# RealmStudioSwift

## How to use RealmStudio  with Swift?

26-08-2023

# INTRODUCTION REALM STUDIO

1. Install Realm
2. Add data to DB
3. Fetch data from DB
4. Edit data from DB
5. Delete Data from DB
6. Update schemaVersion

# 1. INSTALL REALM

- Create podfile ==> pod init
- Add Realm as Dependency in podfile
- Install Dependency ==> pod install

Detail install realm
https://www.mongodb.com/docs/realm/sdk/swift/install/

Add Realm as dependency podfile

Sophearth Chhan Sat 11:47 AM

```
platform : IOS

target 'MyRealmProject' do
  # Comment the next line if you don't want to use dynamic frameworks
  use_frameworks!

  # Pods for MyRealmProject
  pod 'RealmSwift'

end
```

Delete

# 2. ADD DATA TO DB

- import RealmSwift
- Create class for store data local ( FamilyModel and MemberFamilyModel)

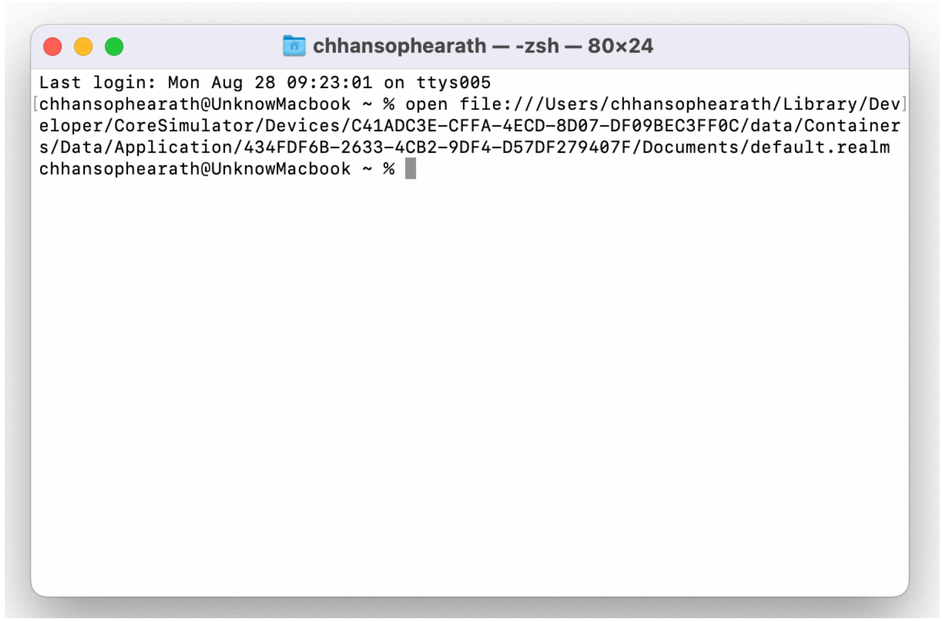
```
import RealmSwift

class FamilyModel: Object {
    @Persisted(primaryKey: true) var familyId: ObjectId
    @Persisted var familyName: String = ""
    @Persisted var members = List<MemberIFamilyModel>() // need the same "members"
}

class MemberIFamilyModel: Object{
    @Persisted(originProperty: "members") var assignee: LinkingObjects<FamilyModel>

    @Persisted(primaryKey: true) var personId: ObjectId
    @Persisted var name: String = ""
    @Persisted var age: Int = 0
    @Persisted var gender: String = ""
}
```

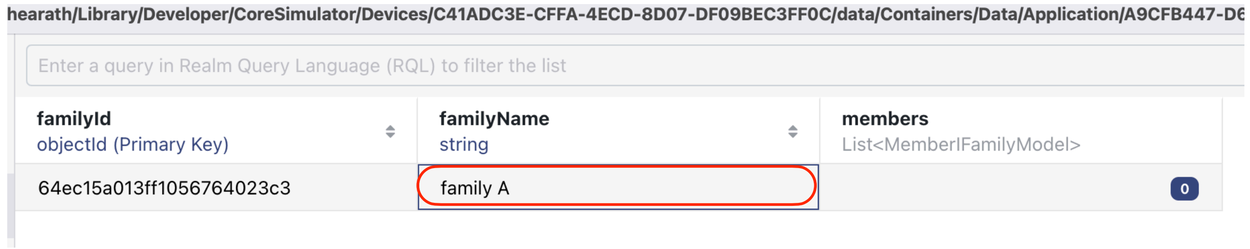
```swift
import RealmSwift

class RealmStudio: UIViewController{
    var realm = try! Realm()
    let familyModel = FamilyModel()


    override func viewDidLoad() {
        super.viewDidLoad()
        title = "Family"
        view.backgroundColor = .white


        // MARK: Add data to DB
        try! realm.write {
            familyModel.familyName = "family A"
            realm.add(familyModel)
        }

        //MARK: URL view data in realm studio
        print("filePathRealmSwift: \(Realm.Configuration.defaultConfiguration.fileURL!)")
    }
}
```

