📱 iOS Subscription App Documentation

🔍 Project Overview

This app is a **subscription-based iOS application** built with **UIKit and StoreKit 2** that allows users to unlock premium products through different plans (e.g., monthly, yearly). The app integrates offer codes, promotional offers, and handles subscription restoration seamlessly, providing users with a smooth and intuitive subscription experience, It simulates a complete StoreKit 2 subscription flow with local `.storekit` testing support.

👨‍💻 Tools & Technologies Used

📌 Development Stack:

- **Xcode** – For development and testing.
- **Language**: Swift
- **UI Framework**: UIKit (with Storyboards) and Core UI rendering and navigation logic.
- **Subscription Framework**: StoreKit 2
- **StoreKit Configuration File** (`.storekit`) – For simulating purchases, offers, trials.
- **Swift 6**
- **Simulator (iOS 18+)** : – For testing StoreKit behavior without a physical device.

💡 UIKit Core Concepts Used:

- `UITableView` for plan selection (`SelectPlanTableViewCell`)
- `UIViewController` lifecycle and navigation (`SubscriptionViewController`)
- `@IBAction`, `@IBOutlet`, and storyboard-based UI linking
- Programmatic updates to table views for subscription states
- Custom cell designs for displaying subscription plans

🧱 StoreKit 2 Core Concepts:

- `Product` and `Transaction` APIs for in-app purchases
- `AppStore.presentOfferCodeRedeemSheet` for promo code selection sheet
- `.currentEntitlements` sequence for checking active plans
- Promotional offer parsing via `Product.subscription?.promotionalOffers`

🧭 App Workflow

1. 🔓 Unlock Premium Access with Plans

After launching the app, users are presented with multiple subscription options (e.g., Monthly, Yearly) to unlock exclusive product content.

- The plans are fetched dynamically from a local `.storekit` file.
- Selecting a plan leads to a secure purchase flow.
- Once subscribed, premium items or features are unlocked.

2. 🗂️ Managing Subscriptions

Users can:

- View their current subscription status.
- Switch between plans (e.g., upgrade from monthly to yearly).
- Cancel or manage their subscription via native Manage Subscription options.
- Subscription status is updated in real-time using `Transaction.currentEntitlements`.

3. 🏷️ Redeeming Offer Codes

Users can apply Offer Codes using the native StoreKit 2 sheet:

- A button triggers `AppStore.presentOfferCodeRedeemSheet`.
- If a valid code is entered, the discounted or free access is applied instantly.
- The redeemed `offerID` is logged and tied to the subscription.

4. 💰 Promotional Offers

Users may also benefit from introductory or promotional offers, such as:

- Free trial for **7** days
- Discounted **monthly/yearly** pricing

Promotional eligibility is checked during the product fetch, and UI is dynamically adjusted to show available offers.

5. 🔄 Restore Purchases

For users reinstalling the app or switching devices:

- A Restore Purchase option allows recovering active subscriptions.
- It fetches transactions via `Transaction.currentEntitlements` and re-enables access to the associated plan.

6. 👉🏻 Importance

This app acts as a complete **subscription management demo** using **StoreKit 2** and allows testing:

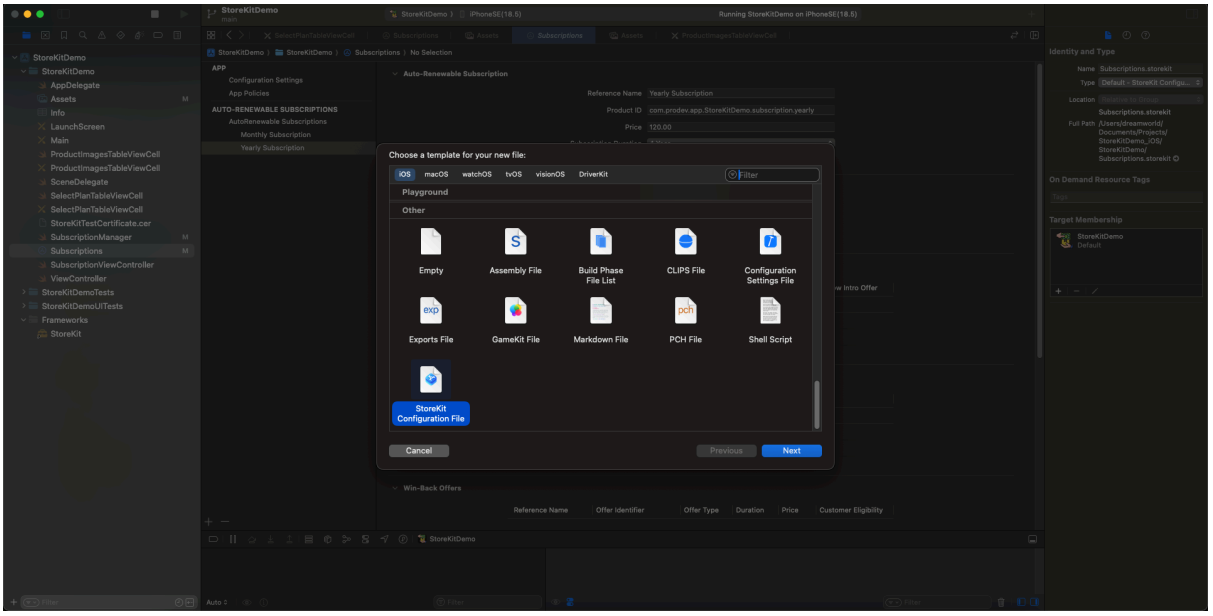
- 💳 Auto-renewable subscriptions (Monthly & Yearly)
- 🧪 Introductory offers and free trials
- 🏷️ Redeeming offer/promo codes locally
- 🔁 Restoring purchases
- ❌ Handling errors (expired, revoked, or failed)

