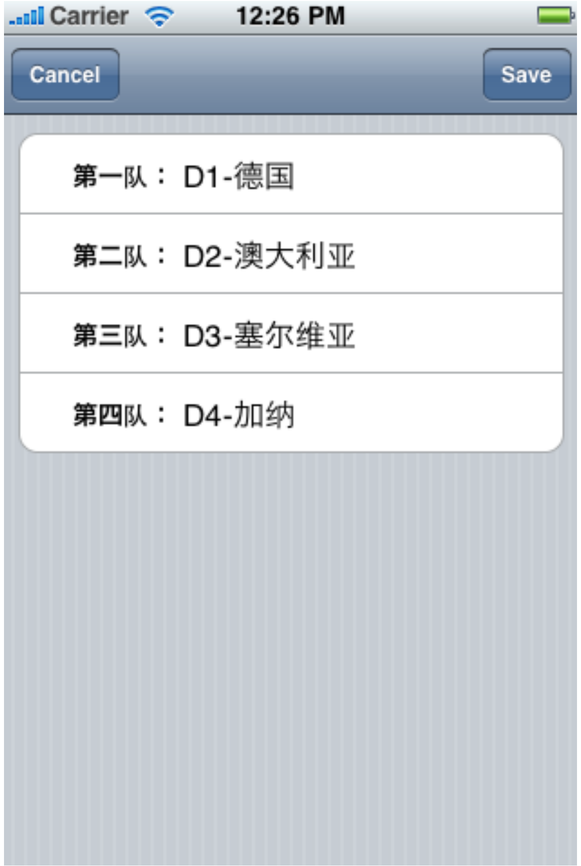
D组

B组

F组

G组

E组

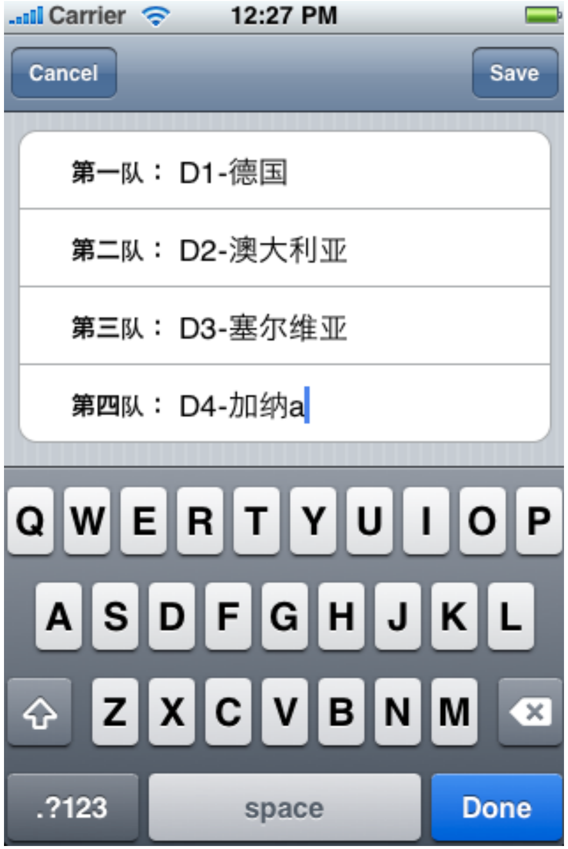


第一队： D1-德国

第二队： D2-澳大利亚

第三队： D3-塞尔维亚

第四队： D4-加纳



第一队： D1-德国

第二队： D2-澳大利亚

第三队： D3-塞尔维亚

第四队： D4-加纳a

TeamsViewController.h

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

@interface TeamsViewController :
SecondLevelViewController {
  NSArray *listData;
}
@property (nonatomic, retain) NSArray
*listData;

@end
```

TeamsViewController.m

```
#import "TeamsViewController.h"
#import "TeamsDetailController.h"

@implementation TeamsViewController
@synthesize listData;
- (void)viewDidLoad {
    NSString *path = [[NSBundle mainBundle]
pathForResource:@"teamdictionary" ofType:@"plist"];
    NSDictionary *dict = [[NSDictionary alloc]
initWithContentsOfFile:path];
    self.listData =  [dict allKeys];
    [dict release];
}
- (void)didReceiveMemoryWarning {
    [super didReceiveMemoryWarning];
}
- (void)viewDidUnload {
    self.listData = nil;
}
- (void)dealloc {
    [listData release];
    [super dealloc];
}
```

实现TableView数据源方法

```
- (NSInteger)numberOfSectionsInTableView:
(UITableView *)tableView {
    return 1;
}
// Customize the number of rows in the
table view.
- (NSInteger)tableView:(UITableView *)
tableView numberOfRowsInSection:(NSInteger)
section {
    return [listData count];
}
```

实现TableView数据源方法

