

스위프트를

이용한

아이폰

앱 개발

시작하기

2020년 2월

 충남대학교 컴퓨터공학과

월	화	수	목
3일	4일	5일	6일
[--Swift 초급 Day!--]		[ --Swift 중급 Day!-- ]	

let 초급 = "3일-4일(월-화) 오후 1시-4시"

let 중급 = "5일-6일(수-목) 오후 1시-4시"

let 장소 = "@Mac실습실 (공과대학 5호관4층 414호)"

let 신청방법 = "https://qrgo.page.link/HETGH"



# Day #3 - 메모장 만들기

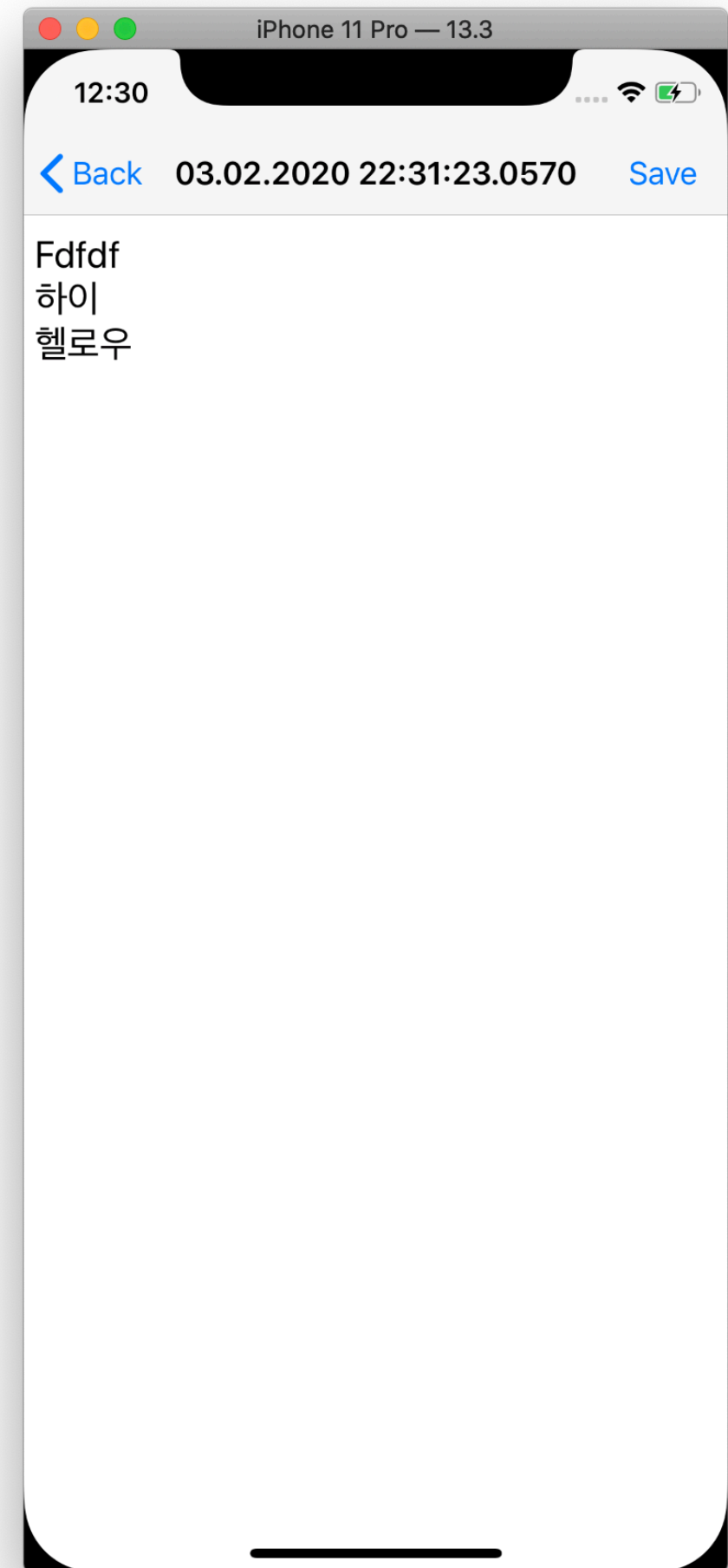
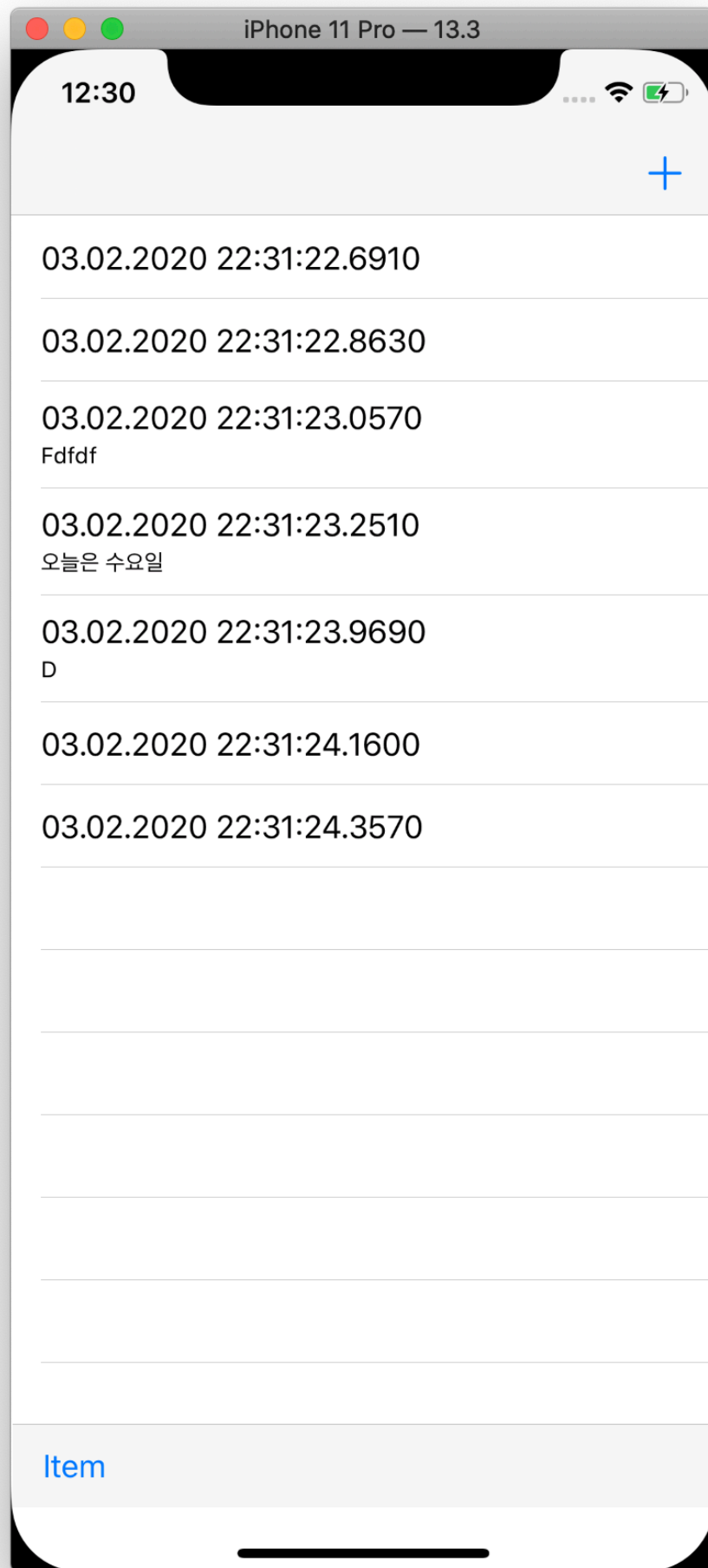
# 오늘의 목표