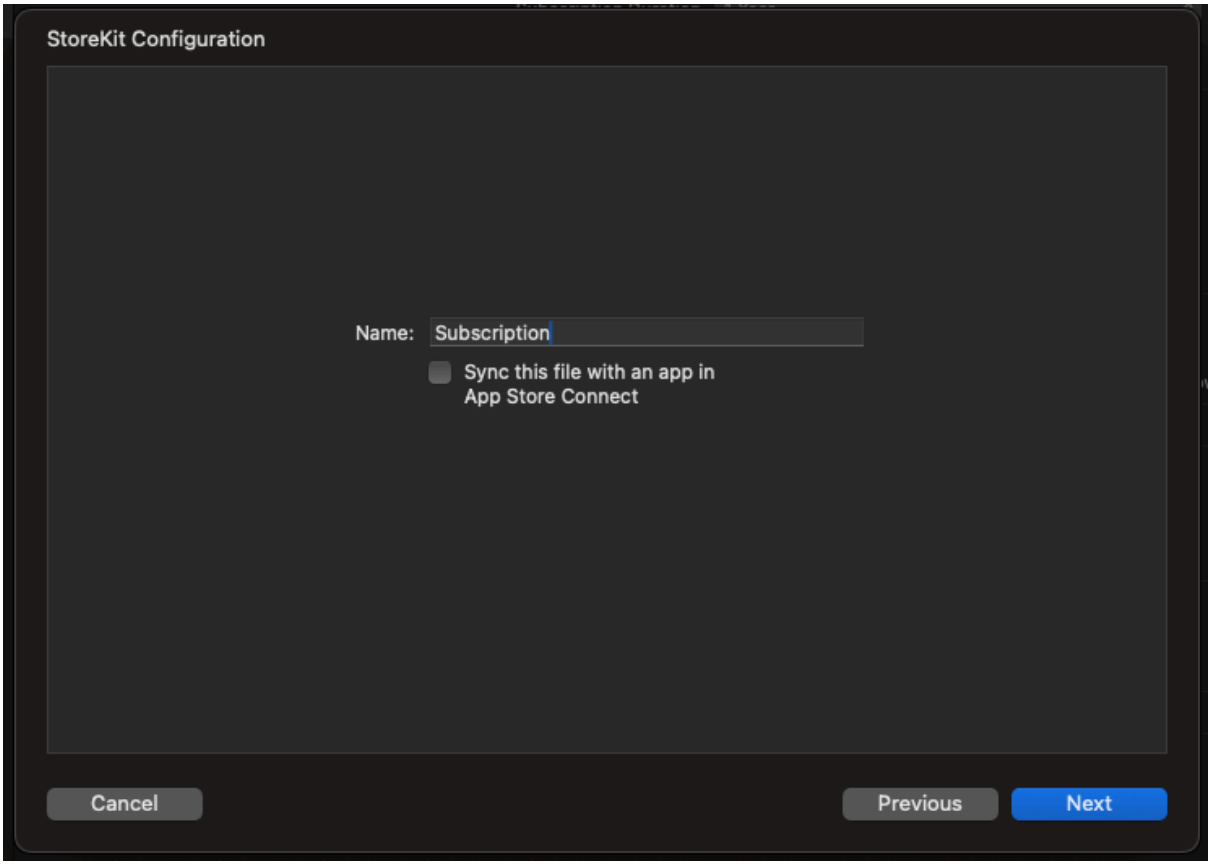
It is a **great testing tool** for any developer working on monetization through in-app subscriptions, and provides a **realistic simulation** of how offers behave in production—all without needing App Store Connect setup.

7. 🔮 Future Scope

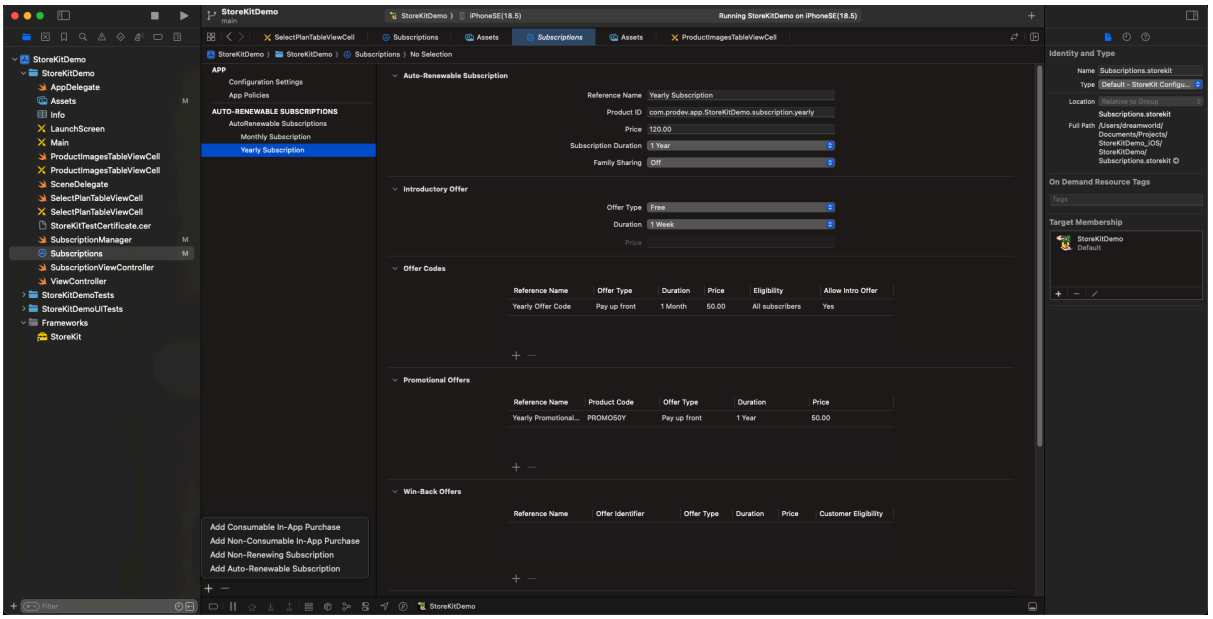
- 🔐 Integrate with real App Store Connect subscriptions & backend validation
- 📊 Add analytics for offer code redemption behavior
- 🌐 Add localization and multi-currency support
- 🧠 Use AI for recommending plans or retry flows
- ☁️ Connect with Firebase/CloudKit for syncing purchase states across devices
- 🎨 Improve UI with SwiftUI hybrid architecture