យើងបានចញ្ចូល **field familyName = “family A” ក្នុង DB**

# View data in Realm Studio

**Copy URL filePathRealmSwift:** ដែលបានព្រីនប្រើcommand open and then past URL



# 3. Fetch data from DB

```swift
import RealmSwift

class RealmStudio: UIViewController{
    var realm = try! Realm()
    let familyModel = FamilyModel()


    override func viewDidLoad() {
        super.viewDidLoad()
        title = "Family"
        view.backgroundColor = .white

        //MARK: Fetch  data from DB
        let fetchData = realm.objects(FamilyModel.self)

        //MARK: URL view data in realm studio
        print("filePathRealmSwift: \(Realm.Configuration.defaultConfiguration.fileURL!)")
    }
}
```

```swift
print(listStore[0].familyName)
```

ប្រសិនបើយើងព្រីនវាបែបនេះវានិងបង្ហាញ  family A ពីព្រោះយើងបានបញ្ចូលវាចូលក្នុង DB នៃ index first

# 4. Edit data from DB

```swift
import RealmSwift

class RealmStudio: UIViewController{
    var realm = try! Realm()
    let familyModel = FamilyModel()


    override func viewDidLoad() {
        super.viewDidLoad()
        title = "Family"
        view.backgroundColor = .white

        //MARK: Fetch  data from DB
        let fetchData = realm.objects(FamilyModel.self)

        //by index [0]
        let id =  fetchData[0].familyId

         do {
             // Fetch the fetchData you want to edit by its id of index
             if let family = realm.object(ofType: FamilyModel.self, forPrimaryKey: id ) {
                 // Perform edits
                 try realm.write {
                     family.familyName = "Family ABCDEF"
                 }
             }
         } catch {
            print(" // Handle error")
         }

        //MARK: URL view data in realm studio
        print("filePathRealmSwift: \(Realm.Configuration.defaultConfiguration.fileURL!)")
    }
}
```

យើងបានកែប្រែ family A ទៅជា Family ABCDEF in DB

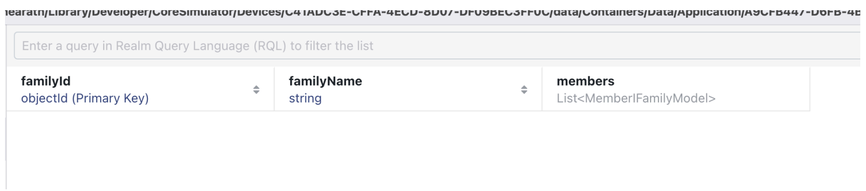
Enter a query in Realm Query Language (RQL) to filter the list

| familyId<br>objectId (Primary Key) | familyName<br>string | members<br>List<MemberIFamilyModel> |
|---|---|---|
| 64ec15a013ff1056764023c3 | Family ABCDEF | 0 |

# 5. Delete Data from DB

```swift
import RealmSwift

class RealmStudio: UIViewController{
    var realm = try! Realm()
    let familyModel = FamilyModel()


    override func viewDidLoad() {
        super.viewDidLoad()
        title = "Family"
        view.backgroundColor = .white

        //MARK: Fetch  data from DB
        let fetchData = realm.objects(FamilyModel.self)

        //by index [0]
        let id =  fetchData[0].familyId

         do {
             // Fetch the fetchData you want to delete by its id of index
             if let family = realm.object(ofType: FamilyModel.self, forPrimaryKey: id ) {
                 // Perform edits
                 try realm.write {
                     realm.delete(family)
                 }
             }
         } catch {
            print(" // Handle error")
         }

        //MARK: URL view data in realm studio
        print("filePathRealmSwift: \(Realm.Configuration.defaultConfiguration.fileURL!)")
    }
}
```

