

```
1. //  
2. // AppDelegate.h  
3. // AnnotatedUtilityApp  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import <UIKit/UIKit.h>  
10.  
11. @class MainViewController;  
12.  
13. @interface AppDelegate : UIResponder <UIApplicationDelegate>  
14.  
15. @property (strong, nonatomic) UIWindow *window;  
16.  
17. @property (strong, nonatomic) MainViewController *mainViewController;  
18.  
19. @end
```

```
1. //  
2. // AppDelegate.m  
3. // AnnotatedUtilityApp  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "AppDelegate.h"  
10.  
11. #import "MainViewController.h"  
12.  
13. @implementation AppDelegate  
14.  
15. @synthesize window = _window;  
16. @synthesize mainViewController = _mainViewController;  
17.  
18. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions  
19. {  
20.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];  
21.     // Override point for customization after application launch.  
22.     self.mainViewController = [[MainViewController alloc] initWithNibName:@"MainViewController" bundle:nil];  
23.     self.window.rootViewController = self.mainViewController;  
24.     [self.window makeKeyAndVisible];  
25.     return YES;  
26. }  
27.  
28. - (void)applicationWillResignActive:(UIApplication *)application  
29. {  
30.     // Sent when the application is about to move from active to inactive state. This can occur for certain types of temporary interruptions  
     // (such as an incoming phone call or SMS message) or when the user quits the application and it begins the transition to the background state.  
31.     // Use this method to pause ongoing tasks, disable timers, and throttle down OpenGL ES frame rates. Games should use this method to pause  
     // the game.  
32. }  
33.  
34. - (void)applicationDidEnterBackground:(UIApplication *)application  
35. {  
36.     // Use this method to release shared resources, save user data, invalidate timers, and store enough application state information to  
     // restore your application to its current state in case it is terminated later.  
37.     // If your application supports background execution, this method is called instead of applicationWillTerminate: when the user quits.  
38. }  
39.  
40. - (void)applicationWillEnterForeground:(UIApplication *)application  
41. {  
42.     // Called as part of the transition from the background to the inactive state; here you can undo many of the changes made on entering the  
     // background.  
43. }  
44.
```

```
45. - (void)applicationDidBecomeActive:(UIApplication *)application
46. {
47.     // Restart any tasks that were paused (or not yet started) while the application was inactive. If the application was previously in the
48.     // background, optionally refresh the user interface.
49.
50. - (void)applicationWillTerminate:(UIApplication *)application
51. {
52.     // Called when the application is about to terminate. Save data if appropriate. See also applicationDidEnterBackground:.
53. }
54.
55. @end
```

```
1. //
2. //  FlipsideViewController.h
3. //  AnnotatedUtilityApp
4. //
5. //  Created by Tommy MacWilliam on 3/19/12.
6. //  Copyright (c) 2012 __MyCompanyName__. All rights reserved.
7. //
8.
9. #import <UIKit/UIKit.h>
10.
11. @class FlipsideViewController;
12.
13. // Define a new protocol that will be implemented by another controller(s)
14. @protocol FlipsideViewControllerDelegate
15. - (void)flipsideViewControllerDidFinish:(FlipsideViewController *)controller;
16. @end
17.
18. @interface FlipsideViewController : UIViewController
19.
20. // Instance of the controller that will implement our protocol
21. @property (weak, nonatomic) id <FlipsideViewControllerDelegate> delegate;
22.
23. - (IBAction)done:(id)sender;
24.
25. @end
```

```
1. //  
2. // FlipsideViewController.m  
3. // AnnotatedUtilityApp  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "FlipsideViewController.h"  
10.  
11. @interface FlipsideViewController ()  
12.  
13. @end  
14.  
15. @implementation FlipsideViewController  
16.  
17. @synthesize delegate = _delegate;  
18.  
19. - (void)viewDidLoad  
20. {  
21.     [super viewDidLoad];  
22. }  
23.  
24. - (void)viewDidUnload  
25. {  
26.     [super viewDidUnload];  
27. }  
28.  
29. - (BOOL)shouldAutorotateToInterfaceOrientation:(UIInterfaceOrientation)interfaceOrientation  
30. {  
31.     return (interfaceOrientation != UIInterfaceOrientationPortraitUpsideDown);  
32. }  
33.  
34. #pragma mark - Actions  
35.  