8. 👉 Creating and Usage of .storekit file

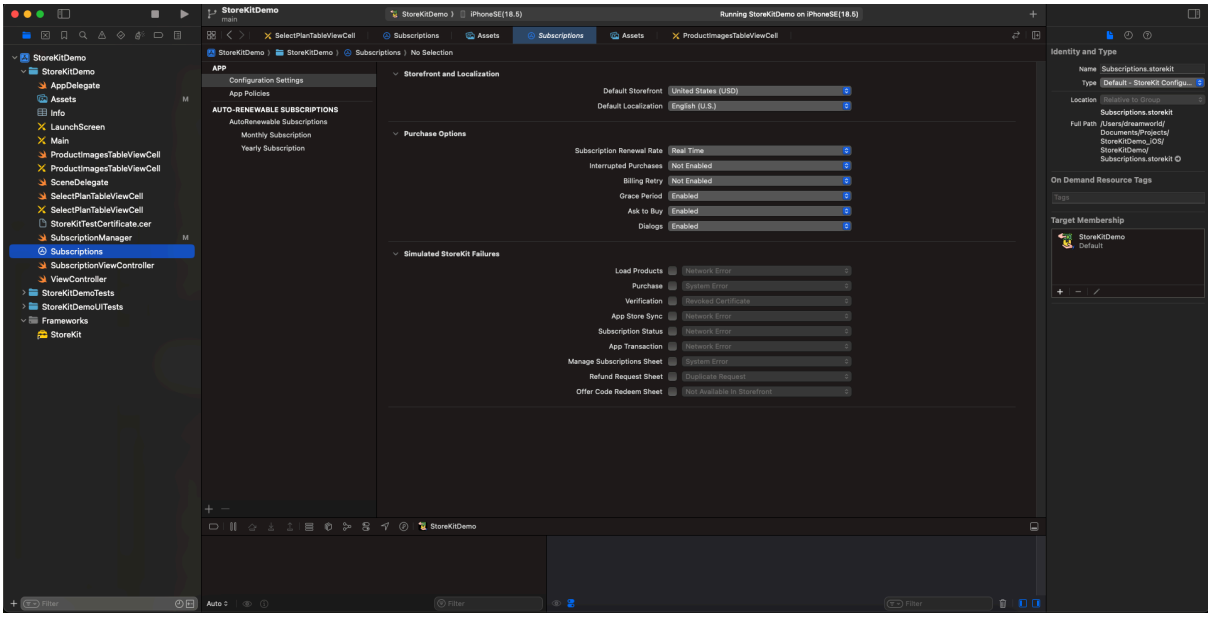




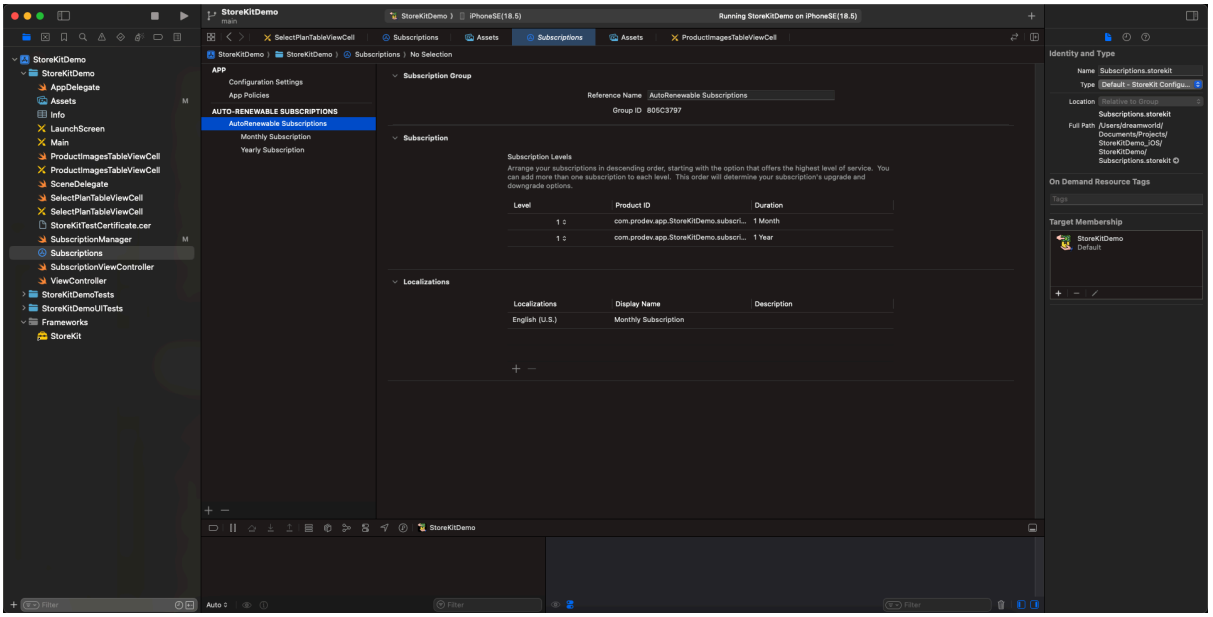
- **To create a `.storekit` file**, go to the **left panel**, right-click, and choose **New File** from the template options. In the template window (as shown in the screenshot), select **StoreKit Configuration File**, then tap **Next**.
- Give your file a suitable name based on your configuration. If you want to sync this `.storekit` file with **App Store Connect**, you can check the corresponding option. Finally, click **Next** to add the file to your project directory.



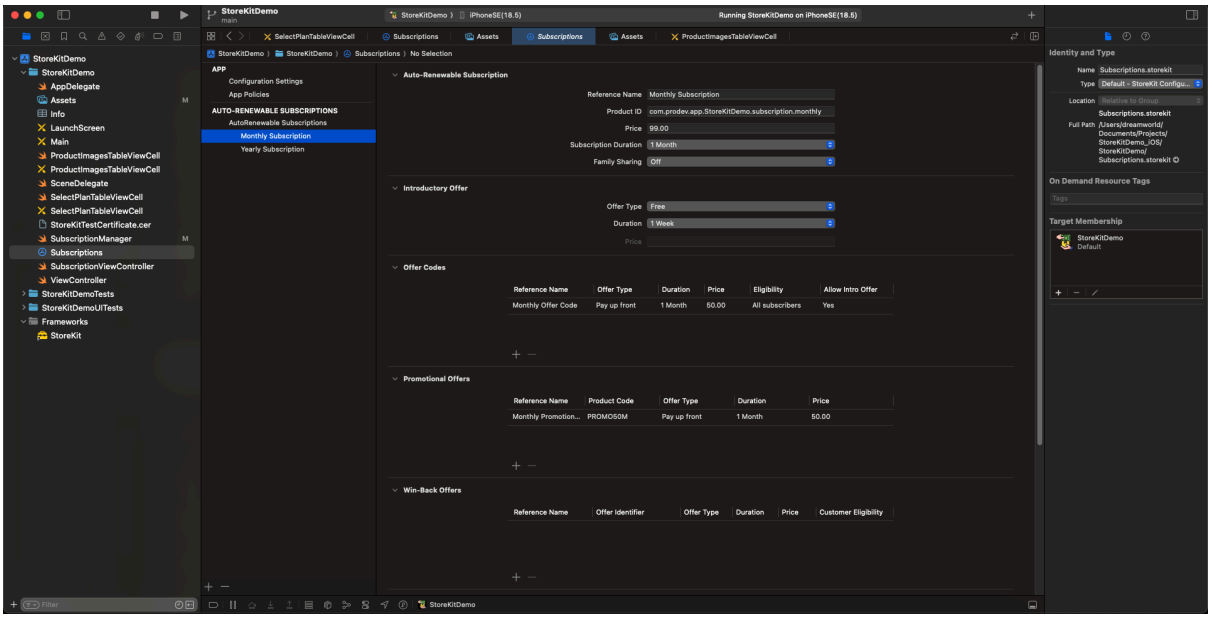
- You can see in this screenshot you can create any In-app purchase plan from this plus icon tap and after you successfully created any plan from the .storekit file it will look like this as i shown in this screenshot.



- You can configure **In-app purchases localization,** set any purchase options according your need and also you can **test failure cases** from the .storekit file check out in this screenshot.

