http://www.tutorialspoint.com/ios/ios_ui_elements_tableview.htm Copyright © tutorialspoint.com

## Use of Table View

It is used for displaying a vertically scrollable view which consists of a number of cells *generallyreusablecells*. It has special features like headers, footers, rows, and section.

## Important Properties

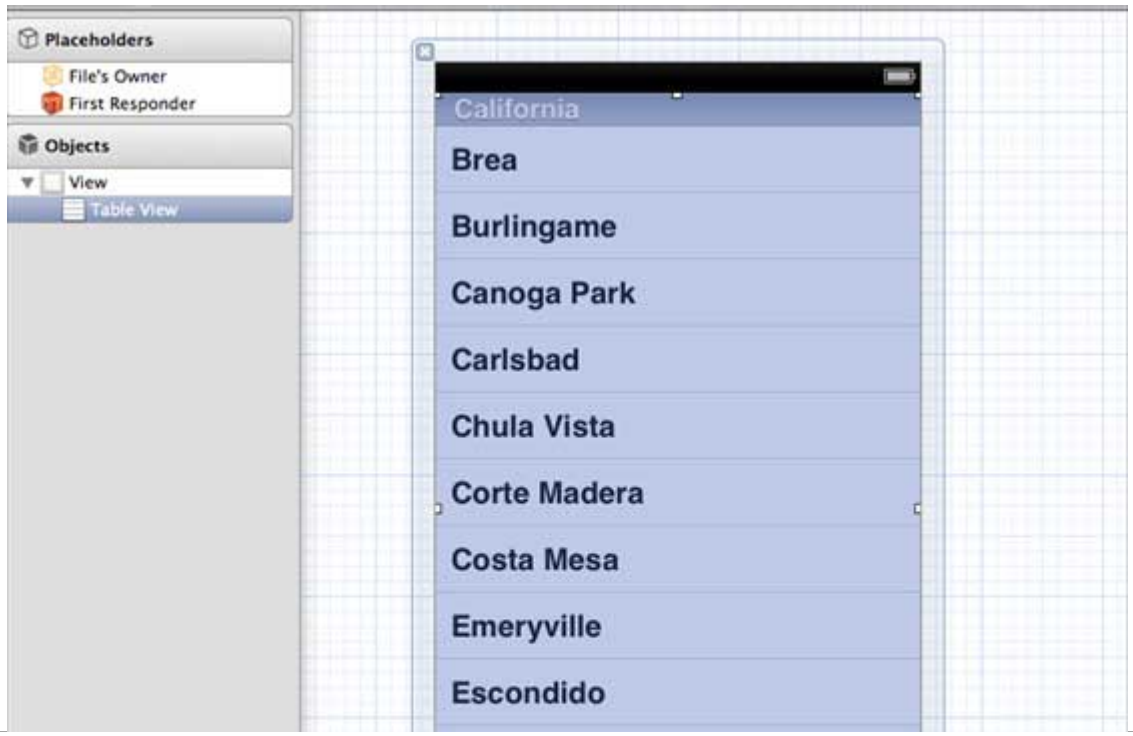
- delegate
- dataSource
- rowHeight
- sectionFooterHeight
- sectionHeaderHeight
- separatorColor
- tableHeaderView
- tableFooterView