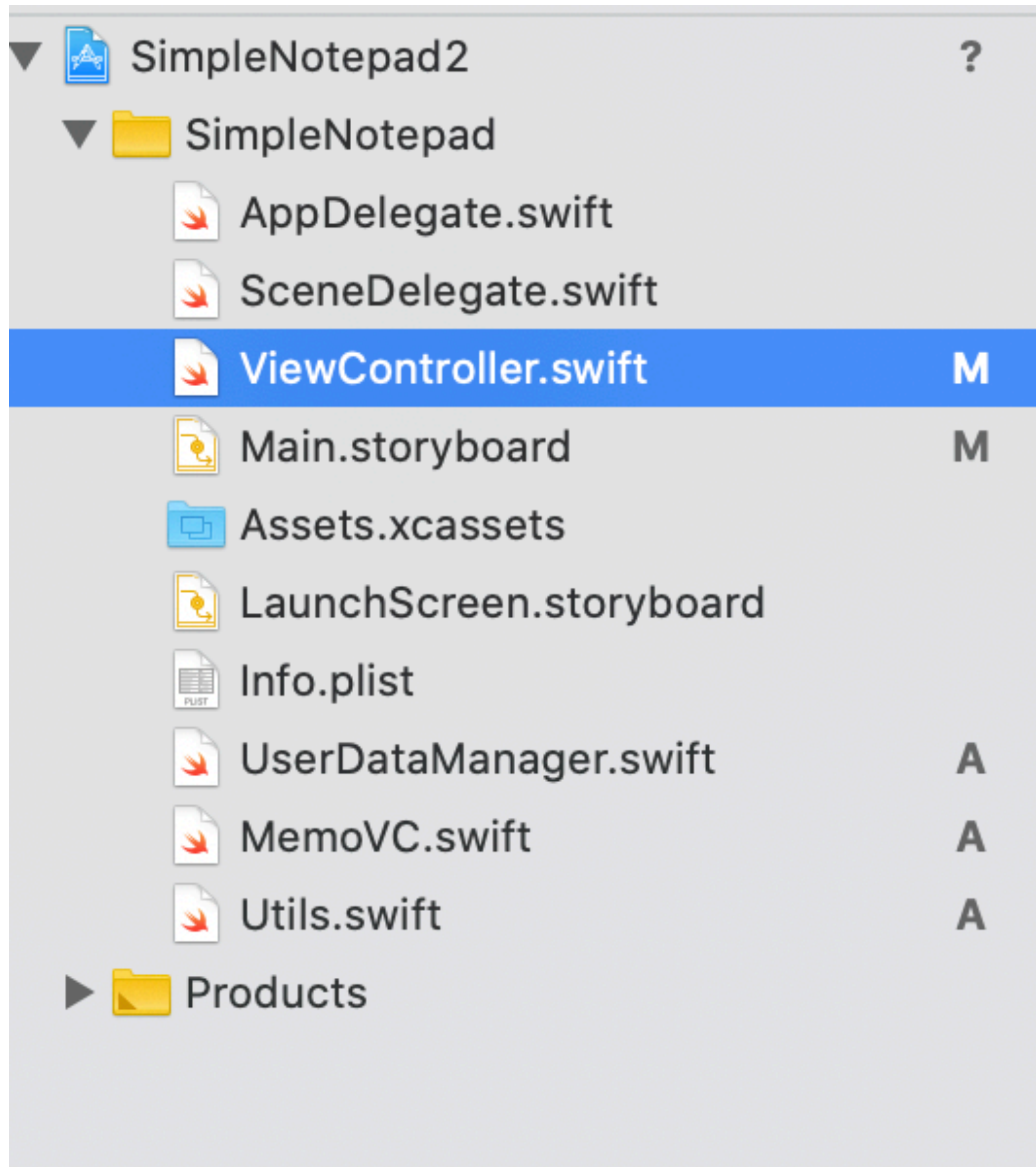
- 메모장 만들기
  - Navigation Controller (화면전환)
  - UserDefaults (데이터 저장)
  - UITableViewController
  - UITextView
  - Keyboard Actions ...