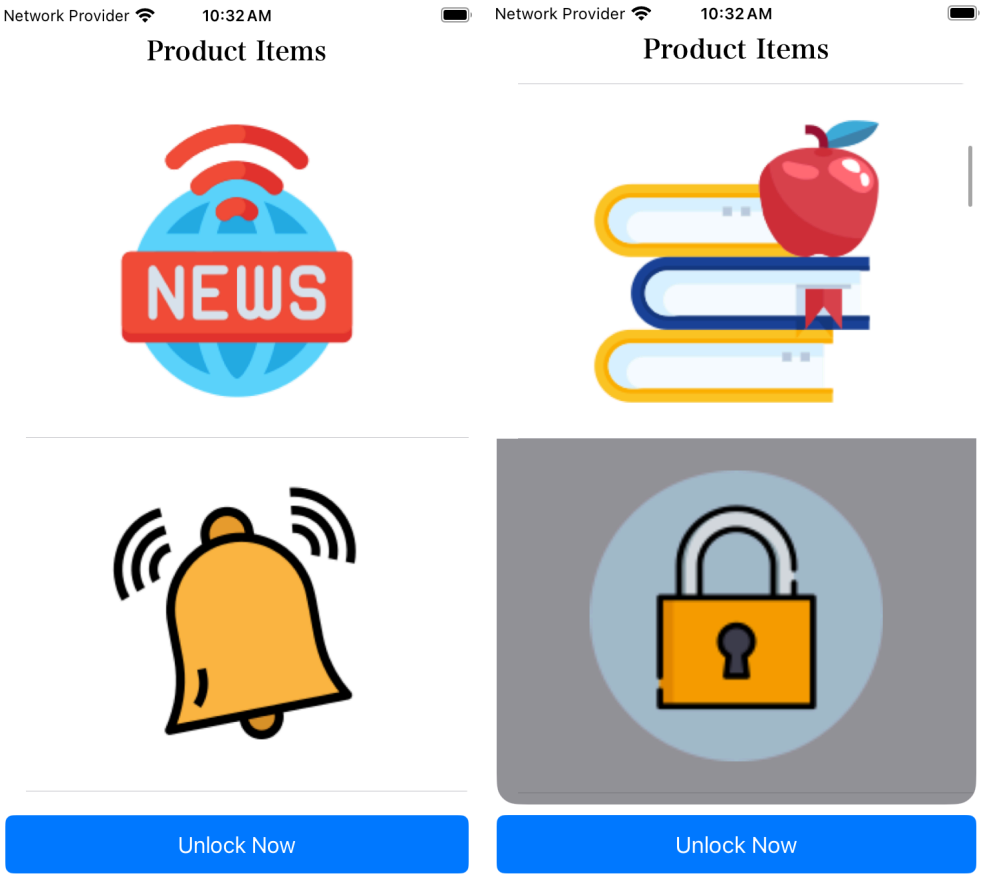


- Currently we have created one subscription group with **Auto-Renewable Monthly and Yearly Subscription Plans** also you can add and manage localization from here see in this screenshot.

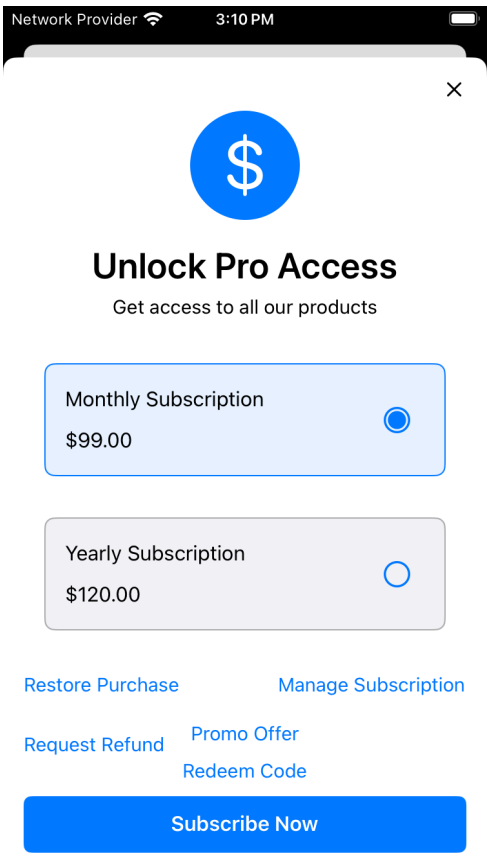


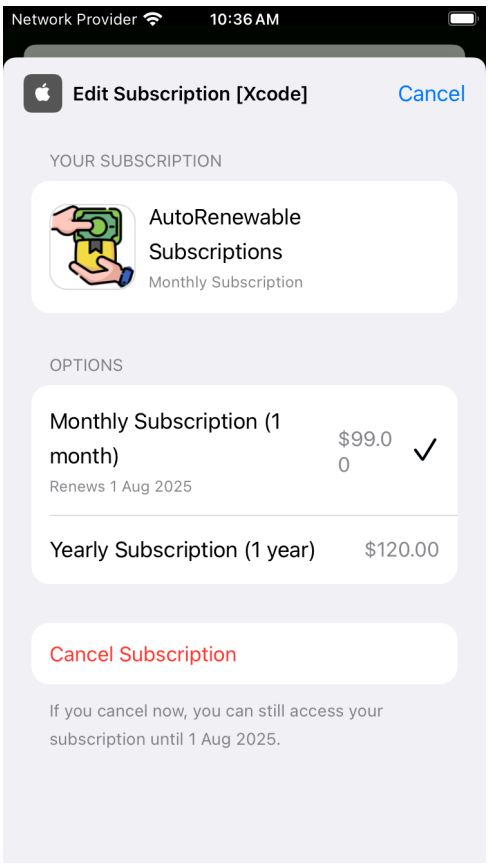
- Now finally check this screenshot after you successfully Created **Monthly/Yearly** subscription plans it will look like this here we configured **Reference-Name, Product ID, Price and Duration** and also we added **Introductory Offer, Offer codes and Promotional Offers**.

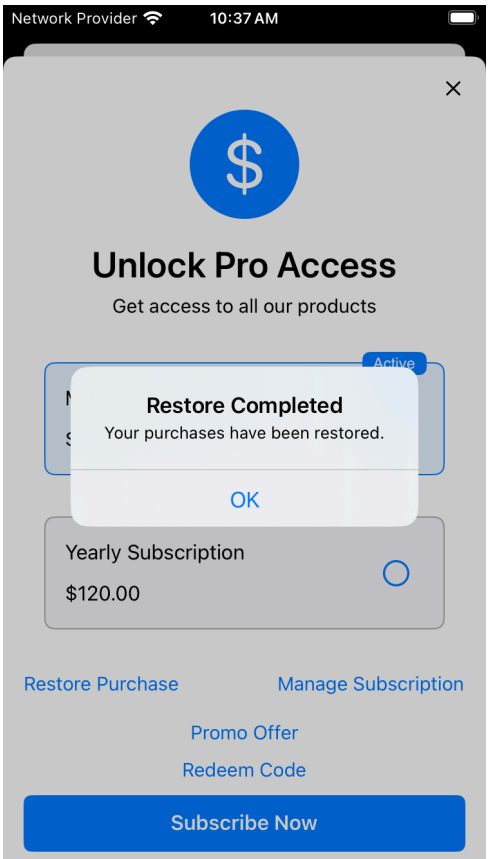
9. 📲 Usage of this subscription plans in App.

