

MahaSanook Manual

คู่มือการใช้งานและวิธีการประยุกต์ใช้ของ Cocoapods ในแอปพลิเคชัน MahaSanook โดยมีหัวข้อดังนี้

1. Pods ที่ใช้ในแอปพลิเคชัน
2. ตัวอย่างที่ใช้งานในแอปพลิเคชัน (ส่วนของการโค้ด)
3. ตัวอย่างหน้าแอปพลิเคชัน MahaSanook

1. Pods ที่ใช้ในแอปพลิเคชัน

โดยก่อนหน้านั้น จะต้องมีการ init pod ขึ้นมาสำหรับรวม framework ที่เราจะใช้ โดยมีคำสั่งดังนี้
สำหรับ pods ที่ใช้ในแอปพลิเคชันมีดังนี้

```
pod init
```

และหลังจากนั้น เข้าไปที่ Podfile และเพิ่มโค้ดเหล่านี้ไป

```
pod 'GoogleSignIn'  
pod 'FBSDKLoginKit'  
pod 'Firebase/Analytics'  
pod 'Firebase/Auth'  
pod 'Firebase/Storage'  
pod 'SwiftChess'  
pod 'JSQMessagesViewController'
```

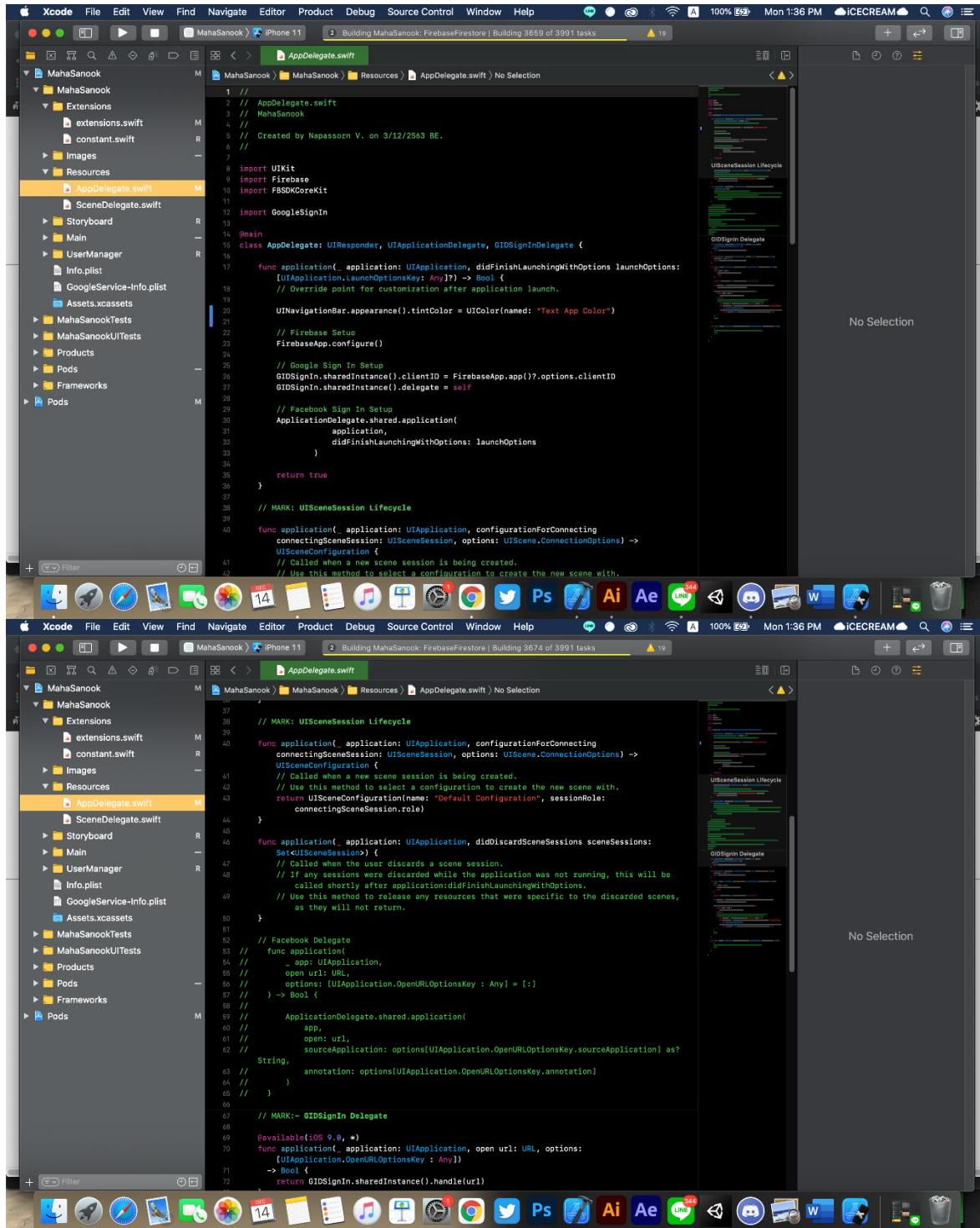
หลังจากนั้น ทำการติดตั้ง pod เข้าไปเป็นอันเสร็จสิ้น

```
pod install
```