36. /**  
37. * Fired when user presses done button in top-left of menu bar  
38. *  
39. */  
40. - (IBAction)done:(id)sender  
41. {  
42.     // tell the delegate to fire the flipsideViewControllerDidFinish method, where we hide this controller  
43.     [self.delegate flipsideViewControllerDidFinish:self];  
44. }  
45.  
46. @end
```

```
1. //  
2. // MainViewController.h  
3. // AnnotatedUtilityApp  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "FlipsideViewController.h"  
10.  
11. @interface MainViewController : UIViewController <FlipsideViewControllerDelegate>  
12.  
13. - (IBAction)showInfo:(id)sender;  
14.  
15. @end
```

```
1. //  
2. // MainViewController.m  
3. // AnnotatedUtilityApp  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "MainViewController.h"  
10.  
11. @interface MainViewController ()  
12.  
13. @end  
14.  
15. @implementation MainViewController  
16.  
17.  
18. - (void)viewDidLoad  
19. {  
20.     [super viewDidLoad];  
21. }  
22.  
23. - (void)viewDidUnload  
24. {  
25.     [super viewDidUnload];  
26. }  
27.  
28. - (BOOL)shouldAutorotateToInterfaceOrientation:(UIInterfaceOrientation)interfaceOrientation  
29. {  
30.     return (interfaceOrientation != UIInterfaceOrientationPortraitUpsideDown);  
31. }  
32.  
33. #pragma mark - Flipside View  
34.  
35. /**  
36. * Defined in FlipSideViewControllerDelegate and fired from the FlipSideViewController.  
37. * Signifies the FlipSideViewController has finished and can be hidden  
38. *  
39. */  
40. - (void)flipsideViewControllerDidFinish:(FlipsideViewController *)controller  
41. {  
42.     [self dismissModalViewControllerAnimated:YES];  
43. }  
44.  
45. /**  
46. * Fired when user taps the info button in the bottom-right corner  
47. *  
48. */
```

```
49. - (IBAction)showInfo:(id)sender
50. {
51.     // create new instance of the viewcontroller for the other side
52.     FlipsideViewController *controller = [[FlipsideViewController alloc] initWithNibName:@"FlipsideView" bundle:nil];
53.     // this is the delegate for the controller (where we'll define any methods specified in the protocol)
54.     controller.delegate = self;
55.
56.     // define the transition for the new controller
57.     controller.modalTransitionStyle = UIModalTransitionStyleFlipHorizontal;
58.     // show the controller
59.     [self presentModalViewController:controller animated:YES];
60. }
61.
62. @end
```

```
1. //  
2. // AppDelegate.h  
3. // CustomProtocolExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import <UIKit/UIKit.h>  
10.  
11. @class ViewController;  
12.  
13. @interface AppDelegate : UIResponder <UIApplicationDelegate>  
14.  
15. @property (strong, nonatomic) UIWindow *window;  
16.  
17. @property (strong, nonatomic) ViewController *viewController;  
18.  
19. @end
```

```
1. //  
2. // AppDelegate.m  
3. // CustomProtocolExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "AppDelegate.h"  
10.  
11. #import "ViewController.h"  
12.  
13. @implementation AppDelegate  
14.  
15. @synthesize window = _window;  
16. @synthesize viewController = _viewController;  
17.  
18. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions  
19. {  
20.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];  
21.     // Override point for customization after application launch.  
22.     self.viewController = [[ViewController alloc] initWithNibName:@"ViewController" bundle:nil];  
23.     self.window.rootViewController = self.viewController;  
24.     [self.window makeKeyAndVisible];  
25.     return YES;  
26. }  
27.  
28. - (void)applicationWillResignActive:(UIApplication *)application  
29. {  
30.     // Sent when the application is about to move from active to inactive state. This can occur for certain types of temporary interruptions  
     // (such as an incoming phone call or SMS message) or when the user quits the application and it begins the transition to the background state.  
31.     // Use this method to pause ongoing tasks, disable timers, and throttle down OpenGL ES frame rates. Games should use this method to pause  
     // the game.  
32. }  
33.  
34. - (void)applicationDidEnterBackground:(UIApplication *)application  
35. {  
36.     // Use this method to release shared resources, save user data, invalidate timers, and store enough application state information to  
     // restore your application to its current state in case it is terminated later.  
37.     // If your application supports background execution, this method is called instead of applicationWillTerminate: when the user quits.  
38. }  
39.  