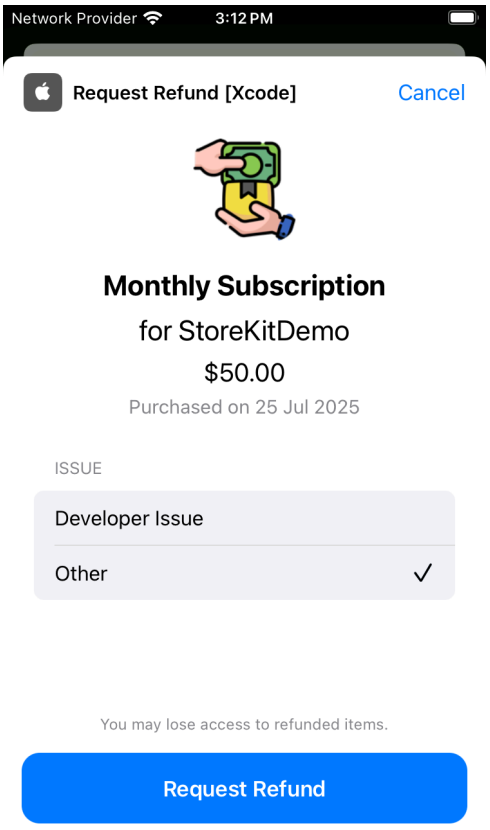


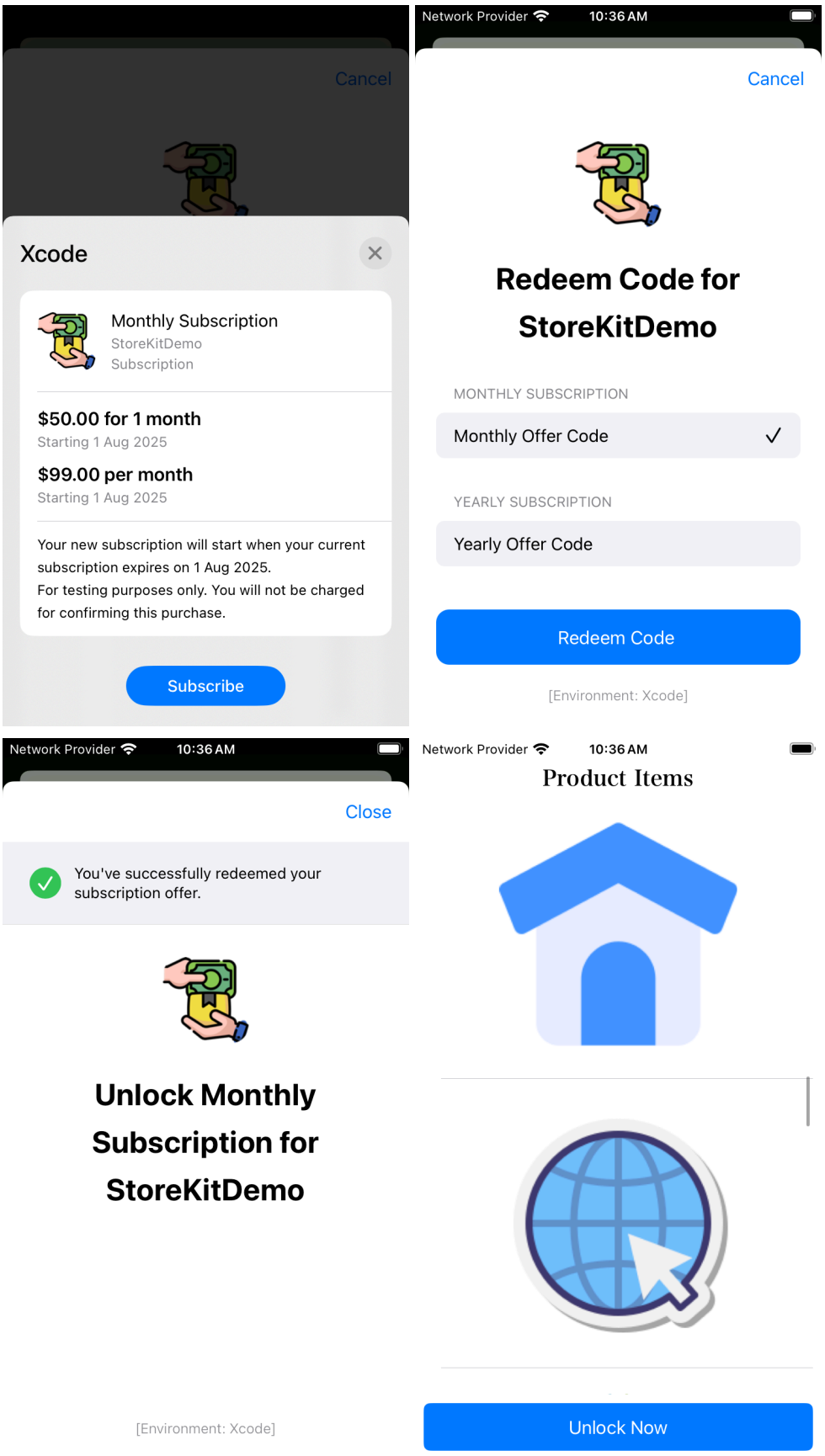
- **This is the main screen for our product items.** The first three products are available for free, while the rest are locked. To unlock all products, you'll need to purchase a subscription plan. Simply tap the **"Unlock Now"** button to view and choose a subscription plan.


Network Provider
3:10 PM
Unlock Pro Access
Get access to all our products
Monthly Subscription
$99.00
Yearly Subscription
$120.00
Restore Purchase
Manage Subscription
Request Refund
Promo Offer
Redeem Code
Subscribe Now


Network Provider
10:36 AM
Edit Subscription [Xcode]
Cancel
YOUR SUBSCRIPTION
AutoRenewable Subscriptions
Monthly Subscription
OPTIONS
Monthly Subscription (1 month)
$99.00
Renews 1 Aug 2025
Yearly Subscription (1 year)
$120.00
Cancel Subscription
If you cancel now, you can still access your subscription until 1 Aug 2025.

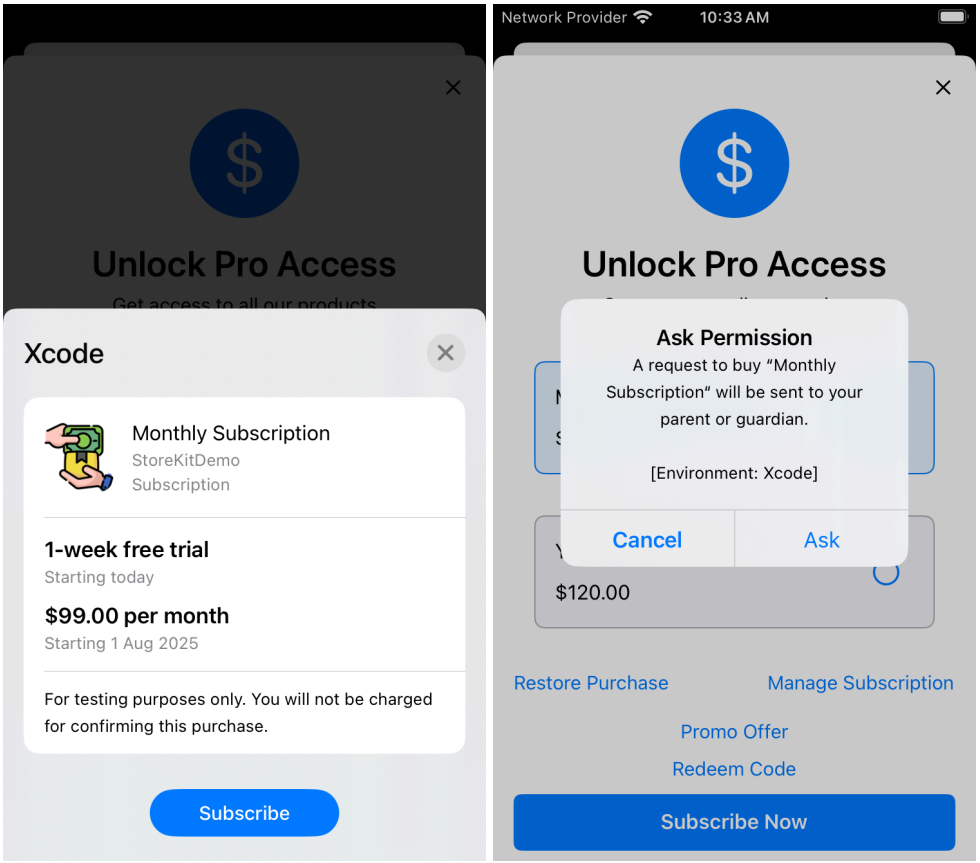

Network Provider
10:37 AM
Unlock Pro Access
Get access to all our products
Active
Restore Completed
Your purchases have been restored.
OK
Yearly Subscription
$120.00
Restore Purchase
Manage Subscription
Promo Offer
Redeem Code
Subscribe Now