2. ตัวอย่างที่ใช้งานในแอปพลิเคชัน (ส่วนของการโค้ด)

2.1. Firebase Authentication

โดยใช้ตัวเสริมในการล็อกอินเพื่อมีตัวเลือก Facebook (FBSDKLoginKit) และ Google (GoogleSignIn)



```

// MARK: UISceneSession Lifecycle

func application(_ application: UIApplication, configurationForConnecting connectingSceneSession: UISceneSession, options: UIScene.ConnectionOptions) -> UISceneConfiguration {
    // Called when a new scene session is being created.
    // Use this method to select a configuration to create the new scene with.
    return UISceneConfiguration(name: "Default Configuration", sessionRole: connectingSceneSession.role)
}

func application(_ application: UIApplication, didDiscardScenes sceneSessions: Set<UISceneSession>) {
    // Called when the user discards a scene session.
    // If any sessions were discarded while the application was not running, this will be
    // called shortly after application:didFinishLaunchingWithOptions.
    // Use this method to release any resources that were specific to the discarded scenes,
    // as they will not return.
}

// MARK: Facebook Delegate

func application(_ app: UIApplication, open url: URL, options: [UIApplication.OpenURLOptionsKey : Any] = [:]) -> Bool {
    // ApplicationDelegate.shared.application(
    //     app,
    //     open: url,
    //     sourceApplication: options[UIApplication.OpenURLOptionsKey.sourceApplication] as?
    //         String,
    //     annotation: options[UIApplication.OpenURLOptionsKey.annotation]
    // )
}

// MARK: GIDSignIn Delegate

@available(iOS 9.0, *)
func application(_ application: UIApplication, open url: URL, options: [UIApplication.OpenURLOptionsKey : Any]) -> Bool {
    return GIDSignIn.sharedInstance().handle(url)
}

```

AppDelegate.swift (Top Project)

```

// MARK:- GTDSignIn Delegate
func application(_ application: UIApplication, open url: URL, options: [UIApplication.OpenURLOptionsKey : Any]) -> Bool {
    return GTDSignIn.sharedInstance().handle(url)
}

func application(_ application: UIApplication, open url: URL, sourceApplication: String?, annotation: Any) -> Bool {
    return GTDSignIn.sharedInstance().handle(url)
}

func sign(_ signIn: GTDSignIn!, didSignInFor user: GTIDGoogleUser!, withError error: Error?) {
    // ...
    if let error = error {
        print(error.localizedDescription)
        return
    }

    guard let authentication = user.authentication else { return }

    let credential = GoogleAuthProvider.credential(withIDToken: authentication.idToken,
                                                   accessToken: authentication.accessToken)

    Auth.auth().signInWithCredential(credential) { (authResult, error) in
        if let error = error {
            print(error.localizedDescription)
        } else {
            //This is where you should add the functionality of successful login
            //i.e. dismissing this view or push the home view controller etc
            let storyboard = UIStoryboard(name: "Main", bundle: nil)
            let loginSuccess = storyboard.instantiateViewController(withIdentifier:
                "loginSuccess") as! MainTabBarViewController
            UIApplication.shared.windows.first?.switchRootViewController(loginSuccess,
                                                                       animated: true, duration: 0.3, options: .transitionCrossDissolve, completion:
                nil)
        }
    }
}

```

SignUpViewController.swift (Bottom Project)

```

let userCreate = [
    "uid": user!.uid,
    "profile_url": user?.photoURL?.relativeString ??
        "",
    "display_name": user!.displayName
]

ref.setValue(userCreate)

let ref2 =
    UsernameCreate.refs.databaseUsername.child(user!.uid)

let create = [
    "username": self.usernameField.text!.lowercased(),
    "display_name": user!.displayName
]

ref2.setValue(create)

let ref3 =
    Friends.ref.firebaseioFriends.child(
        _usernameField.text!.lowercased())

let friends = [
    "request": [
        "to": ""
    ],
    "friends": [
        "friends": [
            "to": ""
        ]
    ]
]

ref3.setValue(friends)

let alert = UIAlertController(title: "Complete",
                            message: "Your email has been sign up!",
                            preferredStyle: .alert)
let action = UIAlertAction(title: "Done", style:
    .cancel, handler: { _ in
    self.logInSuccess()
})

```

The image shows two instances of the Xcode IDE running side-by-side on a Mac OS desktop. Both instances are connected to an iPhone 11 simulator.