40. - (void)applicationWillEnterForeground:(UIApplication *)application  
41. {  
42.     // Called as part of the transition from the background to the inactive state; here you can undo many of the changes made on entering the  
     // background.  
43. }  
44.
```

```
45. - (void)applicationDidBecomeActive:(UIApplication *)application
46. {
47.     // Restart any tasks that were paused (or not yet started) while the application was inactive. If the application was previously in the
48.     // background, optionally refresh the user interface.
49.
50. - (void)applicationWillTerminate:(UIApplication *)application
51. {
52.     // Called when the application is about to terminate. Save data if appropriate. See also applicationDidEnterBackground:.
53. }
54.
55. @end
```

```
1. //
2. // CA.h
3. // CustomProtocolExample
4. //
5. // Created by Tommy MacWilliam on 3/20/12.
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.
7. //
8.
9. #import <Foundation/Foundation.h>
10. #import "ViewController.h"
11.
12. @interface CA : NSObject <GraderProtocol>
13.
14. @end
```

```
1. //
2. // CA.m
3. // CustomProtocolExample
4. //
5. // Created by Tommy MacWilliam on 3/20/12.
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.
7. //
8.
9. #import "CA.h"
10.
11. @implementation CA
12.
13. - (int)grade
14. {
15.     return 100;
16. }
17.
18. - (void)distributeGrades:(NSArray *)grades toStudents:(NSArray *)students
19. {
20.     NSLog(@"Pfft, way ahead of you");
21. }
22.
23. @end
```

```
1. //
2. //  TF.h
3. //  CustomProtocolExample
4. //
5. //  Created by Tommy MacWilliam on 3/20/12.
6. //  Copyright (c) 2012 __MyCompanyName__. All rights reserved.
7. //
8.
9. #import <Foundation/Foundation.h>
10. #import "ViewController.h"
11.
12. @interface TF : NSObject <GraderProtocol>
13.
14. @end
```

```
1. //
2. //  TF.m
3. //  CustomProtocolExample
4. //
5. //  Created by Tommy MacWilliam on 3/20/12.
6. //  Copyright (c) 2012 __MyCompanyName__. All rights reserved.
7. //
8.
9. #import "TF.h"
10. #import <stdlib.h>
11.
12. @implementation TF
13.
14. - (int)grade
15. {
16.     return arc4random() % 100;
17. }
18.
19. - (void)distributeGrades:(NSArray *)grades toStudents:(NSArray *)students
20. {
21.     NSLog(@"All done!");
22. }
23.
24. @end
```

```
1. //
2. // ViewController.h
3. // CustomProtocolExample
4. //
5. // Created by Tommy MacWilliam on 3/19/12.
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.
7. //
8.
9. #import <UIKit/UIKit.h>
10.
11. @protocol GraderProtocol
12.
13. - (int)grade;
14. - (void)distributeGrades:(NSArray *)grades toStudents:(NSArray *)students;
15.
16. @end
17.
18. @interface ViewController : UIViewController
19.
20. @end
```

```
1. //
2. // ViewController.m
3. // CustomProtocolExample
4. //
5. // Created by Tommy MacWilliam on 3/19/12.
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.
7. //
8.
9. #import "ViewController.h"
10. #import "CA.h"
11. #import "TF.h"
12.
13. @implementation ViewController
14.
15. - (void)viewDidLoad
16. {
17.     [super viewDidLoad];
18.
19.     // create staff objects
20.     TF *tommy = [[TF alloc] init];
21.     TF *rob = [[TF alloc] init];
22.     CA *bob = [[CA alloc] init];
23.
24.     // create collection of staff
25.     NSArray *staffers = [NSArray arrayWithObjects:tommy, rob, bob, nil];
26.
27.     // iterate through staff and assign grades
28.     for (id<GraderProtocol> staff in staffers)
29.         NSLog(@"Grade is: %d", [staff grade]);
30. }
31.
32. - (void)viewDidUnload
33. {
34.     [super viewDidUnload];
35. }
36.
37. - (BOOL)shouldAutorotateToInterfaceOrientation:(UIInterfaceOrientation)interfaceOrientation
38. {
39.     return (interfaceOrientation != UIInterfaceOrientationPortraitUpsideDown);
40. }
41.
42. @end
```

```
1. //  
2. // AppDelegate.h  
3. // HiddenUITextFieldExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import <UIKit/UIKit.h>  
10.  
11. @class ViewController;  
12.  
13. @interface AppDelegate : UIResponder <UIApplicationDelegate>  
14.  