**Level #2**

# Level #2 요구사항

- 데이터 저장 기능 적용
  - 각 메모의 Key : 생성된 TimestampString
- 테이블에서 생성된 날짜 선택 시, 메모 작성으로 이동
- 메모 화면에서 우측 상단에 저장 버튼 추가
- 메모 저장





# UserDefaults

```
func saveList(with key:String, list:[TimeInterval])->Bool {  
    UserDefaults.standard.set(list, forKey: key)
```

UserDefaults.standard.set

❗ Ambiguous use of 'set'

M	Void set(url: URL?, forKey: String)
M	Void set(value: Any?, forKey: String)
M	Void set(value: Bool, forKey: String)
M	Void set(value: Double, forKey: String)
M	Void set(value: Float, forKey: String)
M	Void set(value: Int, forKey: String)
M	Void setVolatileDomain(domain: [String : Any], forName: String)
M	Void setPersistentDomain(domain: [String : Any], forName: String)

```
let list = UserDefaults.standard.value(forKey: key) as? [TimeInterval] {  
    UserDefaults.standard.va
```

UserDefaults.standard.va

❗ Value of type 'UserDefaults' has no member 'va'

No Selection

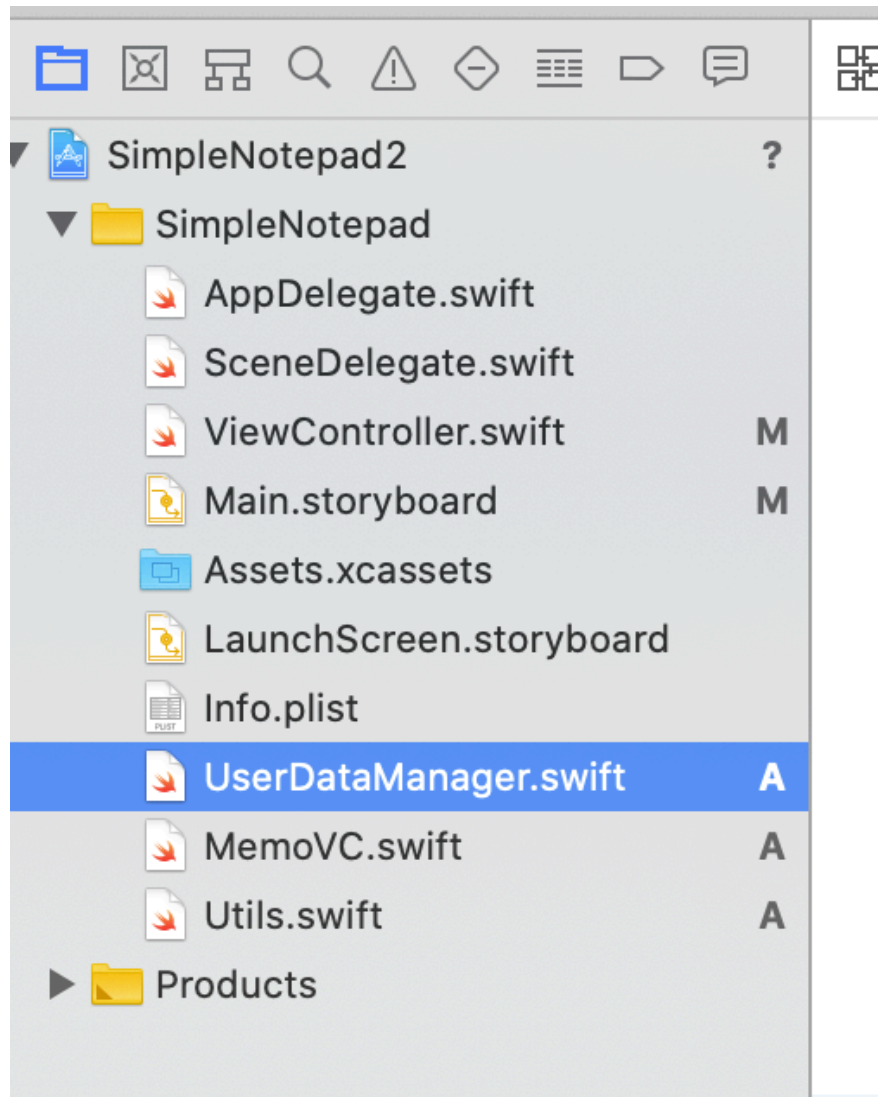
M	Any? value(forKey: String)
M	Any? value(forKeyPath: String)
M	Void validateValue(ioValue: AutoreleasingUnsafeMutablePointer<AnyObject?>, forKey: String) throws
M	Any? value(forKey: String)
M	Void validateValue(ioValue: AutoreleasingUnsafeMutablePointer<AnyObject?>, forKeyPath: String) throws
V	String? accessibilityValue
V	Int hashValue

