

```
1. //
2. // AppDelegate.h
3. // Nib1
4. //
5. // David J. Malan
6. // Harvard University
7. // malan@harvard.edu
8. //
9. // Demonstrates a Single View Application implemented with a nib, plus IBAction and IBOutlet.
10. //
11.
12. #import <UIKit/UIKit.h>
13.
14. @class ViewController;
15.
16. @interface AppDelegate : UIResponder <UIApplicationDelegate>
17.
18. @property (strong, nonatomic) ViewController *viewController;
19. @property (strong, nonatomic) UIWindow *window;
20.
21. @end
```

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10. //
11.
12. #import "AppDelegate.h"
13. #import "ViewController.h"
14.
15. @implementation AppDelegate
16.
17. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions
18. {
19.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];
20.     self.viewController = [[ViewController alloc] initWithNibName:@"ViewController" bundle:nil];
21.     self.window.rootViewController = self.viewController;
22.     [self.window makeKeyAndVisible];
23.     return YES;
24. }
25.
26. @end
```

```
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11.
12. #import <UIKit/UIKit.h>
13.
14. #import "AppDelegate.h"
15.
16. int main(int argc, char *argv[])
17. {
18.     @autoreleasepool {
19.         return UIApplicationMain(argc, argv, nil, NSStringFromClass([AppDelegate class]));
20.     }
21. }
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12. #import <UIKit/UIKit.h>
13.
14. @interface ViewController : UIViewController
15.
16. @property (nonatomic, strong) IBOutlet UITextField *textField;
17.
18. - (IBAction)go:(id)sender;
19.
20. @end
```

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10. //
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12. #import "ViewController.h"
13.
14. @implementation ViewController
15.
16. - (IBAction)go:(id)sender
17. {
18.     // hide keyboard
19.     [self.textField resignFirstResponder];
20.
21.     // show alert
22.     NSString *s = [NSString stringWithFormat:@"Hello, %@", self.textField.text];
23.     UIAlertView *alert = [[UIAlertView alloc] initWithTitle:@"Hello"
24.                                     message:s
25.                                     delegate:nil
26.                                     cancelButtonTitle:@"Thanks!"
27.                                     otherButtonTitles:nil];
28.     [alert show];
29. }
30.
31. @end
```

```
1. //
2. // AppDelegate.h
3. // Nib2
4. //
5. // David J. Malan
6. // Harvard University
7. // malan@harvard.edu
8. //
9. // Demonstrates a Single View Application with a UIAlertViewDelegate.
10. //
11.
12. #import <UIKit/UIKit.h>
13.
14. @class ViewController;
15.
16. @interface AppDelegate : UIResponder <UIApplicationDelegate>
17.
18. @property (strong, nonatomic) ViewController *viewController;
19. @property (strong, nonatomic) UIWindow *window;
20.
21. @end
```

```
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17. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions
18. {
19.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];
20.     self.viewController = [[ViewController alloc] initWithNibName:@"ViewController" bundle:nil];
21.     self.window.rootViewController = self.viewController;
22.     [self.window makeKeyAndVisible];
23.     return YES;
24. }
25.
26. @end
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9. // Demonstrates a Single View Application with a UIAlertViewDelegate.
10. //
11.
12. #import "ViewController.h"
13.
14. @implementation ViewController
15.
16. - (void)alertView:(UIAlertView *)alertView didDismissWithButtonIndex:(NSInteger)buttonIndex
17. {
18.     // clear text field
19.     self.textField.text = nil;
20. }
21.
22. - (IBAction)go:(id)sender
23. {
24.     // hide keyboard
25.     [self.textField resignFirstResponder];
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16.
17. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions
18. {
19.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];
20.     self.viewController = [[ViewController alloc] init];
21.     self.window.rootViewController = self.viewController;
22.     [self.window makeKeyAndVisible];
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12. #import <UIKit/UIKit.h>
13.
14. @interface ViewController : UIViewController
15.
16. @property (nonatomic, readwrite, strong) UITextField *textField;
17.
18. - (void)alertView:(UIAlertView *)alertView didDismissWithButtonIndex:(NSInteger)buttonIndex;
19. - (void)go:(id)sender;
20.
21. @end
```

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10. //
11.
12. #import "ViewController.h"
13.
14.
15. @implementation ViewController
16.
17.
18. #pragma mark - UIViewController
19.
20. - (void)loadView
21. {
22.     // create view
23.     self.view = [[UIView alloc] initWithFrame:[UIScreen mainScreen].applicationFrame];
24.     self.view.backgroundColor = [UIColor whiteColor];
25.
26.     // create text field
27.     CGRect frame = CGRectMake(20, 20, 280, 31);
28.     self.textField = [[UITextField alloc] initWithFrame:frame];
29.     self.textField.autocapitalizationType = UITextAutocapitalizationTypeWords;
30.     self.textField.autocorrectionType = UITextAutocorrectionTypeNo;
31.     self.textField.borderStyle = UITextBorderStyleRoundedRect;
32.     self.textField.contentVerticalAlignment = UIControlContentVerticalAlignmentCenter;
33.     self.textField.font = [UIFont systemFontOfSize:[UIFont systemFontOfSize]];
34.     self.textField.placeholder = @"Name";
35.     self.textField.returnKeyType = UIReturnKeyGo;
36.
37.     // listen for Did End on Exit
38.     [self.textField addTarget:self action:@selector(go:) forControlEvents:UIControlEventEditingDidEndOnExit];
39.
40.     // add text field to view
41.     [self.view addSubview:self.textField];
42.
43.     // create button
44.     frame = CGRectMake(124, 59, 72, 37);
45.     UIButton *button = [UIButton buttonWithType:UIButtonTypeRoundedRect];
46.     button.frame = frame;
47.     [button setTitle:@"Go" forState:UIControlStateNormal];
48.
```