15. @property (strong, nonatomic) UIWindow *window;  
16.  
17. @property (strong, nonatomic) ViewController *viewController;  
18.  
19. @end
```

```
1. //  
2. // AppDelegate.m  
3. // HiddenUITextFieldExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "AppDelegate.h"  
10.  
11. #import "ViewController.h"  
12.  
13. @implementation AppDelegate  
14.  
15. @synthesize window = _window;  
16. @synthesize viewController = _viewController;  
17.  
18. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions  
19. {  
20.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];  
21.     // Override point for customization after application launch.  
22.     self.viewController = [[ViewController alloc] initWithNibName:@"ViewController" bundle:nil];  
23.     self.window.rootViewController = self.viewController;  
24.     [self.window makeKeyAndVisible];  
25.     return YES;  
26. }  
27.  
28. - (void)applicationWillResignActive:(UIApplication *)application  
29. {  
30.     // Sent when the application is about to move from active to inactive state. This can occur for certain types of temporary interruptions  
     // (such as an incoming phone call or SMS message) or when the user quits the application and it begins the transition to the background state.  
31.     // Use this method to pause ongoing tasks, disable timers, and throttle down OpenGL ES frame rates. Games should use this method to pause  
     // the game.  
32. }  
33.  
34. - (void)applicationDidEnterBackground:(UIApplication *)application  
35. {  
36.     // Use this method to release shared resources, save user data, invalidate timers, and store enough application state information to  
     // restore your application to its current state in case it is terminated later.  
37.     // If your application supports background execution, this method is called instead of applicationWillTerminate: when the user quits.  
38. }  
39.  
40. - (void)applicationWillEnterForeground:(UIApplication *)application  
41. {  
42.     // Called as part of the transition from the background to the inactive state; here you can undo many of the changes made on entering the  
     // background.  
43. }  
44.
```

```
45. - (void)applicationDidBecomeActive:(UIApplication *)application
46. {
47.     // Restart any tasks that were paused (or not yet started) while the application was inactive. If the application was previously in the
48.     // background, optionally refresh the user interface.
49.
50. - (void)applicationWillTerminate:(UIApplication *)application
51. {
52.     // Called when the application is about to terminate. Save data if appropriate. See also applicationDidEnterBackground:.
53. }
54.
55. @end
```

```
1. //  
2. // ViewController.h  
3. // HiddenUITextFieldExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import <UIKit/UIKit.h>  
10.  
11. @interface ViewController : UIViewController <UITextFieldDelegate>  
12.  
13. @property (weak, nonatomic) IBOutlet UILabel *label;  
14. @property (weak, nonatomic) IBOutlet UITextField *textField;  
15.  
16. @end
```

```
1. //  
2. // ViewController.m  
3. // HiddenUITextFieldExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "ViewController.h"  
10.  
11. @implementation ViewController  
12.  
13. @synthesize label = _label;  
14. @synthesize textField = _textField;  
15.  
16. - (void)viewDidLoad  
17. {  
18.     [super viewDidLoad];  
19.  
20.     // hide text field by default  
21.     self.textField.hidden = YES;  
22.  
23.     // display keyboard  
24.     [self.textField becomeFirstResponder];  
25. }  
26.  
27. - (void)viewDidUnload  
28. {  
29.     [super viewDidUnload];  
30. }  
31.  
32. - (BOOL)shouldAutorotateToInterfaceOrientation:(UIInterfaceOrientation)interfaceOrientation  
33. {  
34.     return (interfaceOrientation != UIInterfaceOrientationPortraitUpsideDown);  
35. }  
36.  
37. /**  
38. * Called whenever the user presses a key, but before the text field is actually updated  
39. *  
40. */  
41. - (BOOL)textField:(UITextField *)textField shouldChangeCharactersInRange:(NSRange)range replacementString:(NSString *)string  
42. {  
43.     // append newly typed letter to display label  
44.     self.label.text = [NSString stringWithFormat:@"%@%@", self.label.text, string];  
45.  
46.     // allow text field to change  
47.     return YES;  
48. }
```

49.
50. @end

```
1. //  
2. // AppDelegate.h  
3. // NSUserDefaultsExample  
4. //  
5. // Created by Tommy MacWilliam on 3/21/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import <UIKit/UIKit.h>  
10.  
11. @class ViewController;  
12.  
13. @interface AppDelegate : UIResponder <UIApplicationDelegate>  
14.  
