

Xcode프로젝트 Tuist 도입하기

Tuist란?

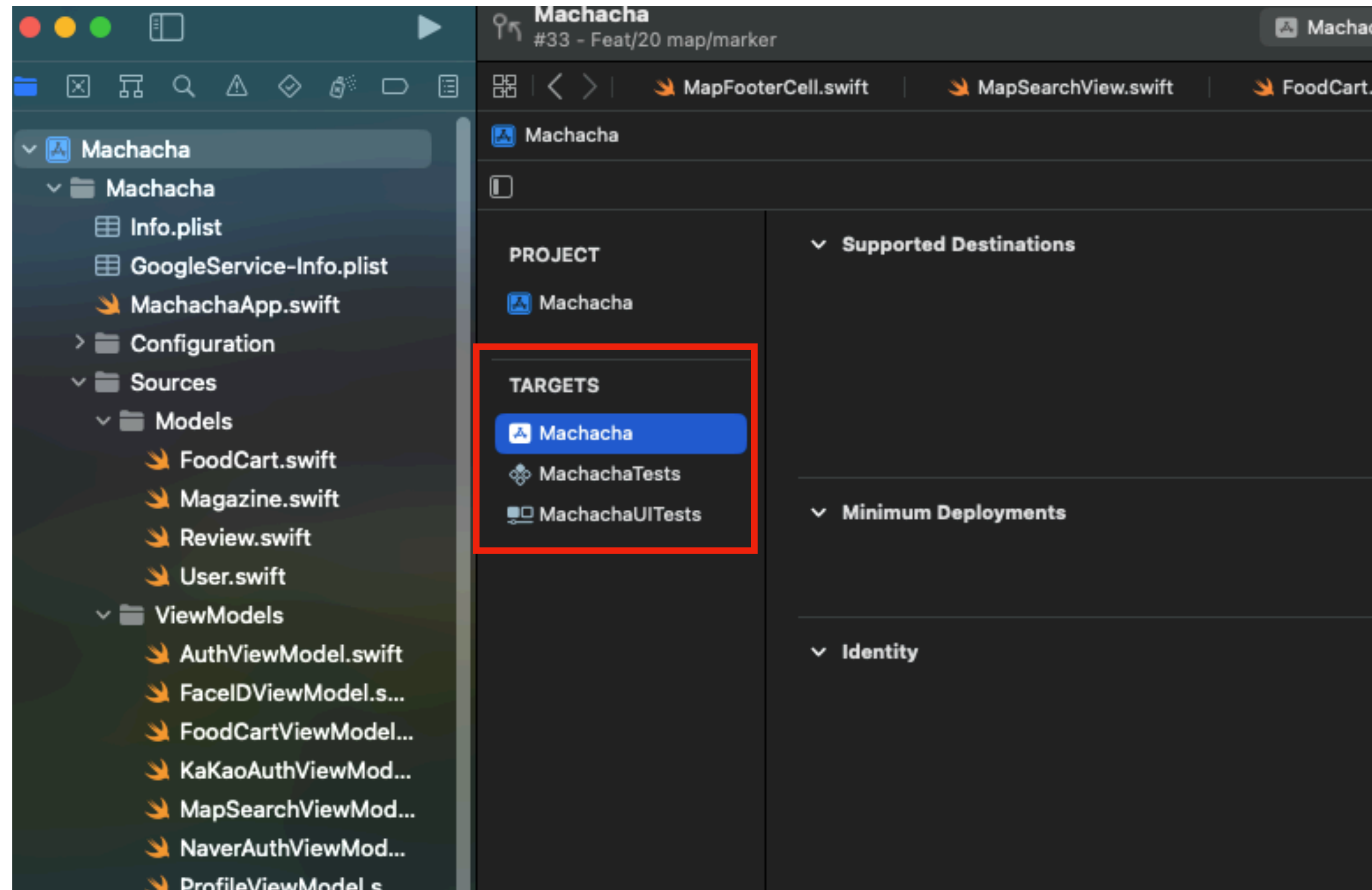


Xcode 프로젝트의 생성, 유지 관리 및 상호 작용
을 도와주는 CLI 도구

Tuist를 사용하기 전에..