Network Provider
3:12 PM
Request Refund [Xcode]
Cancel
Monthly Subscription
for StoreKitDemo
$50.00
Purchased on 25 Jul 2025
ISSUE
Developer Issue
Other
You may lose access to refunded items.
Request Refund

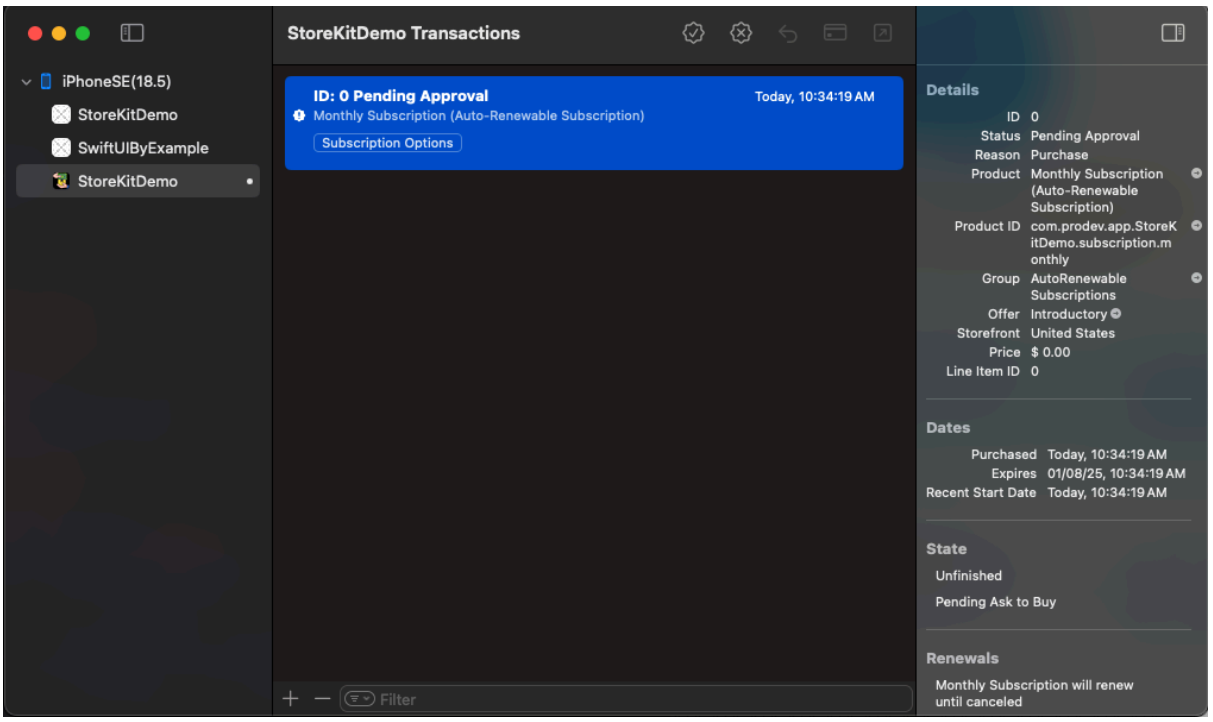


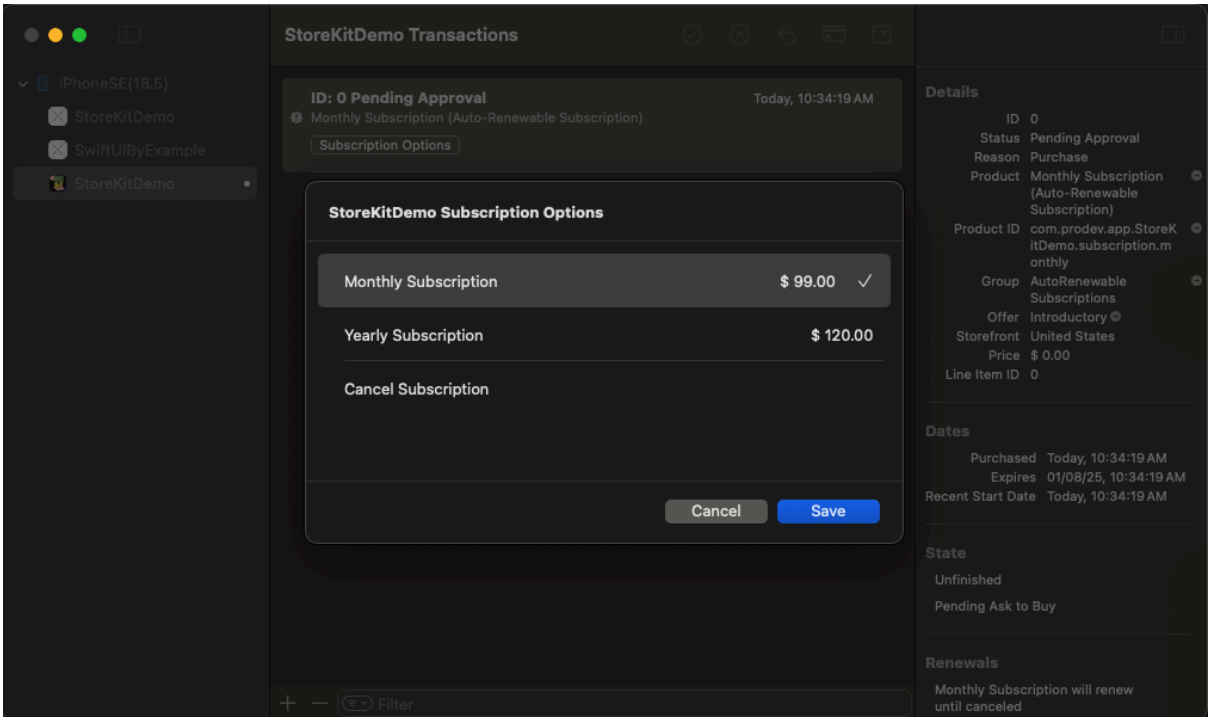
- **From this subscription screen**, you can choose and purchase a **Monthly or Yearly plan**. Once your subscription is active, you can manage it anytime by tapping the **Manage Subscription** button.