# 1. 데이터 저장 추가하기



# UserDataManager

## 클래스 작성



```
8
9  import UIKit
10
11 class UserDataManager: NSObject {
12
13
14     static let LIST_KEY_DEFAULT = "default"
15
16     static let shared = UserDataManager()
17     private override init () {
18         super.init()
19         // Do Some Code Here
20     }
21
```

# 리스트 저장 함수 추가

```
20     }
21
22     func saveList(with key:String, list:[TimeInterval])->Bool {
23         UserDefaults.standard.set(list, forKey: key)
24
25         return UserDefaults.standard.synchronize()
26     }
27
28 ~~,
27
28     func getList(with key:String)->[TimeInterval] {
29         if let list = UserDefaults.standard.value(forKey: key) as? [TimeInterval] {
30             return list
31         }
32         return []
33     }
34
35 ~~
```

# 리스트 관련 함수 변경

## ViewController.swift

```
9  import UIKit
10
11  class ViewController: UIViewController {
12
13      var list:[TimeInterval] = []
14      @IBOutlet var table: UITableView!
15
16
17      override func viewDidLoad() {
18          super.viewDidLoad()
19          // Do any additional setup after loading the view.
20
21          list = UserDataManager.shared.getList(with: UserDataManager.LIST_KEY_DEFAULT)
22
23      }
```

# 리스트 관련 함수 변경

## ViewController.swift

```
24
○ @IBAction func addNewMemo(_ sender: Any) {
26     let newtime = Utils.shared.makeNewDate()
27     list.append(newtime)
28     if UserDataManager.shared.saveList(with: UserDataManager.LIST_KEY_DEFAULT, list: list) {
29         self.table.reloadSections(IndexSet(0...0), with: .automatic)
30     }
31 }
32
33 override func viewWillAppear(_ animated: Bool) {
34     super.viewWillAppear(animated)
35     table.reloadData()
36 }
37
```

# 리스트 관련 함수 변경

## ViewController.swift

```
37
38
39 // Step 2
40 func requestRemoveItem(at:Int) {
41     let alert = UIAlertController(title: "삭제요청", message: "삭제하시겠습니까?", preferredStyle: .alert)
42     let deleteAction = UIAlertAction(title: "삭제", style: .destructive) { (action) in
43         //
44         self.list.remove(at: at)
45
46         if UserDataManager.shared.saveList(with: UserDataManager.LIST_KEY_DEFAULT, list: self.list) {
47             self.table.reloadSections(IndexSet(0...0), with: .automatic)
48         }
49     }
50     let cancelAction = UIAlertAction(title: "취소", style: .cancel, handler: nil)
51
52     alert.addAction(deleteAction)
53     alert.addAction(cancelAction)
54
55     self.present(alert, animated: true, completion: nil)
56 }
```