15. @property (strong, nonatomic) UIWindow *window;  
16.  
17. @property (strong, nonatomic) ViewController *viewController;  
18.  
19. @end
```

```
1. //  
2. // AppDelegate.m  
3. // NSUserDefaultsExample  
4. //  
5. // Created by Tommy MacWilliam on 3/21/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "AppDelegate.h"  
10.  
11. #import "ViewController.h"  
12.  
13. @implementation AppDelegate  
14.  
15. @synthesize window = _window;  
16. @synthesize viewController = _viewController;  
17.  
18. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions  
19. {  
20.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];  
21.     // Override point for customization after application launch.  
22.     self.viewController = [[ViewController alloc] initWithNibName:@"ViewController" bundle:nil];  
23.     self.window.rootViewController = self.viewController;  
24.     [self.window makeKeyAndVisible];  
25.     return YES;  
26. }  
27.  
28. - (void)applicationWillResignActive:(UIApplication *)application  
29. {  
30.     // Sent when the application is about to move from active to inactive state. This can occur for certain types of temporary interruptions  
     // (such as an incoming phone call or SMS message) or when the user quits the application and it begins the transition to the background state.  
31.     // Use this method to pause ongoing tasks, disable timers, and throttle down OpenGL ES frame rates. Games should use this method to pause  
     // the game.  
32. }  
33.  
34. - (void)applicationDidEnterBackground:(UIApplication *)application  
35. {  
36.     // Use this method to release shared resources, save user data, invalidate timers, and store enough application state information to  
     // restore your application to its current state in case it is terminated later.  
37.     // If your application supports background execution, this method is called instead of applicationWillTerminate: when the user quits.  
38. }  
39.  
40. - (void)applicationWillEnterForeground:(UIApplication *)application  
41. {  
42.     // Called as part of the transition from the background to the inactive state; here you can undo many of the changes made on entering the  
     // background.  
43. }  
44.
```

```
45. - (void)applicationDidBecomeActive:(UIApplication *)application
46. {
47.     // Restart any tasks that were paused (or not yet started) while the application was inactive. If the application was previously in the
48.     // background, optionally refresh the user interface.
49.
50. - (void)applicationWillTerminate:(UIApplication *)application
51. {
52.     // Called when the application is about to terminate. Save data if appropriate. See also applicationDidEnterBackground:.
53. }
54.
55. @end
```

```
1. //  
2. // ViewController.h  
3. // NSUserDefaultsExample  
4. //  
5. // Created by Tommy MacWilliam on 3/21/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import <UIKit/UIKit.h>  
10.  
11. @interface ViewController : UIViewController  
12.  
13. @property (weak, strong) IBOutlet UITextField *textField;  
14.  
15. - (IBAction)buttonPressed:(id)sender;  
16.  
17. @end
```

```
1. //  
2. // ViewController.m  
3. // NSUserDefaultsExample  
4. //  
5. // Created by Tommy MacWilliam on 3/21/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "ViewController.h"  
10.  
11. @implementation ViewController  
12.  
13. @synthesize textField = _textField;  
14.  
15. - (void)viewDidLoad  
16. {  
17.     [super viewDidLoad];  
18.  
19.     // set default values  
20.     NSMutableDictionary *defaultValues = [[NSMutableDictionary alloc] init];  
21.     [defaultValues setObject:@"" forKey:@"text"];  
22.  
23.     // register defaults  
24.     NSUserDefaults *defaults = [NSUserDefaults standardUserDefaults];  
25.     [defaults registerDefaults:defaultValues];  
26.  
27.     // load saved text into text field  
28.     self.textField.text = [defaults stringForKey:@"text"];  
29. }  
30.  
31. - (void)viewDidUnload  
32. {  
33.     [super viewDidUnload];  
34. }  
35.  
36. - (BOOL)shouldAutorotateToInterfaceOrientation:(UIInterfaceOrientation)interfaceOrientation  
37. {  
38.     return (interfaceOrientation != UIInterfaceOrientationPortraitUpsideDown);  
39. }  
40.  
41. - (void)buttonPressed:(id)sender  
42. {  
43.     // save value  
44.     NSUserDefaults *defaults = [NSUserDefaults standardUserDefaults];  
45.     [defaults setObject:self.textField.text forKey:@"text"];  
46.     [defaults synchronize];  
47.  
48.     // hide keyboard
```

```
49.     [self.textField resignFirstResponder];
50. }
51.