Top Window (SignUpViewController.swift):

```

100 let userCreate = [
101     "uid": user!.uid,
102     "profile_url": user?.photoURL?.relativeString ?? "",
103     "display_name": user!.displayName
104 ]
105
106 ref.setValue(userCreate)
107
108 let ref2 =
109     UsernameCreate.refs.databaseUsername.child(user!.uid)
110
111 let create = [
112     "username": self.usernameField.text!.lowercased(),
113     "display_name": user!.displayName
114 ]
115
116 ref2.setValue(create)
117
118 let ref3 =
119     Friends.refs.databaseFriends.child(self.usernameField.text!.lowercased())
120
121 let friends = [
122     "request": [
123         "0" : ""
124     ],
125     "friends": [
126         "0" : ""
127     ]
128 ]
129
130 ref3.setValue(friends)
131
132
133 let alert = UIAlertController(title: "Complete",
134                             message: "Your email has been sign up!",
135                             preferredStyle: .alert)
136 let action = UIAlertAction(title: "Done", style:
137     .cancel, handler: { [weak self] in
138     self?.loginSuccess()
139 })

```

Bottom Window (SignInViewController.swift):

```

62 @IBAction func didTapGoogleButton(_ sender: Any) {
63     GIDSignIn.sharedInstance().signIn()
64 }
65
66 @IBAction func didTapFacebookButton(_ sender: Any) {
67     loginButton.sendActions(for: .touchUpInside)
68 }
69
70 // MARK: - Facebook Function
71 func loginButton(_ loginButton: FBLLoginButton, didCompleteWith result: LoginManagerLoginResult?, error: Error?) {
72     if AccessToken.current?.tokenString != nil {
73         let credential = FacebookAuthProvider.credential(withAccessToken:
74             AccessToken.current?.tokenString)
75
76         Auth.auth().signIn(with: credential) { (authResult, error) in
77             if let error = error {
78                 print(error.localizedDescription)
79                 return
80             }
81             else {
82                 self.loginSuccess()
83             }
84         }
85     }
86 }
87
88 func loginButtonDidLogOut(_ loginButton: FBLLoginButton) {
89 }
90
91
92 func activityIndicatorRunning(_ run: Bool) {
93     activityIndicator.isHidden = !run
94     if run {
95         activityIndicator.startAnimating()
96     }
97     else {
98         activityIndicator.stopAnimating()
99     }
100 }
101
102 /*
103 */
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2.2. Firebase Storage

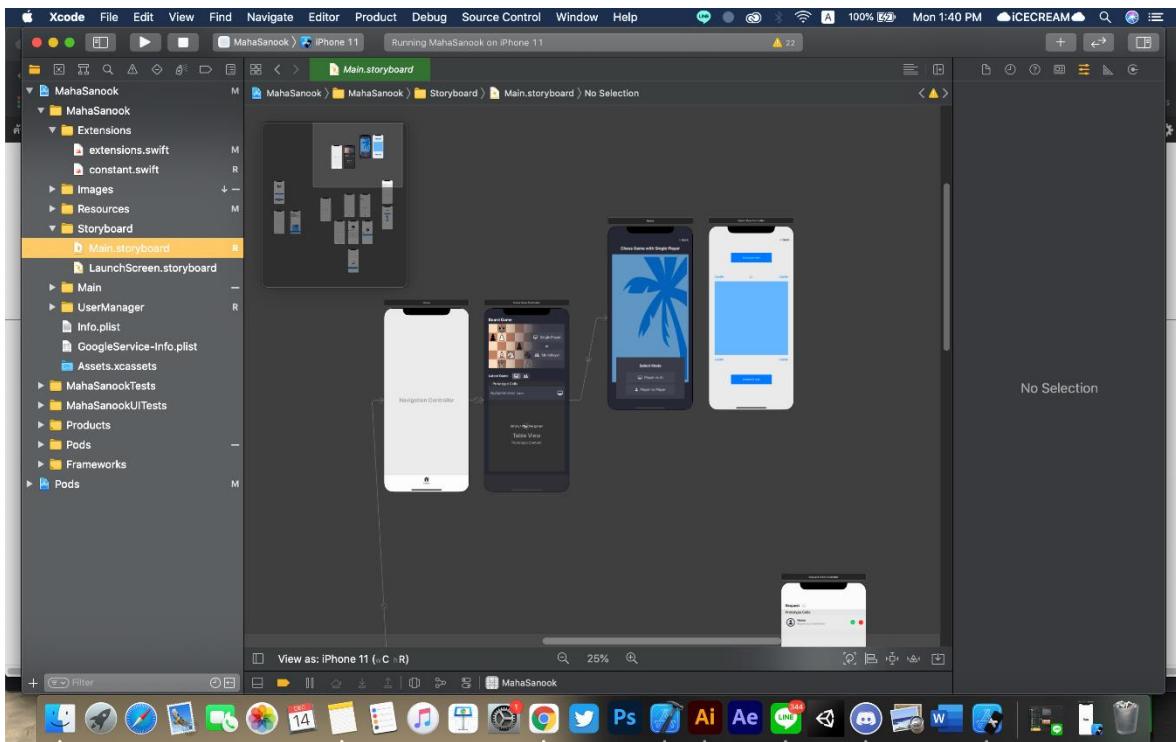
```
func imagePickerController(_ picker: UIImagePickerController, didFinishPickingMediaWithInfo info: [UIImagePickerController.InfoKey : Any]) {
    guard let im: UIImage = info[.editedImage] as? UIImage else { return }
    guard let d: Data = im.jpegData(compressionQuality: 0.5) else { return }

    let md = StorageMetadata()
    md.contentType = "image/png"