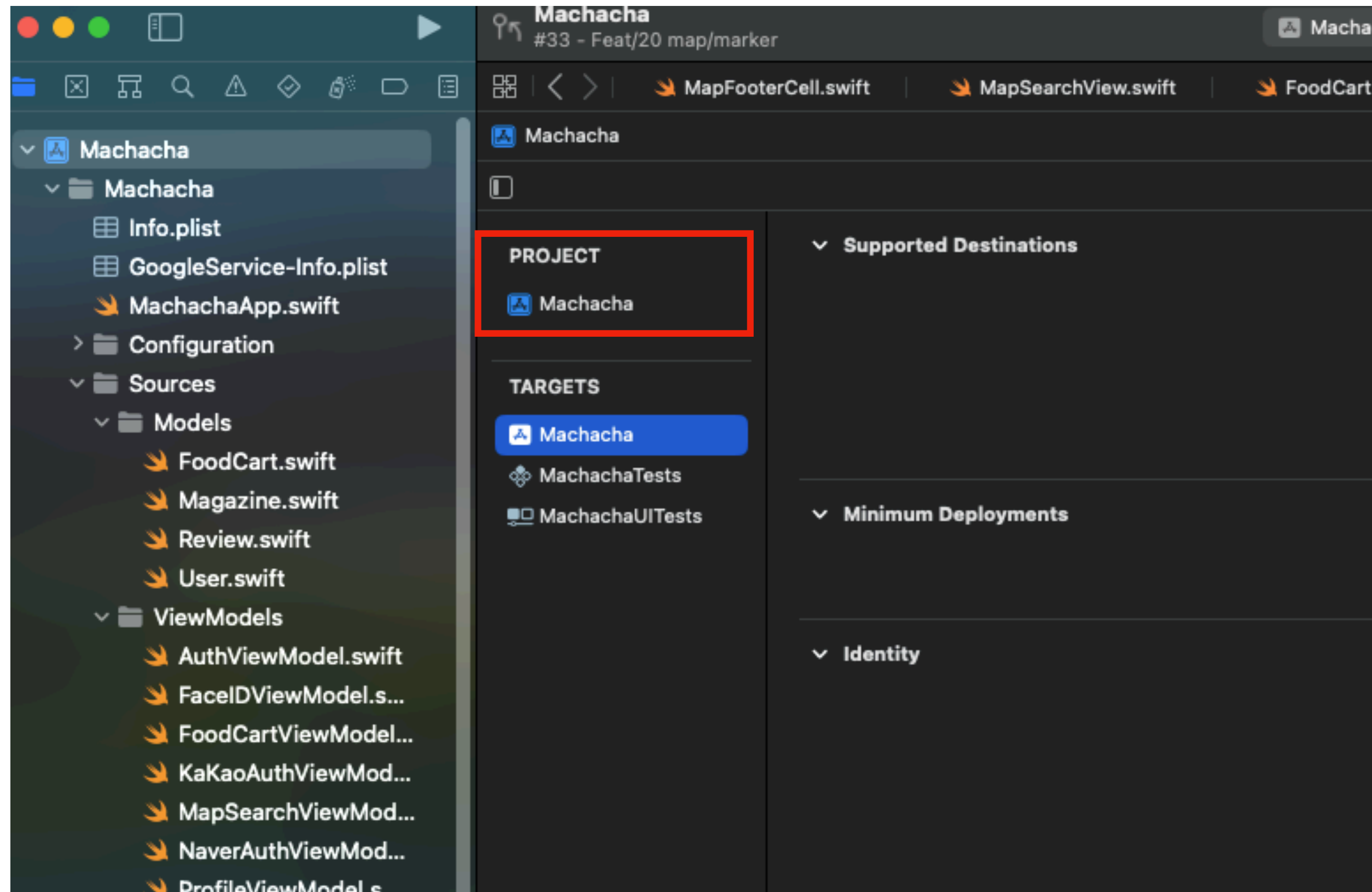
- Target
- Project
- Workspace
- 모듈화

Target