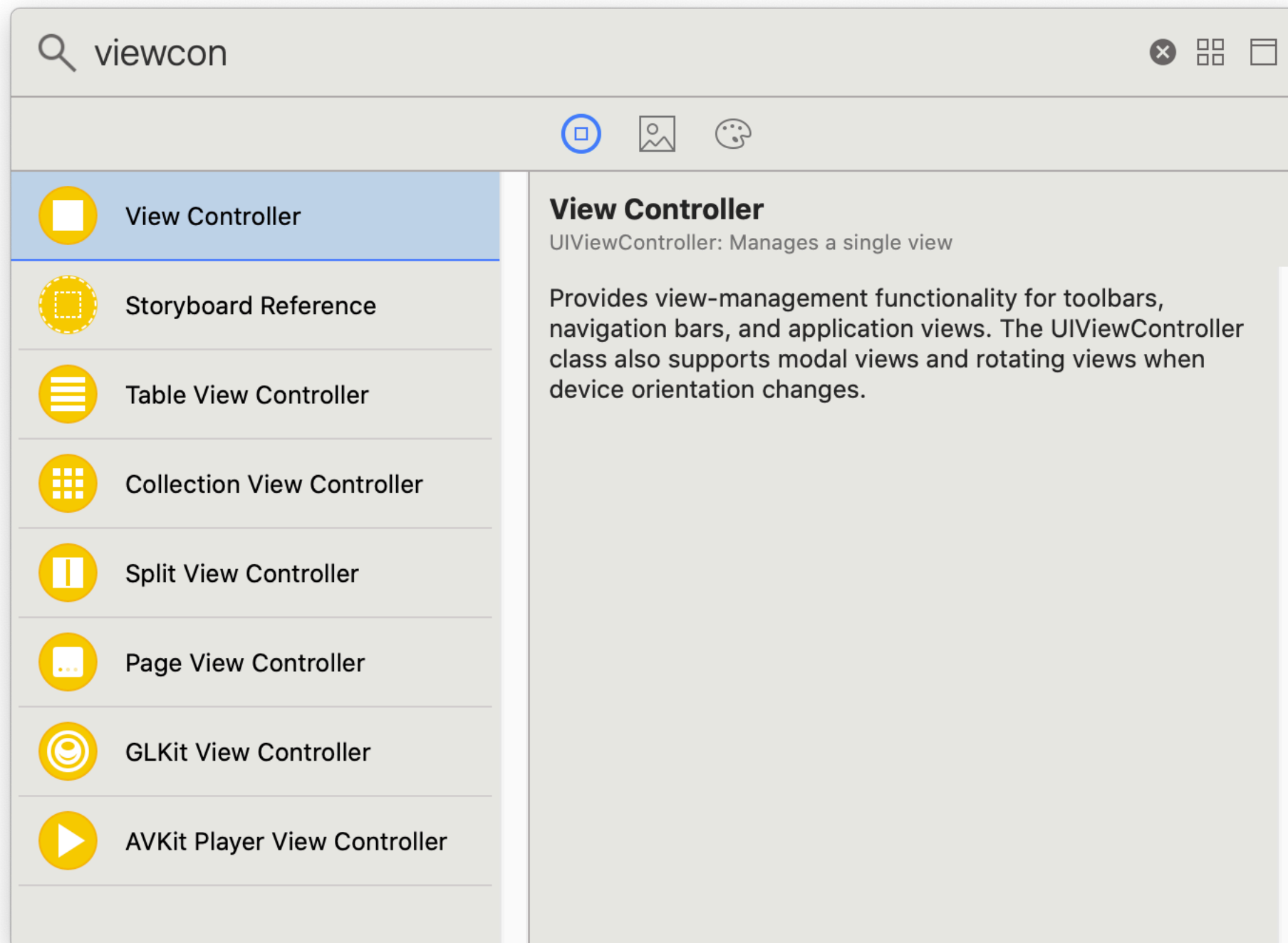
# 리스트 관련 함수 변경

## ViewController.swift

```
85
86 func tableView(_ tableView: UITableView, editActionsForRowAt indexPath: IndexPath) -> [UITableViewRowAction]? {
87     let deleteAction = UITableViewRowAction(style: .destructive, title: "삭제") {
88         (action, indexPath) in
89             /* step 1
90             self.list.remove(at: indexPath.row)
91             //self.table.reloadSections(IndexSet(0...0), with: .automatic)
92             if UserDataManager.shared.saveList(with: UserDataManager.LIST_KEY_DEFAULT, list:
93                 self.list) {
94                 self.table.reloadSections(IndexSet(0...0), with: .automatic)
95             }
96             /*
97
98             // Step 2
99             //self.requestRemoveItem(at: indexPath.row)
100         }
101
102     return [deleteAction]
103 }
```