## Important Methods

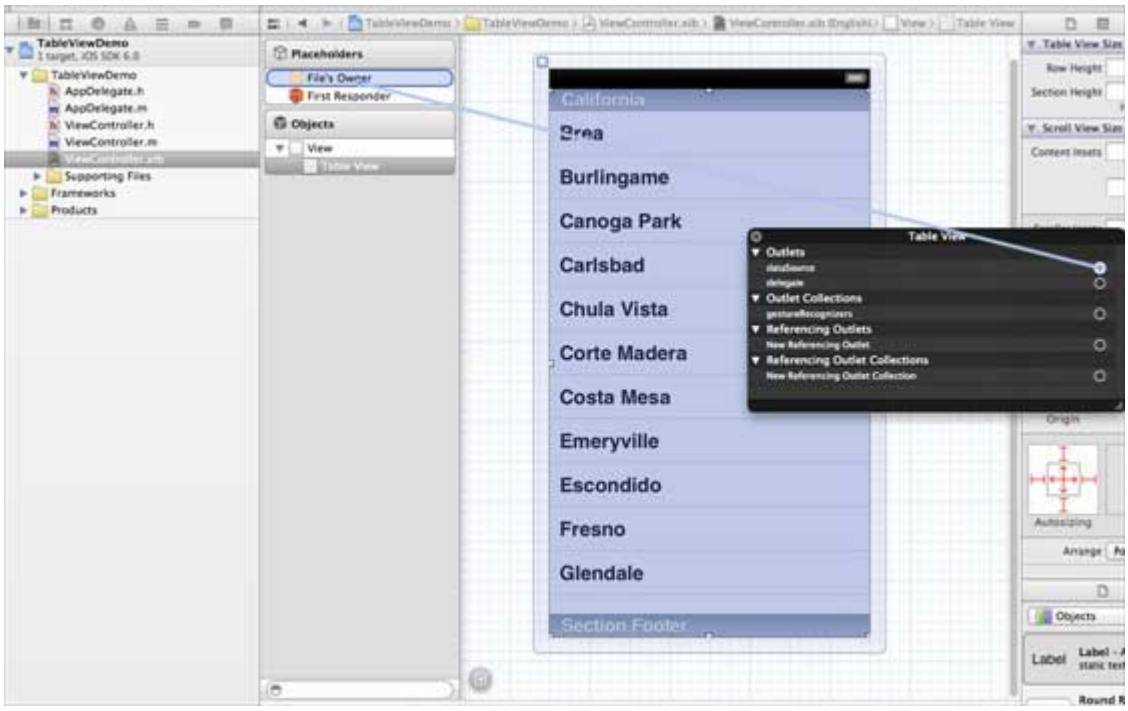
```
- (UITableViewCell *)cellForRowAtIndexPath:(NSIndexPath *)indexPath
- (void)deleteRowsAtIndexPaths:(NSArray *)indexPaths
withRowAnimation:(UITableViewRowAnimation)animation
- (id)dequeueReusableCellWithIdentifier:(NSString *)identifier
- (id)dequeueReusableCellWithIdentifier:(NSString *)identifier
forIndexPath:(NSIndexPath *)indexPath
- (void)reloadData
- (void)reloadRowsAtIndexPaths:(NSArray *)indexPaths
withRowAnimation:(UITableViewRowAnimation)animation
- (NSArray *)visibleCells
```