```
// Customize the appearance of table view cells.
- (UITableViewCell *)tableView:(UITableView *)tableView
cellForRowAtIndexPath:(NSIndexPath *)indexPath {

    static NSString *CellIdentifier = @"Cell";
    UITableViewCell *cell = [tableView
dequeueReusableCellWithIdentifier:CellIdentifier];
    if (cell == nil) {
        cell = [[[UITableViewCell alloc]
initWithStyle:UITableViewCellStyleDefault
reuseIdentifier:CellIdentifier] autorelease];
    }
   NSInteger row = [indexPath row];
   NSString *title = [listData objectAtIndex:row];
   cell.textLabel.text = title;
    return cell;
}
```

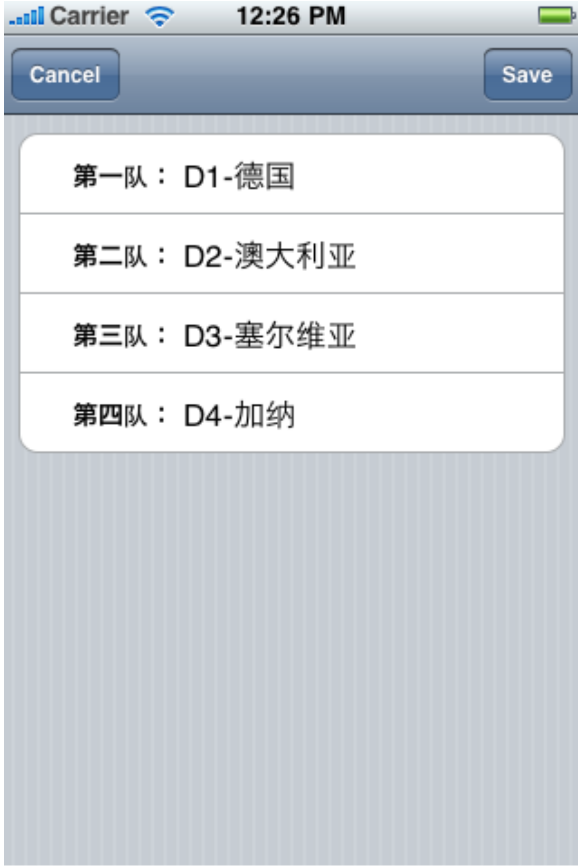
实现TableView数据源方法

```
-(void)tableView:(UITableView *)tableView
didSelectRowAtIndexPath:(NSIndexPath *)indexPath {
   NSInteger row = [indexPath row];
   NSString *groupName = [listData objectAtIndex:row];
   NSString *path = [[NSBundle mainBundle]
pathForResource:@"teamdictionary" ofType:@"plist"];
   NSDictionary *dict = [[NSDictionary alloc]
initWithContentsOfFile:path];
   TeamsDetailController *detailController =
[[TeamsDetailController alloc]
                   initWithStyle:UITableViewStyleGrouped];

   detailController.listData = [dict objectForKey:groupName];
   [dict release];

    [self.navigationController
pushViewController:detailController animated:YES];
    [detailController release];
}
```

可编辑表视图控制器

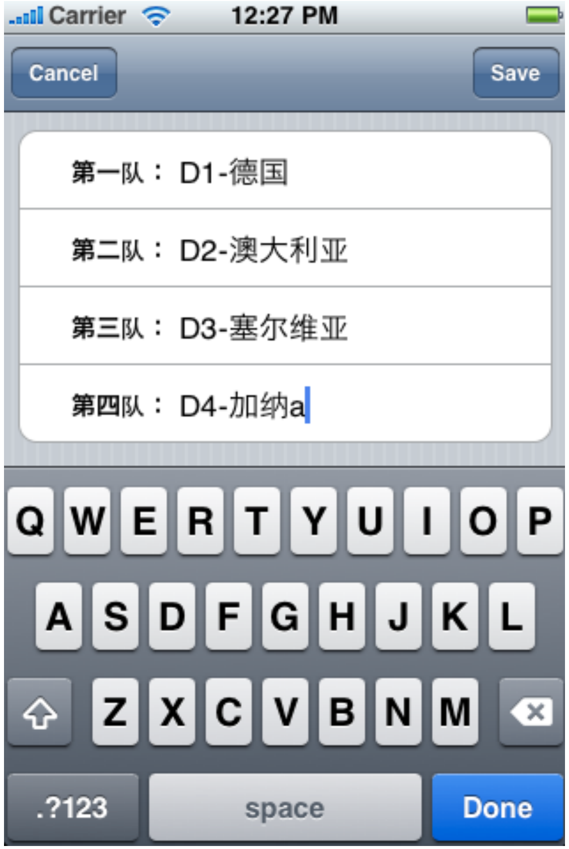


第一队： D1-德国

第二队： D2-澳大利亚

第三队： D3-塞尔维亚

第四队： D4-加纳



第一队： D1-德国

第二队： D2-澳大利亚

第三队： D3-塞尔维亚

第四队： D4-加纳a

TeamsDetailController.h