```
49.     // listen for Touch Up Inside
50.     [button addTarget:self action:@selector(go:) forControlEvents:UIControlEventTouchUpInside];
51.
52.     // add button to view
53.     [self.view addSubview:button];
54. }
55.
56.
57. #pragma mark - UIAlertViewDelegate
58.
59. - (void)alertView:(UIAlertView *)alertView didDismissWithButtonIndex:(NSInteger)buttonIndex
60. {
61.     // clear text field
62.     self.textField.text = nil;
63. }
64.
65.
66. #pragma mark - Actions
67.
68. - (void)go:(id)sender
69. {
70.     // hide keyboard
71.     [self.textField resignFirstResponder];
72.
73.     // show alert
74.     NSString *s = [NSString stringWithFormat:@"Hello, %@", self.textField.text];
75.     UIAlertView *alert = [[UIAlertView alloc] initWithTitle:@"Hello"
76.                                     message:s
77.                                     delegate:self
78.                                     cancelButtonTitle:@"Thanks!"
79.                                     otherButtonTitles:nil];
80.     [alert show];
81. }
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83.
84. @end
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13. #import "ViewController.h"
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15. @implementation AppDelegate
16.
17. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions
18. {
19.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];
20.     self.viewController = [[ViewController alloc] initWithNibName:@"ViewController" bundle:nil];
21.     self.window.rootViewController = self.viewController;
22.     [self.window makeKeyAndVisible];
23.     return YES;
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```
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14. @interface ViewController : UIViewController
15. @end
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8. //
9. // Demonstrates a Single View Application.
10. //
11.
12. #import "ViewController.h"
13.
14. @implementation ViewController
15. @end
```

```
1. //
2. // AppDelegate.h
3. // Utility
4. //
5. // David J. Malan
6. // Harvard University
7. // malan@harvard.edu
8. //
9. // Demonstrates a Utility Application.
10. //
11.
12. #import <UIKit/UIKit.h>
13.
14. @class MainViewController;
15.
16. @interface AppDelegate : UIResponder <UIApplicationDelegate>
17.
18. @property (strong, nonatomic) MainViewController *mainViewController;
19. @property (strong, nonatomic) UIWindow *window;
20.
21. @end
```

```
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4. //
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10. //
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12. #import "AppDelegate.h"
13.
14. #import "MainViewController.h"
15.
16. @implementation AppDelegate
17.
18. - (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions
19. {
20.     self.window = [[UIWindow alloc] initWithFrame:[[UIScreen mainScreen] bounds]];
21.     self.mainViewController = [[MainViewController alloc] initWithNibName:@"MainViewController" bundle:nil];
22.     self.window.rootViewController = self.mainViewController;
23.     [self.window makeKeyAndVisible];
24.     return YES;
25. }
26.
27. @end
```

```
1. //
2. // FlipsideViewController.h
3. // Utility
4. //
5. // David J. Malan
6. // Harvard University
7. // malan@harvard.edu
8. //
9. // Demonstrates a Utility Application.
10. //
11.
12. #import <UIKit/UIKit.h>
13.
14. @class FlipsideViewController;
15.
16. @protocol FlipsideViewControllerDelegate
17. - (void)flipsideViewControllerDidFinish:(FlipsideViewController *)controller;
18. @end
19.
20. @interface FlipsideViewController : UIViewController
21.
22. @property (weak, nonatomic) id <FlipsideViewControllerDelegate> delegate;
23.
24. - (IBAction)done:(id)sender;
25.
26. @end
```



```
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3. // Utility
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8. //
9. // Demonstrates a Utility Application.
10. //
11.
12. #import "FlipsideViewController.h"
13.
14. @implementation FlipsideViewController
15.
16. - (IBAction)done:(id)sender
17. {
18.     [self.delegate flipsideViewControllerDidFinish:self];
19. }
20.
21. @end
```

```
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```
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8. //
9. // Demonstrates a Utility Application.
10. //
11.
12. #import "FlipsideViewController.h"
13.
14. @interface MainViewController : UIViewController <FlipsideViewControllerDelegate>
15.
16. - (IBAction)showInfo:(id)sender;
17.
18. @end
```

```
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8. //
9. // Demonstrates a Utility Application.
10. //
11.
12. #import "MainViewController.h"
13.
14. @implementation MainViewController
15.
16. - (void)flipsideViewControllerDidFinish:(FlipsideViewController *)controller
17. {
18.     [self dismissViewControllerAnimated:YES completion:nil];
19. }
20.
21. - (IBAction)showInfo:(id)sender
22. {
23.     FlipsideViewController *controller = [[FlipsideViewController alloc] initWithNibName:@"FlipsideViewController" bundle:nil];
24.     controller.delegate = self;
25.     controller.modalTransitionStyle = UIModalTransitionStyleFlipHorizontal;
26.     [self presentViewController:controller animated:YES completion:nil];
27. }
28.
29. @end
```