    let ref = storageRef.child("profile_img/\(user!.uid).jpg")
    ref.putData(d, metadata: md) { (metadata, error) in
        if error == nil {
            ref.downloadURL(completion: { (url, error) in
                let changeRequest = Auth.auth().currentUser?.createProfileChangeRequest()
                changeRequest?.photoURL = url
                changeRequest?.commitChanges { (error) in
                    if error != nil {
                        self.errorLabel.text = "Error: \(error.localizedDescription)"
                    } else {
                        self.urlProfilePic = url
                    }
                }
            })
        } else {
            print("error \(String(describing: error))")
        }
    }
}

self.dismiss(animated: true, completion: nil)
if let image = info[UIImagePickerController.InfoKey.editedImage] as? UIImage {
    imageProfile.image = image.withRoundedCorners()
}
```

2.3. SwiftChess



The screenshot shows the Xcode interface with the following details:

- Project Navigator:** On the left, the project structure for "MahaSanook" is shown. The "SwiftChess" folder contains "BoardView.swift", "GameViewController.swift" (which is selected), "PieceView.swift", and "PromotionSelection.swift".
- Editor:** The main editor area displays the code for "GameViewController.swift". The code handles alert displays, date calculations, and database operations for game history.
- Assistant Editor:** The right side of the screen shows the "GameHistory" database structure, including tables for "Game", "Player", and "Match".
- Utilities:** The bottom of the screen features the Xcode dock with various icons for different tools and services.

```
// MARK: - Alerts
func showAlert(title: String, message: String) {
    let alertController = UIAlertController(title: title, message: message, preferredStyle: .alert)
    let okAction = UIAlertAction(title: "OK", style: .default, handler: { _ in
        if title == "Checkmate!" { //self.title == "Player vs AI" || self.title == "Player vs Player"
            //Date
            let date = Date()
            let calendar = Calendar.current
            let components = calendar.dateComponents([.year, .month, .day], from: date)

            let year = components.year
            let month = components.month
            let day = components.day

            let hour = calendar.component(.hour, from: date)
            let minutes = calendar.component(.minute, from: date)
            let second = calendar.component(.second, from: date)

            let dateTime = "\(year)\(\month)\(\day)\(\hour):\(\minutes)\(\second)"

            if self.title == "Player vs AI" {
                let ref = Database.database().reference()
                let gameRef = GameHistory.refs.Game.child(Auth.auth().currentUser!.uid).child("single")
                ref.child("game").child(Auth.auth().currentUser!.uid).child("single")
                    .observeSingleEvent(of: .value, with: { (snapshot) in
                        guard var snap = snapshot.value as? [String: String] else {
                            print("nonono")
                        }
                        if message == "Black wins!" {
                            gameRef.setValue(["dateTime": "\(dateTime)", "AI Wins! (Versus AI)"])
                        }
                    })
            }
        }
    })
    alertController.addAction(okAction)
    self.present(alertController, animated: true, completion: nil)
}
```

The screenshot shows the Xcode IDE with the following details:

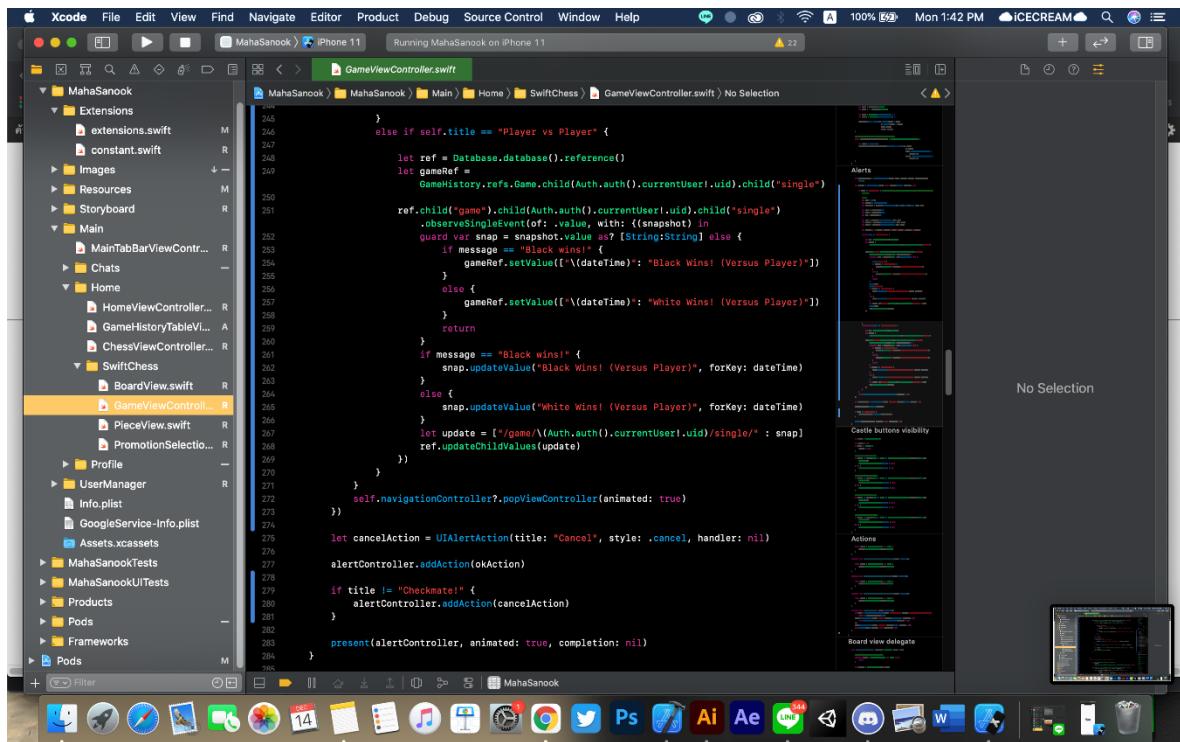
- Project Navigator:** Shows the project structure for "MahaSanook". The "SwiftChess" folder contains "GameView.swift" which is currently selected.
- Editor:** Displays the code for "GameView.swift". The code handles database updates for game results based on user input and AI moves.
- Right Panel:** Shows various interface builder files for "Main", "Chats", and "Home" screens, including "BoardView.swift", "GameView.swift", "PieceView.swift", and "PromotionSelection.swift".
- Status Bar:** Shows the build status as "No Selection".