## Sample Code and Steps

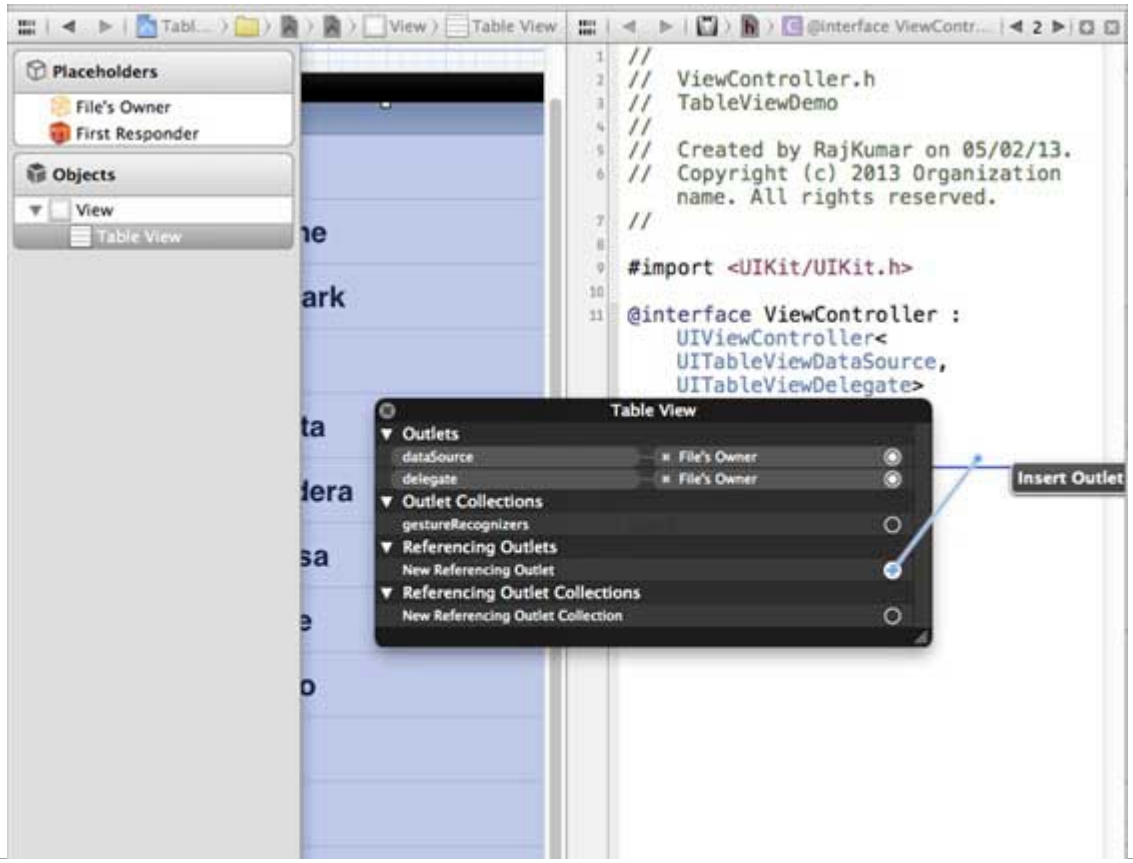
**Step 1.** Let's add a tableview in **ViewController.xib** as shown below.

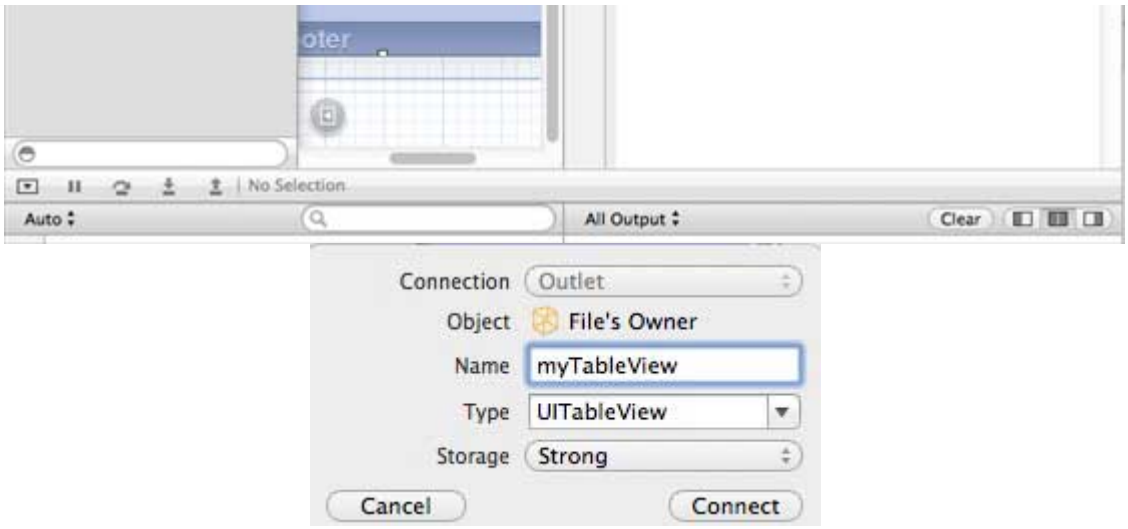



**Step 2.** Set **delegate** and **dataSource** to **file owner** for tableview by right-clicking and selecting datasource and delegate. Setting dataSource is shown below.