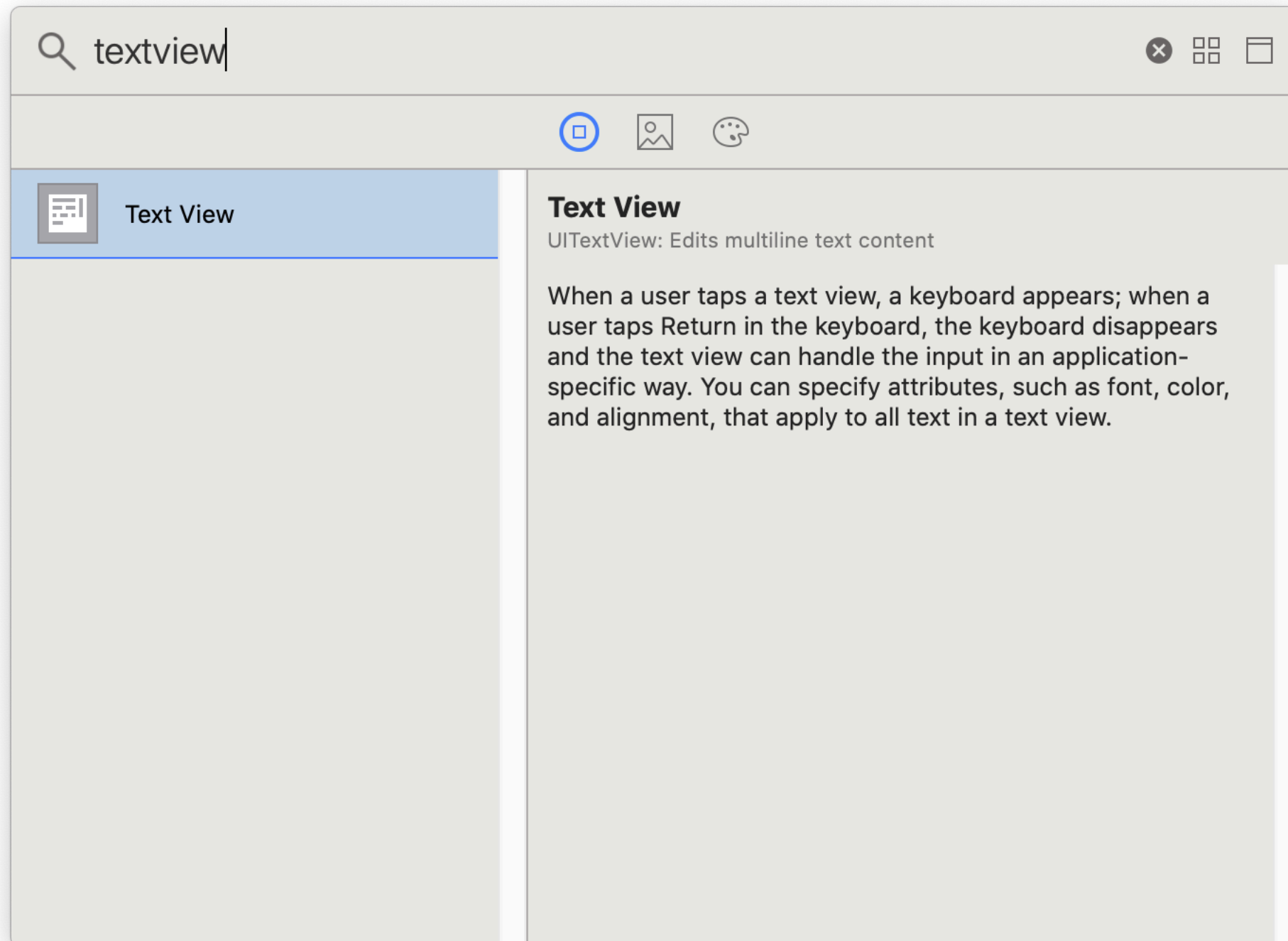
## 2. 메모 화면 추가하기

# MemoVC.swift 추가

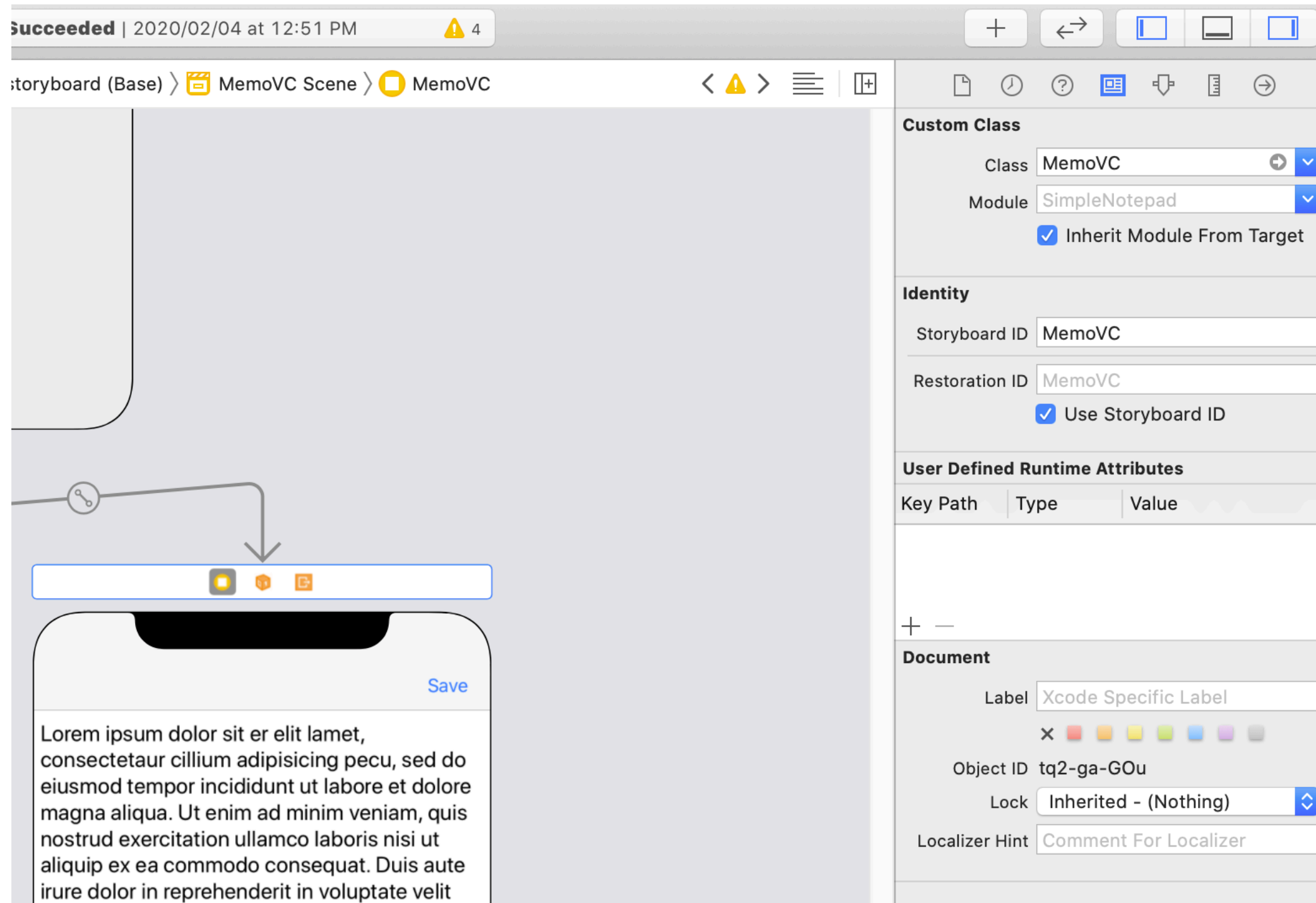




# MemoVC.swift 에 UITextView 추가



# MemoVC 클래스 연결



# Outlet 연결

```
8
9  import UIKit
10
11  class MemoVC: UIViewController {
12
13      ◎    @IBOutlet var tvMemoInput:UITextView!
14          var timestamp:TimeInterval!
15
16          override func viewDidLoad() {
17              super.viewDidLoad()
```

### 3. 메모 저장 기능 추가

# UserDefaultsManager.swift 수정

```
35
36     func getMemo(with timeStampString:String)->String {
37         if let memo = UserDefaults.standard.value(forKey: timeStampString) as? String {
38             return memo