```
ref.child("game").child(Auth.auth().currentUser!.uid).child("single")
    .observeSingleEvent(of: .value, with: {(snapshot) in
        guard var snap = snapshot.value as? [String:String] else {
            print("oooooooooo")
            if message == "Black wins!" {
                gameRef.setValue(["(dateTime)": "AI Wins! (Versus AI)"])
            } else {
                gameRef.setValue(["(dateTime)": "Player Wins! (Versus AI)"])
            }
            return
        }
        print(snap)
        print("yyyyyyyyy")
        if message == "Black wins!" {
            snap.updateValue("AI Wins! (Versus AI)", forKey: dateTime)
        } else {
            snap.updateValue("Player Wins! (Versus AI)", forKey: dateTime)
        }
        let update = ["game":\((Auth.auth().currentUser!.uid)/single": snap]
        print(snap)
        ref.updateChildValues(update)
    })
}

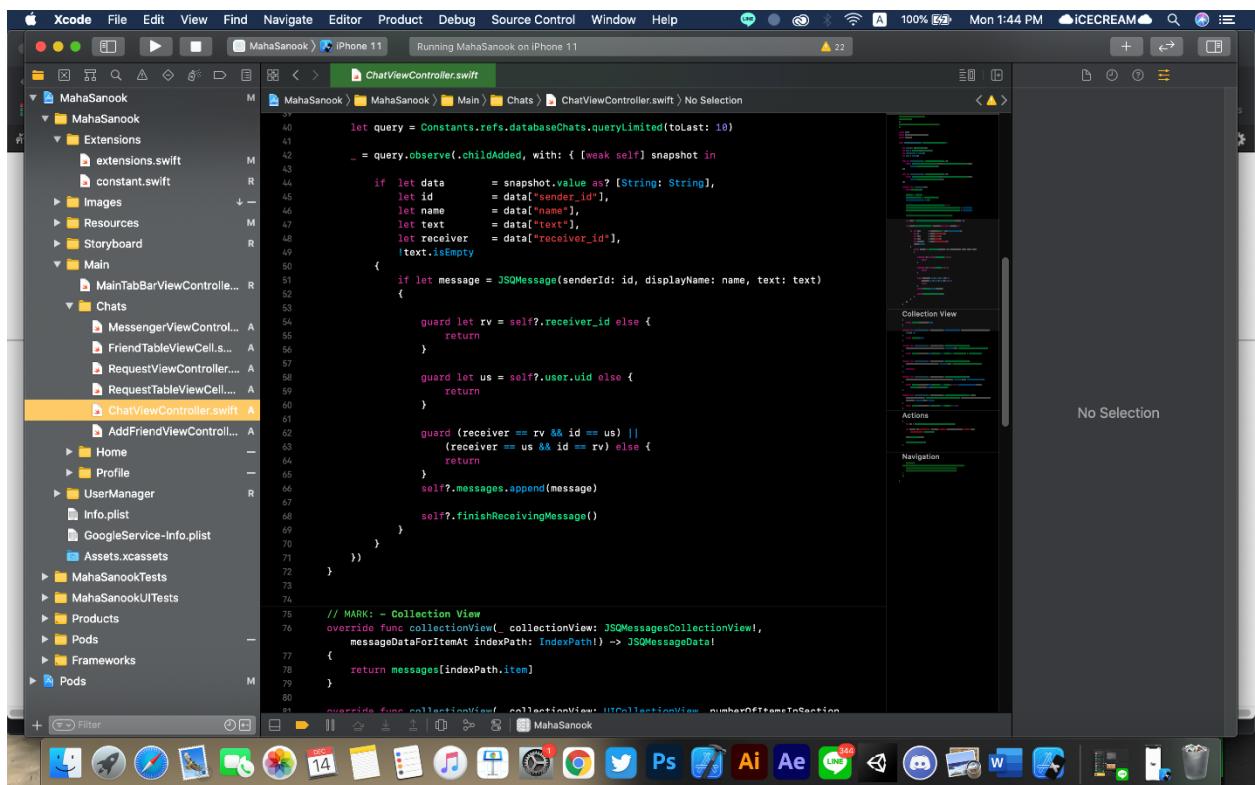
else if self.title == "Player vs Player" {