យើងបានលុប Family ABCDEF  ចេញពី DB



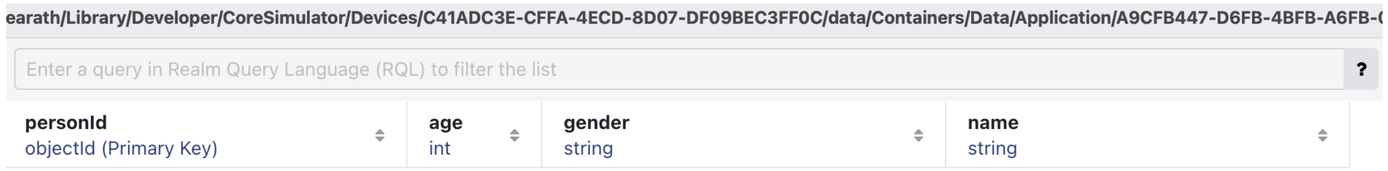
# 6.Update Data in DB (schemaVersion)

```swift
import RealmSwift

class FamilyModel: Object {
    @Persisted(primaryKey: true) var familyId: ObjectId
    @Persisted var familyName: String = ""
    @Persisted var members = List<MemberIFamilyModel>() // need the same "members"
}

class MemberIFamilyModel: Object{
    @Persisted(originProperty: "members") var assignee: LinkingObjects<FamilyModel>

    @Persisted(primaryKey: true) var personId: ObjectId
    @Persisted var name: String = ""
    @Persisted var age: Int = 0
    @Persisted var gender: String = ""
    @Persisted var email: String = "" // New field email
}
```

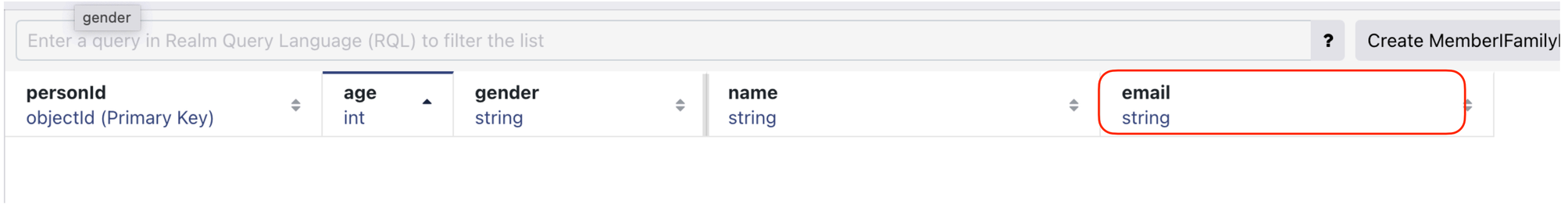
នៅពេលយើងបន្ថែម new field យើងត្រូវ update version វា


import RealmSwift
class RealmStudio: UIViewController{
var realm: Realm!
let familyModel = FamilyModel()
let newSchemaVersion: UInt64 = 2
override func viewDidLoad() {
super.viewDidLoad()
title = "Family"
view.backgroundColor = .white
// MARK: Use for udete version bd and edit field mane
let config = Realm.Configuration(
schemaVersion: newSchemaVersion, // Increment this value whenever schema changes
migrationBlock: { migration, oldSchemaVersion in
}
)
do {
realm = try Realm(configuration: config)
try! realm.write {
}
} catch let error as NSError {
print("Error: \(error.localizedDescription)")
}
//MARK: URL view data in realm studio
print("filePathRealmSwift: \(Realm.Configuration.defaultConfiguration.fileURL!)")
}
}
បានកែប្រែ
បញ្ចូលបន្ថែម
បញ្ចូលបន្ថែម
បញ្ចូលបន្ថែម

## OldVersion




## NewVersion បានបន្ថែម Field email



ប្រសិនបើយើងចង់ប្តូរ name —> fullName យើងគ្រាន់តែចូលទៅ newSchemaVersion +1 បន្ថែមជាការស្រាច់

```swift
import RealmSwift

class FamilyModel: Object {
    @Persisted(primaryKey: true) var familyId: ObjectId
    @Persisted var familyName: String = ""
    @Persisted var members = List<MemberIFamilyModel>() // need the same "members"
}

class MemberIFamilyModel: Object{
    @Persisted(originProperty: "members") var assignee: LinkingObjects<FamilyModel>

    @Persisted(primaryKey: true) var personId: ObjectId
    @Persisted var fullName: String = "" //Edit field name to fullname
    @Persisted var age: Int = 0
    @Persisted var gender: String = ""
    @Persisted var email: String = "" // New field email
}
```

```swift
import RealmSwift

class RealmStudio: UIViewController{
    var realm: Realm!
    let familyModel = FamilyModel()

    let newSchemaVersion: UInt64 = 3

    override func viewDidLoad() {
        super.viewDidLoad()
        title = "Family"
        view.backgroundColor = .white

        // MARK: Use for udete version bd and edit field mane
        let config = Realm.Configuration(
            schemaVersion: newSchemaVersion, // Increment this value whenever schema changes
            migrationBlock: { migration, oldSchemaVersion in

            }
        )

        do {
            realm = try Realm(configuration: config)
            try! realm.write {

            }

        } catch let error as NSError {
            print("Error: \(error.localizedDescription)")
        }

        //MARK: URL view data in realm studio
        print("filePathRealmSwift: \(Realm.Configuration.defaultConfiguration.fileURL!)")
    }
}
```

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