39         }
40
41         return ""
42     }
43
44     func saveMemo(with timeStampStr:String, memo:String)->Bool {
45         UserDefaults.standard.set(memo, forKey: timeStampStr)
46         return UserDefaults.standard.synchronize()
47     }
48 }
49
```

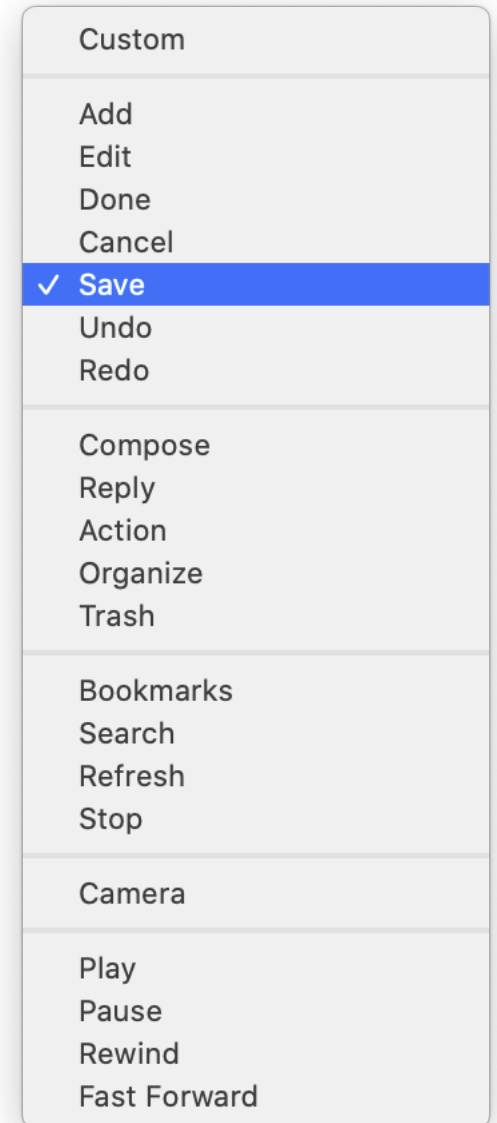
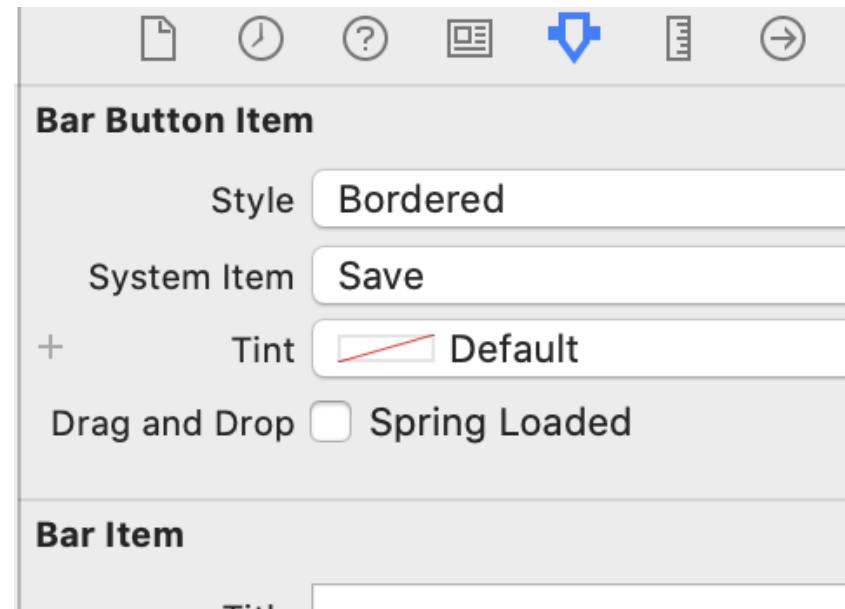
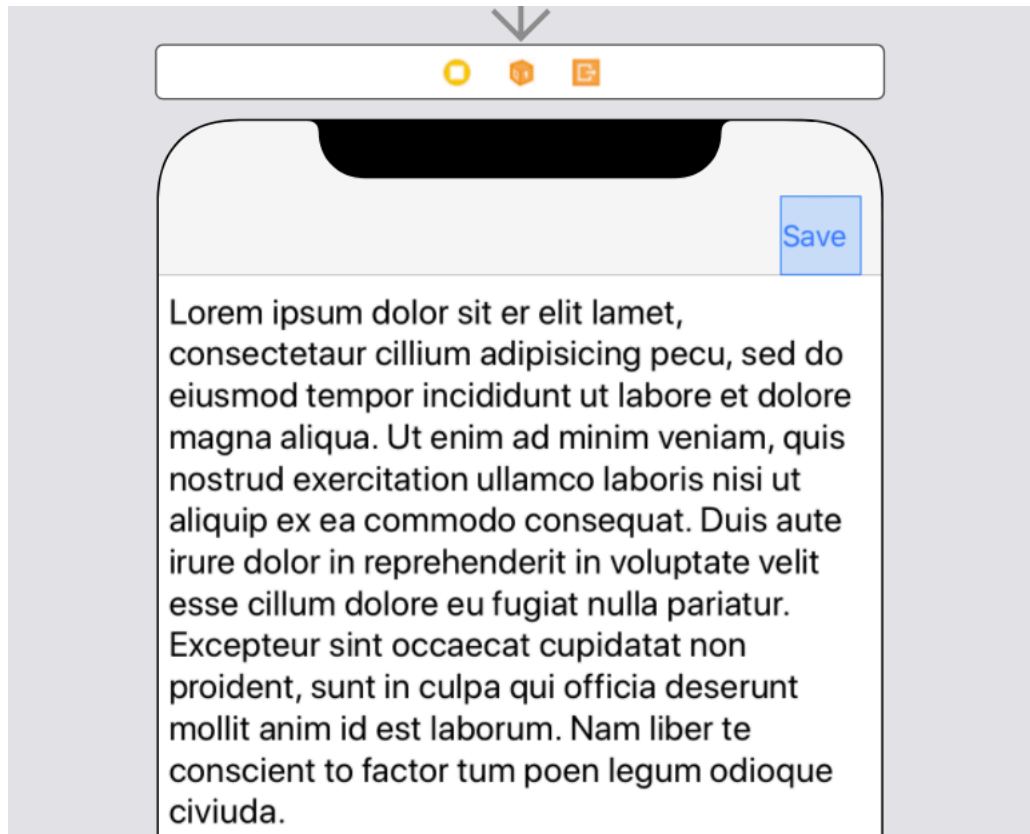
# 기존 저장된 메모 불러오는 코드 작성

```
--  
25  
26     private func setMemoText() {  
27         let str = Utils.shared.timeString(time: timestamp)  
28         self.title = str  
29         let txt = UserDataManager.shared.getMemo(with: str)  
30         self.tvMemoInput.text = txt  
31     }  
32
```