    let ref = Database.database().reference()
    let gameRef =
        Gamehistory.refs.Game.child(Auth.auth().currentUser!.uid).child("single")

    ref.child("game").child(Auth.auth().currentUser!.uid).child("single")
        .observeSingleEvent(of: .value, with: {(snapshot) in
            guard var snap = snapshot.value as? [String:String] else {
                if message == "Black wins!" {
                    gameRef.setValue(["(dateTime)": "Black Wins! (Versus Player)"])
                }
            }
        })
}
```

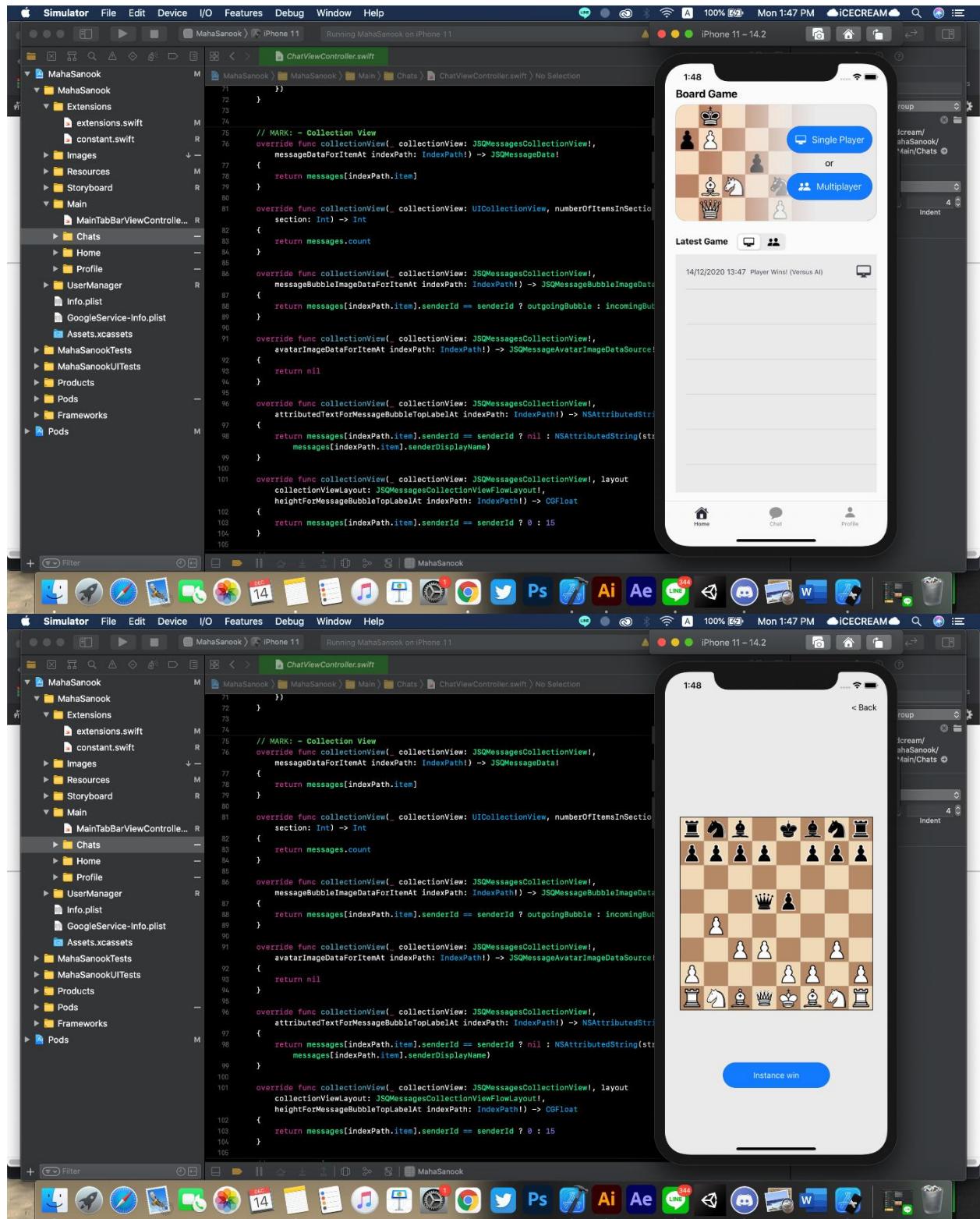


2.4. JSQMessagesViewController

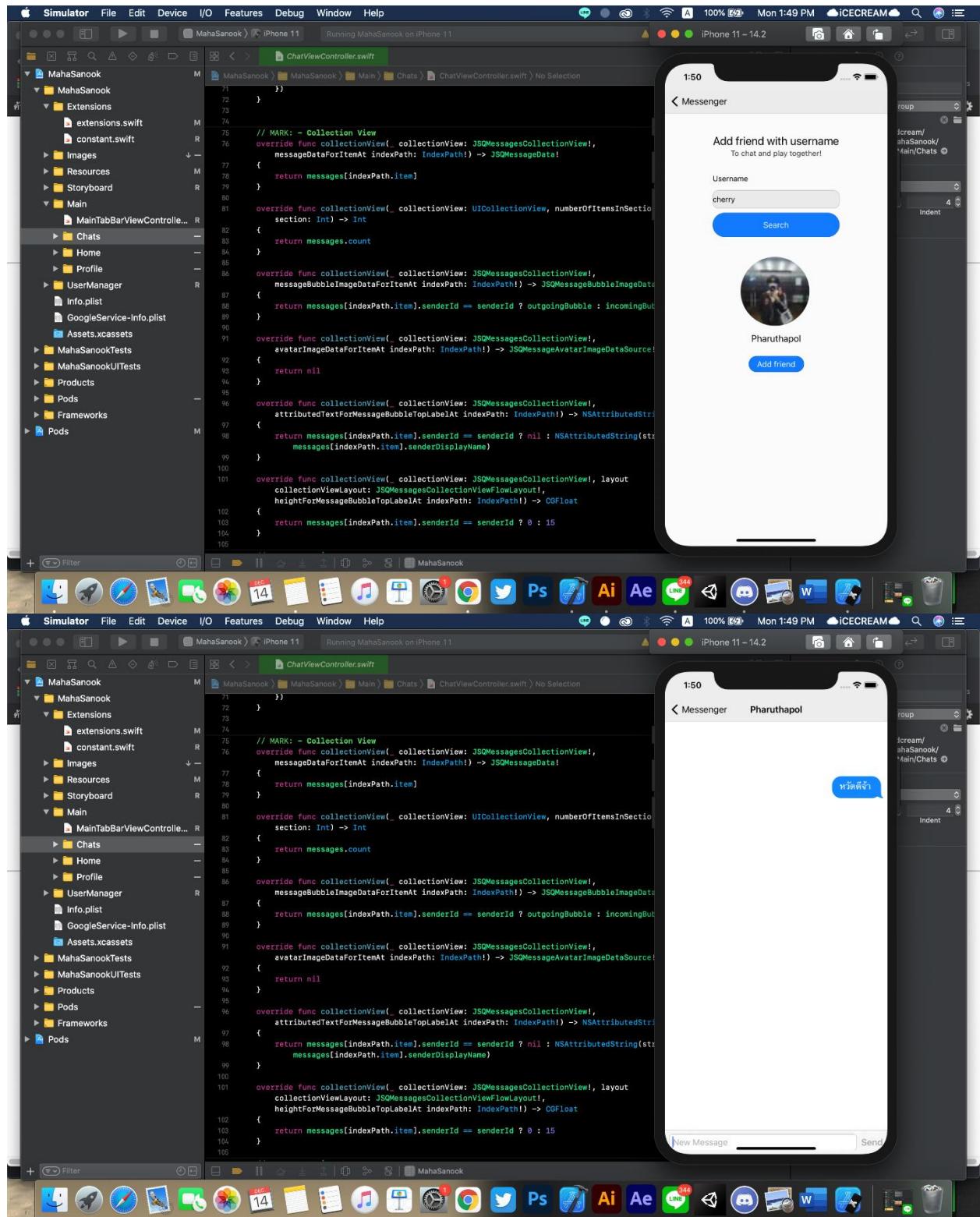


3. ตัวอย่างหน้าแอปพลิเคชัน MahaSanook

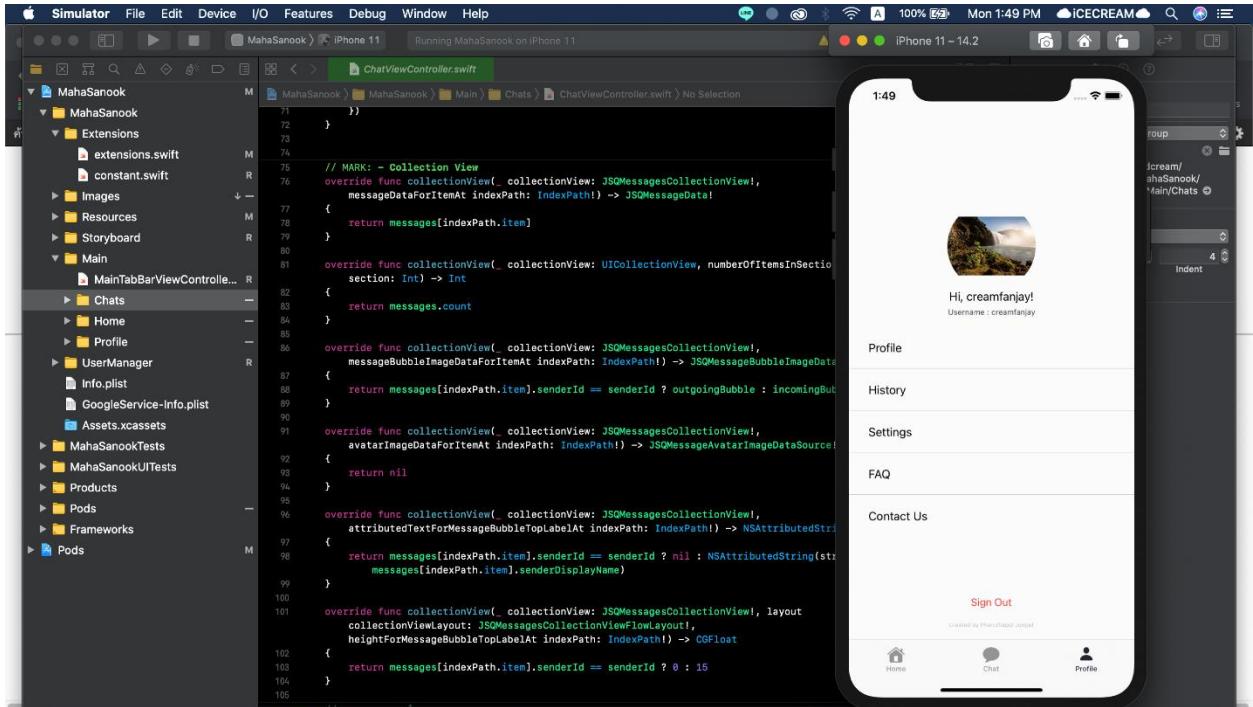
หน้า Home สำหรับเล่นหมากรุกและแสดงประวัติการเล่น



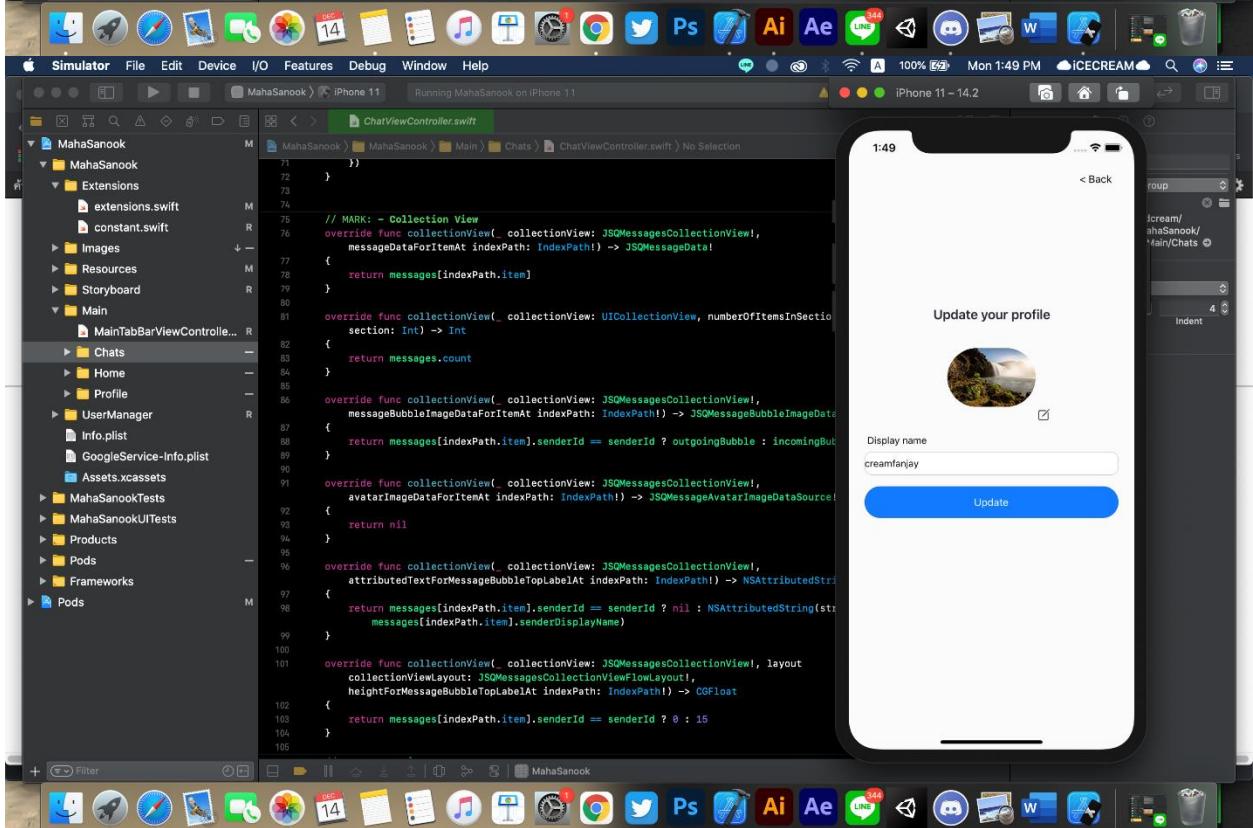
หน้า Chat สำหรับแขกบ้านเพื่อน



หน้า Profile สำหรับแก้ไขโปรไฟล์



The screenshot shows the Xcode interface with the ChatViewController.swift file open in the editor. The code implements a UICollectionViewDataSource for displaying messages. It includes methods for collection view layout, item height, and cell configuration. The UICollectionView is used to show a list of messages, where each message is represented by a cell containing an image, text, and a timestamp.



The second part of the screenshot shows the same Xcode setup, but the iPhone 11 simulator displays a modal dialog titled "Update your profile". The dialog contains a placeholder image, a text input field with the value "creamfanjay", and a blue "Update" button at the bottom.