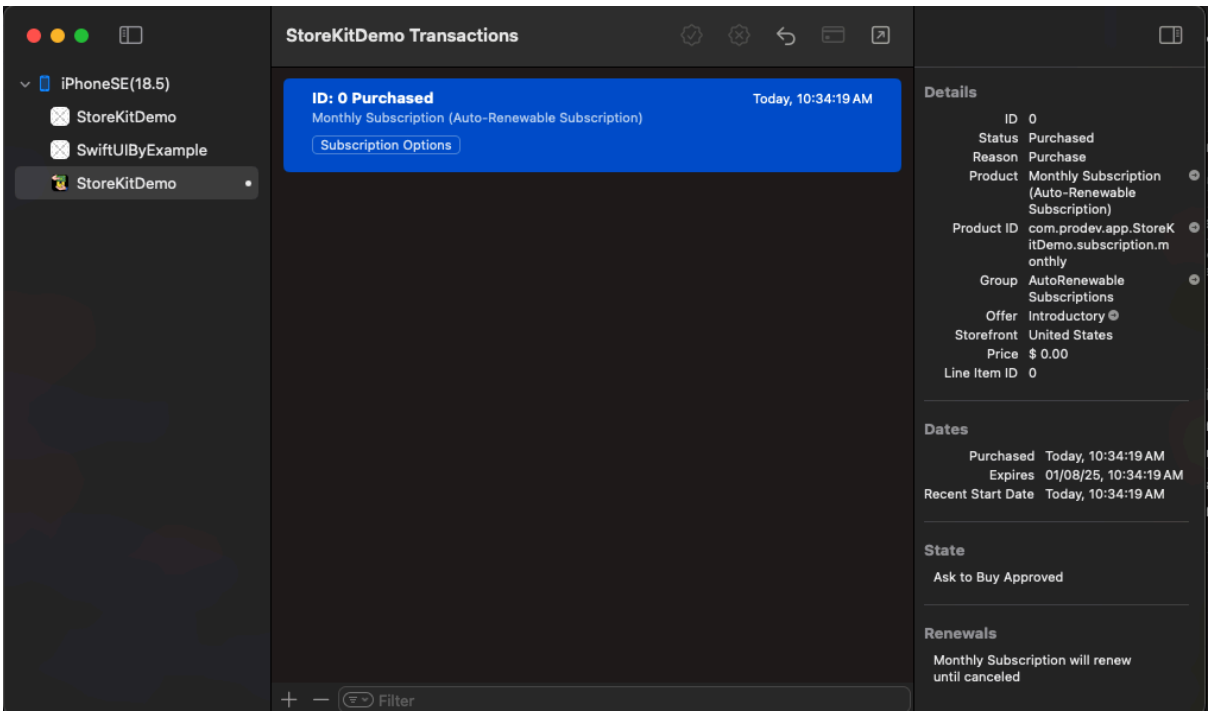
- You can also **Redeem offer codes** using the **Redeem Code** button, and if promotional offers are available, access them via the **Promo Offer** button.
- You can also **Request Refund** using the **Request Refund** button.
- To subscribe directly, simply select a plan and tap the **Subscribe Now** button.