# 화면 켜질때, 메모 불러오는 코드 작성

```
8
9  import UIKit
10
11  class MemoVC: UIViewController {
12
13      @IBOutlet var tvMemoInput:UITextView!
14      var timestamp:TimeInterval!
15
16      override func viewDidLoad() {
17          super.viewDidLoad()
18
19          // Do any additional setup after loading the view.
20
21          setMemoText()
22      }
23  }
```

# 저장버튼 추가





# 저장버튼 연결

```
@IBAction func doSaveMemo(_ sender: Any) {  
    let str = Utils.shared.timeString(time: timestamp)  
    if UserDataManager.shared.saveMemo(with: str, memo: tvMemoInput.text) {  
        self.navigationController?.popViewController(animated: true)  
    }  
}
```

**Level #3 Extra..**

# 키보드 관련 코드 추가

```
49
50 func registerForKeyboardNotifications() {
51     NotificationCenter.default.addObserver(self, selector:
52         #selector(keyboardWillShow(_:)), name:
53         UIResponder.keyboardWillShowNotification, object: nil)
54     NotificationCenter.default.addObserver(self, selector:
55         #selector(keyboardWillHide(_:)), name:
56         UIResponder.keyboardWillHideNotification, object: nil)
57 }
```

# 키보드 관련 코드 추가

```
56
57 @objc func keyboardWillShow(_ notification: Notification) {
58     guard let keyboardFrame =
59         (notification.userInfo?[UIResponder.keyboardFrameEndUserInfoKey] as?
60             NSValue)?.cgRectValue else { return }
61
62     let contentInsets = UIEdgeInsets(top: 0.0, left: 0.0, bottom:
63         keyboardFrame.height, right: 0.0)
64     tvMemoInput.contentInset = contentInsets
65     tvMemoInput.scrollIndicatorInsets = contentInsets
66 }
67
68 // 이 메서드는 UIKeyboardWillHide noti피케이션을 받으면 호출된다.
69 @objc func keyboardWillHide(_ notification: Notification) {
70     let contentInsets = UIEdgeInsets.zero
71     tvMemoInput.contentInset = contentInsets
72     tvMemoInput.scrollIndicatorInsets = contentInsets
73 }
```

```
8
9  import UIKit
10
11  class MemoVC: UIViewController {
12
13      @IBOutlet var tvMemoInput:UITextView!
14      var timestamp:TimeInterval!
15
16      override func viewDidLoad() {
17          super.viewDidLoad()
18
19          // Do any additional setup after loading the view.
20
21          setMemoText()
22          registerForKeyboardNotifications()
23      }
24
```