**Step 3.** Create an **IBOutlet** for tableView and name it as **myTableView**. It is shown in the following images.






**Step 4.** Then add an NSMutableArray for holding the data to be displayed in the table view.

**Step 5.** Our ViewController should adopt the **UITableViewDataSource** and **UITableViewDelegate** protocols. The **ViewController.h** should look as shown below.

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

@interface ViewController : UIViewController<UITableViewDataSource,
UITableViewDelegate>
{

    IBOutlet UITableView *myTableView;
    NSMutableArray *myData;
}

@end
```

**Step 6.** We should implement the required tableview delegate and dataSource methods. The updated **ViewController.m** is as follows −

```
#import "ViewController.h"

@interface ViewController ()

@end

@implementation ViewController

- (void)viewDidLoad
{
    [super viewDidLoad];
    // table view data is being set here
    myData = [[NSMutableArray alloc]initWithObjects:
    @"Data 1 in array",@"Data 2 in array",@"Data 3 in array",
    @"Data 4 in array",@"Data 5 in array",@"Data 5 in array",
    @"Data 6 in array",@"Data 7 in array",@"Data 8 in array",
    @"Data 9 in array", nil];
    // Do any additional setup after loading the view, typically from a nib.
}

- (void)didReceiveMemoryWarning
{
    [super didReceiveMemoryWarning];
    // Dispose of any resources that can be recreated.
}

#pragma mark - Table View Data source
- (NSInteger)tableView:(UITableView *)tableView numberOfRowsInSection:
  (NSInteger)section{
    return [myData count]/2;
```

```
}

- (UITableViewCell *)tableView:(UITableView *)tableView cellForRowAtIndexPath:
  (NSIndexPath *)indexPath{
    static NSString *cellIdentifier = @"cellID";

    UITableViewCell *cell = [tableView dequeueReusableCellWithIdentifier:
    cellIdentifier];
    if (cell == nil) {
        cell = [[UITableViewCell alloc]initWithStyle:
        UITableViewCellStyleDefault reuseIdentifier:cellIdentifier];
    }
    NSString *stringForCell;
    if (indexPath.section == 0) {
        stringForCell= [myData objectAtIndex:indexPath.row];

    }
    else if (indexPath.section == 1){
        stringForCell= [myData objectAtIndex:indexPath.row+ [myData count]/2];

    }
    [cell.textLabel setText:stringForCell];
    return cell;
}

// Default is 1 if not implemented
- (NSInteger)numberOfSectionsInTableView:(UITableView *)tableView{
    return 2;
}

- (NSString *)tableView:(UITableView *)tableView titleForHeaderInSection:
  (NSInteger)section{
    NSString *headerTitle;
    if (section==0) {
        headerTitle = @"Section 1 Header";
    }
    else{
        headerTitle = @"Section 2 Header";

    }
    return headerTitle;
}
- (NSString *)tableView:(UITableView *)tableView titleForFooterInSection:
  (NSInteger)section{
    NSString *footerTitle;
    if (section==0) {
        footerTitle = @"Section 1 Footer";
    }
    else{
        footerTitle = @"Section 2 Footer";

    }
    return footerTitle;
}

#pragma mark - TableView delegate

-(void)tableView:(UITableView *)tableView didSelectRowAtIndexPath:
 (NSIndexPath *)indexPath{
    [tableView deselectRowAtIndexPath:indexPath animated:YES];
    UITableViewCell *cell = [tableView cellForRowAtIndexPath:indexPath];
    NSLog(@"Section:%d Row:%d selected and its data is %@",
    indexPath.section,indexPath.row,cell.textLabel.text);
}


@end
```

**Step 7.** When we run the application we'll get the following **output** –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