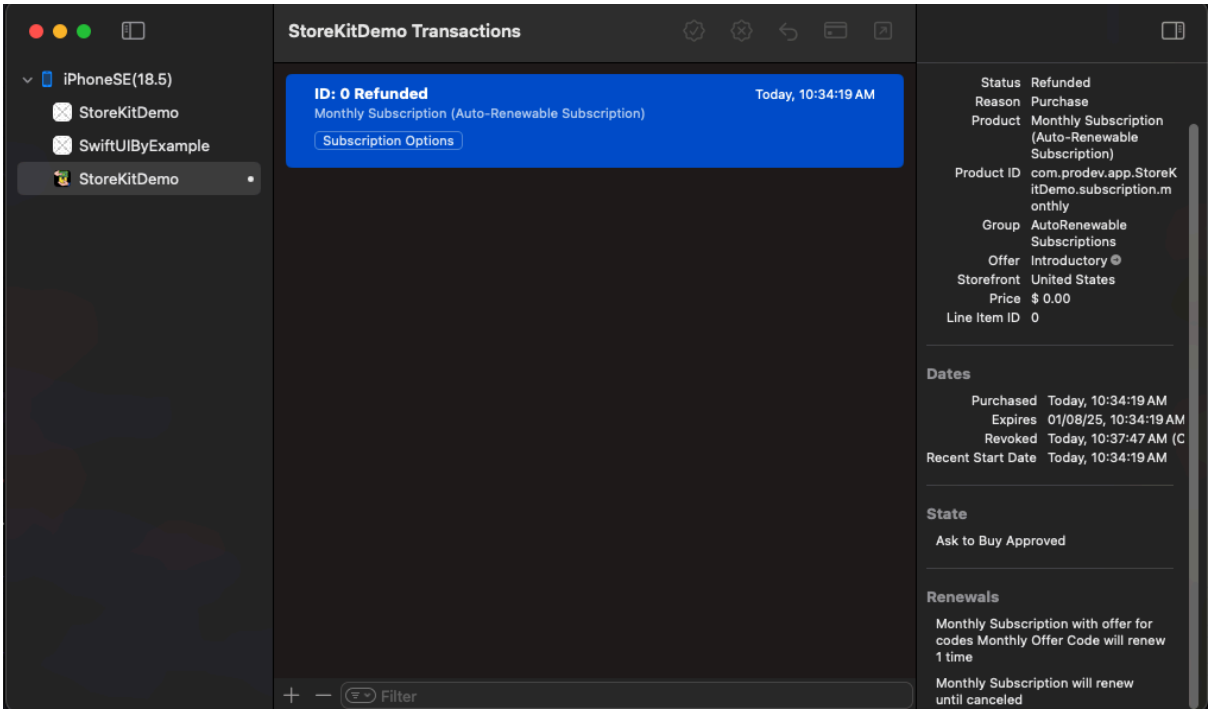


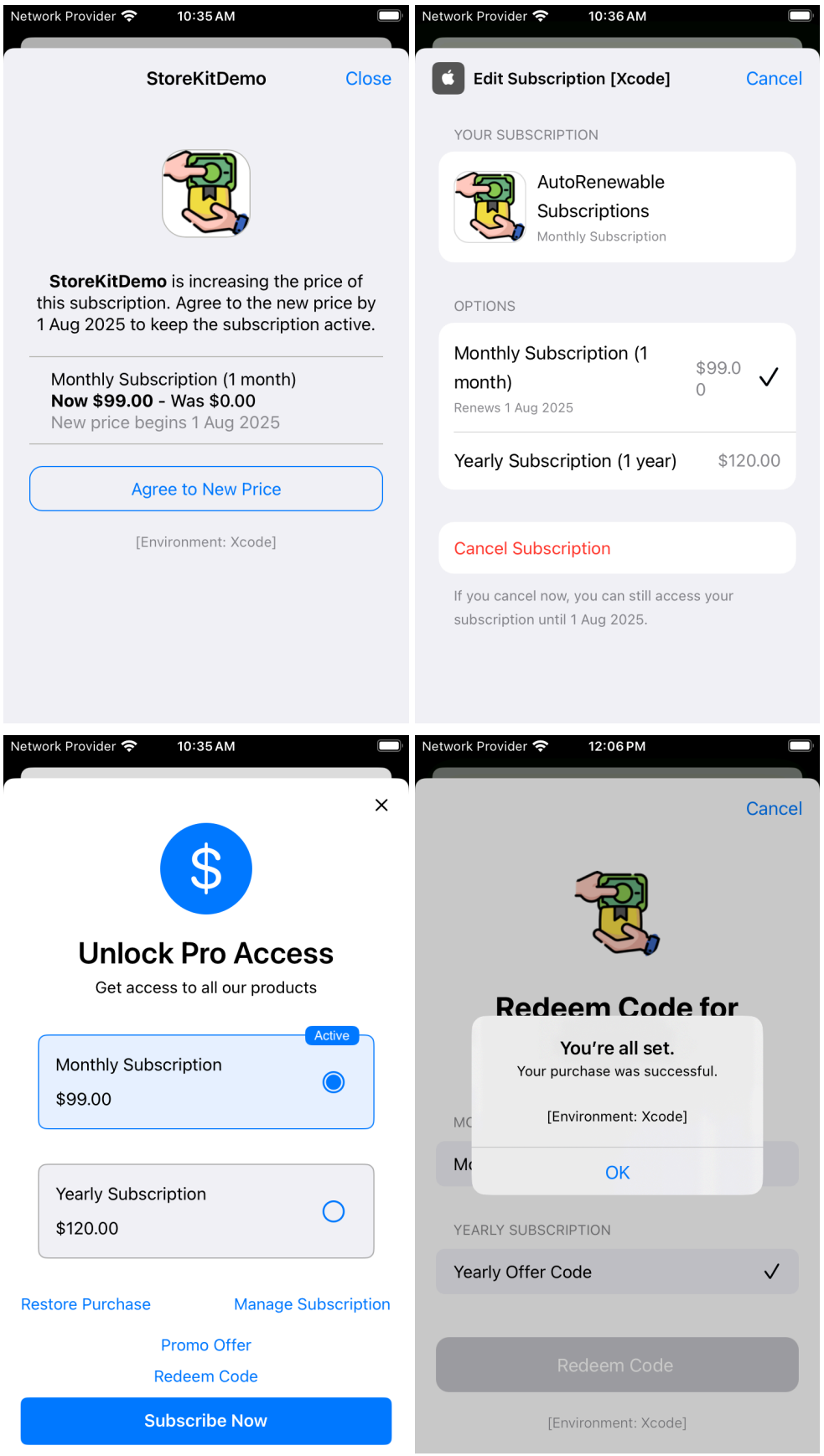
- When you tap the **Subscribe Now** button, the **subscription sheet** will appear. After tapping **Subscribe**, if parental permission is required for the purchase, an **Ask Permission** prompt will be shown. Otherwise, the subscription will be processed directly.


iPhoneSE(18.5)
StoreKitDemo
SwiftUIByExample
StoreKitDemo
StoreKitDemo Transactions
ID: 0 Pending Approval
Today, 10:34:19 AM
Monthly Subscription (Auto-Renewable Subscription)
Subscription Options
Filter
Details
ID 0
Status Pending Approval
Reason Purchase
Product Monthly Subscription (Auto-Renewable Subscription)
Product ID com.prodev.app.StoreKitDemo.subscription.monthly
Group AutoRenewable Subscriptions
Offer Introductory
Storefront United States
Price $ 0.00
Line Item ID 0
Dates
Purchased Today, 10:34:19 AM
Expires 01/08/25, 10:34:19 AM
Recent Start Date Today, 10:34:19 AM
State
Unfinished
Pending Ask to Buy
Renewals
Monthly Subscription will renew until canceled


StoreKitDemo Transactions
ID: 0 Pending Approval
Today, 10:34:19 AM
Monthly Subscription (Auto-Renewable Subscription)
Subscription Options
StoreKitDemo Subscription Options
Monthly Subscription $ 99.00
Yearly Subscription $ 120.00
Cancel Subscription
Cancel
Save


StoreKitDemo Transactions
iPhoneSE(18.5)
StoreKitDemo
SwiftUIByExample
StoreKitDemo
ID: 0 Purchased
Today, 10:34:19 AM
Monthly Subscription (Auto-Renewable Subscription)
Subscription Options
Filter
Details
ID 0
Status Purchased
Reason Purchase
Product Monthly Subscription (Auto-Renewable Subscription)
Product ID com.prodev.app.StoreKitDemo.subscription.monthly
Group AutoRenewable Subscriptions
Offer Introductory
Storefront United States
Price $ 0.00
Line Item ID 0
Dates
Purchased Today, 10:34:19 AM
Expires 01/08/25, 10:34:19 AM
Recent Start Date Today, 10:34:19 AM
State
Ask to Buy Approved
Renewals
Monthly Subscription will renew until canceled

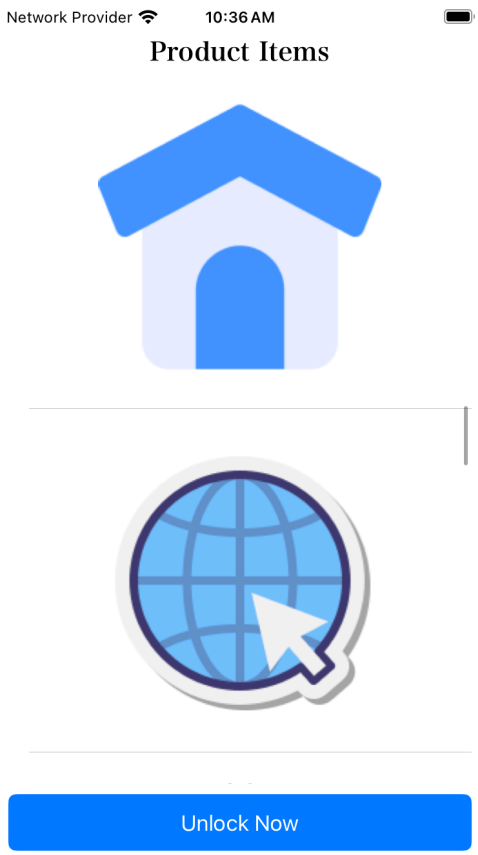

StoreKitDemo Transactions
iPhoneSE(18.5)
StoreKitDemo
SwiftUIByExample
StoreKitDemo
ID: 0 Refunded
Today, 10:34:19 AM
Monthly Subscription (Auto-Renewable Subscription)
Subscription Options
Filter
Status Refunded
Reason Purchase
Product Monthly Subscription (Auto-Renewable Subscription)
Product ID com.prodev.app.StoreKitDemo.subscription.monthly
Group AutoRenewable Subscriptions
Offer Introductory
Storefront United States
Price $ 0.00
Line Item ID 0
Dates
Purchased Today, 10:34:19 AM
Expires 01/08/25, 10:34:19 AM
Revoked Today, 10:37:47 AM (C
Recent Start Date Today, 10:34:19 AM
State
Ask to Buy Approved
Renewals
Monthly Subscription with offer for codes Monthly Offer Code will renew 1 time
Monthly Subscription will renew until canceled



- If a **permission popup** appears, you'll need to grant permission from the **StoreKit Transaction panel from the Xcode**. From this panel, you can **approve or cancel permission requests**, **manage subscriptions**, **view transaction history**, check **purchase and expiration dates**, and see any **applied offers**.

- Additionally, you can **increase subscription prices**, which will prompt users with a **price increase confirmation sheet in the app**. You can also **refund**, **cancel**, or **upgrade plans**, along with many other actions — all from this single panel.

10. 🔓 Unlocked Products.



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