```
#import <UIKit/UIKit.h>
#define TEAM1  1
#define TEAM2  2
#define TEAM3  3
#define TEAM4  4
#define LABLE_TAG 45678
@interface TeamsDetailController : UITableViewController
<UITextFieldDelegate> {
    NSArray *listData;
    NSMutableArray *teamsData;
    NSArray *fieldLables;
}
@property (nonatomic, retain) NSArray *listData;
@property (nonatomic, retain) NSArray *fieldLables;
@property (nonatomic, retain) NSMutableArray *teamsData;
-(IBAction)cancel:(id)sender;
-(IBAction)save:(id)sender;
-(IBAction)textFieldDone:(id)sender;
@end
```

TeamsDetailController.m

```
#import "TeamsDetailController.h”
@implementation TeamsDetailController
@synthesize listData;
@synthesize fieldLables;
@synthesize teamsData;
-(IBAction)cancel:(id)sender {
    [self.navigationController popViewControllerAnimated:YES];
}
-(IBAction)save:(id)sender {
    for (UIView *oneView in self.tableView.subviews) {
        if ([oneView isMemberOfClass:[UITableViewCell class]]) {
            UITableViewCell *cell = (UITableViewCell *)oneView;
            for (UIView *twoView in cell.contentView.subviews) {
                if ([twoView isMemberOfClass:[UITextField class]]) {
                    UITextField *textField = (UITextField *)twoView;
                    NSLog(@"行 %i -- value %@", textField.tag ,textField.text);
                }
            }
        }
    }
    [self.navigationController popViewControllerAnimated:YES];
}
```

TeamsDetailController.m

```
-(IBAction)textFieldDone:(id)sender {
   [sender resignFirstResponder];
}

- (void)viewDidUnload {
   self.listData = nil;
   self.teamsData = nil;
   self.fieldLables = nil;
   self.listData = nil;
}

- (void)dealloc {
   [listData release];
   [teamsData release];
   [fieldLables release];
    [super dealloc];
}
```

TeamsDetailController.m

```
- (void)viewDidLoad {
    teamsData = [[NSMutableArray alloc] init];
    for (id name in listData) {
        [teamsData addObject:name];
    }
    NSArray *array = [[NSArray alloc] initWithObjects:@"第一队：",@"第二
队：",@"第三队：",@"第四队：", nil];
    self.fieldLables = array;
    [array release];
    UIBarButtonItem *cancelButton = [[UIBarButtonItem alloc]
                                      initWithTitle:@"Cancel"
                                      style:UIBarButtonItemStyleBordered
                                      target:self
                                      action:@selector(cancel:)];
    self.navigationItem.leftBarButtonItem = cancelButton;
    [cancelButton release];
    UIBarButtonItem *saveButton = [[UIBarButtonItem alloc]
                                       initWithTitle:@"Save"
                                       style:UIBarButtonItemStyleBordered
                                       target:self
                                       action:@selector(save:)];
    self.navigationItem.rightBarButtonItem = saveButton;
    [saveButton release];
}
```

实现TableView数据源方法

```
- (NSInteger)numberOfSectionsInTableView:
(UITableView *)tableView {
    return 1;
}

- (NSInteger)tableView:(UITableView *)
tableView numberOfRowsInSection:(NSInteger)
section {
    return [teamsData count];
}
```

实现TableView数据源方法

```
// Customize the appearance of table view cells.
- (UITableViewCell *)tableView:(UITableView *)tableView cellForRowAtIndexPath:
(NSIndexPath *)indexPath {

    static NSString *CellIdentifier = @"Cell";

    UITableViewCell *cell = [tableView dequeueReusableCellWithIdentifier:CellIdentifier];
    if (cell == nil) {

        cell = [[[UITableViewCell alloc] initWithStyle:UITableViewCellStyleDefault
reuseIdentifier:CellIdentifier] autorelease];
                UILabel *label = [[UILabel alloc] initWithFrame:CGRectMake(10, 10, 75, 25)];
                label.textAlignment = UITextAlignmentRight;
                label.tag = LABLE_TAG;
                label.font = [UIFont boldSystemFontOfSize:14];
                [cell.contentView addSubview:label];

                [label release];
```

实现TableView数据源方法

```
    NSInteger row = [indexPath row];

    UILabel *label = (UILabel *)[cell viewWithTag:LABLE_TAG];
    UITextField *textField = nil;
    for (UIView *oneView in cell.contentView.subviews) {
        if ([oneView isMemberOfClass:[UITextField class]]) {
            textField = (UITextField *)oneView;
        }
    }

    label.text = [fieldLables objectAtIndex:row];
    textField.text = [listData objectAtIndex:row];
    textField.tag = row;


  return cell;
}
```

实现TableView委托方法

```
- (void)textFieldDidEndEditing:(UITextField *)
textField {
   NSLog(@"修改 行 %i -- value %@",
textField.tag ,textField.text);
}
```

RootViewController中viewDidLoad方法

```
   //增加可编辑详细窗格控制器
   TeamsViewController *teamsViewController =
[[TeamsViewController alloc]
                    initWithStyle:UITableViewStylePlain];

   teamsViewController.title = @"Detail Edit";
   teamsViewController.rowImage = [UIImage
imageNamed:@"detailEditIcon.png"];
   [array addObject:teamsViewController];
   [teamsViewController release];
```