52. @end
```

```
1. //  
2. // AppDelegate.h  
3. // PropertyListExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import <UIKit/UIKit.h>  
10.  
11. @class ViewController;  
12.  
13. @interface AppDelegate : UIResponder <UIApplicationDelegate>  
14.  
15. @property (strong, nonatomic) UIWindow *window;  
16.  
17. @property (strong, nonatomic) ViewController *viewController;  
18.  
19. @end
```

```
1. //  
2. // AppDelegate.m  
3. // PropertyListExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "AppDelegate.h"  
10.  
11. #import "ViewController.h"  
12.  
13. @implementation AppDelegate  
14.  
15. @synthesize window = _window;  
16. @synthesize viewController = _viewController;  
17.  
18. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions  
19. {  
20.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];  
21.     // Override point for customization after application launch.  
22.     self.viewController = [[ViewController alloc] initWithNibName:@"ViewController" bundle:nil];  
23.     self.window.rootViewController = self.viewController;  
24.     [self.window makeKeyAndVisible];  
25.     return YES;  
26. }  
27.  
28. - (void)applicationWillResignActive:(UIApplication *)application  
29. {  
30.     // Sent when the application is about to move from active to inactive state. This can occur for certain types of temporary interruptions  
     // (such as an incoming phone call or SMS message) or when the user quits the application and it begins the transition to the background state.  
31.     // Use this method to pause ongoing tasks, disable timers, and throttle down OpenGL ES frame rates. Games should use this method to pause  
     // the game.  
32. }  
33.  
34. - (void)applicationDidEnterBackground:(UIApplication *)application  
35. {  
36.     // Use this method to release shared resources, save user data, invalidate timers, and store enough application state information to  
     // restore your application to its current state in case it is terminated later.  
37.     // If your application supports background execution, this method is called instead of applicationWillTerminate: when the user quits.  
38. }  
39.  
40. - (void)applicationWillEnterForeground:(UIApplication *)application  
41. {  
42.     // Called as part of the transition from the background to the inactive state; here you can undo many of the changes made on entering the  
     // background.  
43. }  
44.
```

```
45. - (void)applicationDidBecomeActive:(UIApplication *)application
46. {
47.     // Restart any tasks that were paused (or not yet started) while the application was inactive. If the application was previously in the
48.     // background, optionally refresh the user interface.
49.
50. - (void)applicationWillTerminate:(UIApplication *)application
51. {
52.     // Called when the application is about to terminate. Save data if appropriate. See also applicationDidEnterBackground:.
53. }
54.
55. @end
```

```
1. //  
2. // ViewController.h  
3. // PropertyListExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import <UIKit/UIKit.h>  
10.  
11. @interface ViewController : UIViewController  
12.  
13. @end
```

```
1. //  
2. // ViewController.m  
3. // PropertyListExample  
4. //  
5. // Created by Tommy MacWilliam on 3/19/12.  
6. // Copyright (c) 2012 __MyCompanyName__. All rights reserved.  
7. //  
8.  
9. #import "ViewController.h"  
10.  
11. @implementation ViewController  
12.  
13. - (void)viewDidLoad  
14. {  
15.     [super viewDidLoad];  
16.  
17.     // load plist file into dictionary  
18.     NSMutableDictionary *staff = [[NSMutableDictionary alloc] initWithContentsOfFile:  
19.                                     [[NSBundle mainBundle] pathForResource:@"Staff" ofType:@"plist"]];  
20.  
21.     // iterate over values in the staff array  
22.     int y = 10;  
23.     for (NSString *tf in [staff valueForKey:@"staff"]) {  
24.         // create a label to display staff info  
25.         UILabel *label = [[UILabel alloc] initWithFrame:CGRectMake(30, y, 300, 20)];  
26.         label.text = tf;  
27.  
28.         // add the staff label to the view  
29.         [self.view addSubview:label];  
30.  
31.         // the next label should be displayed below this one  
32.         y += 30;  
33.     }  
34. }  
35.  
36. - (void)viewDidUnload  
37. {  
38.     [super viewDidUnload];  
39. }  
40.  
41. - (BOOL)shouldAutorotateToInterfaceOrientation:(UIInterfaceOrientation)interfaceOrientation  
42. {  
43.     return (interfaceOrientation != UIInterfaceOrientationPortraitUpsideDown);  
44. }  
45.  
46. @end
```