project나 Workspace의 파일들을 빌드하여 생성되는 End Product를 의미

Project



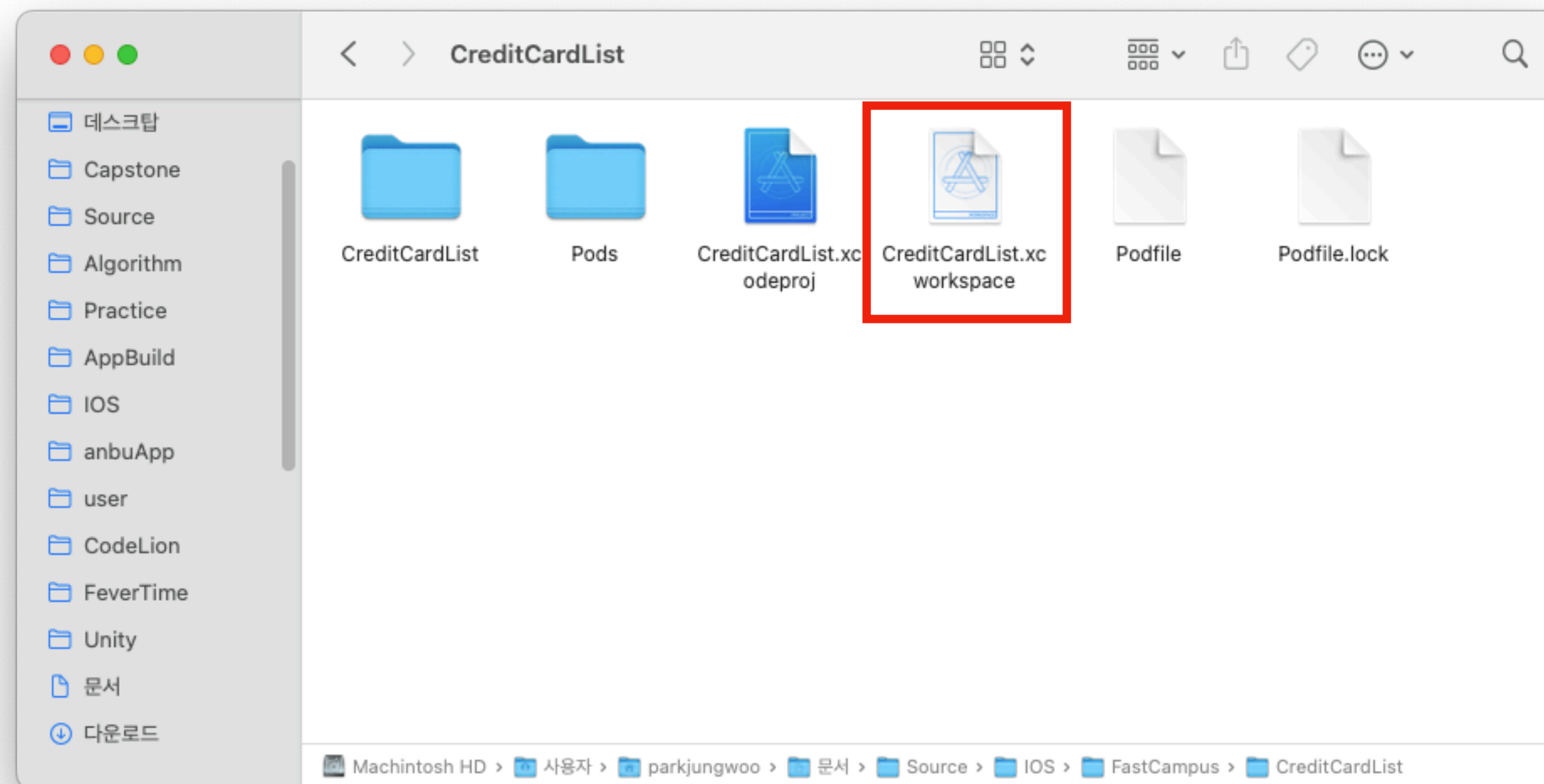
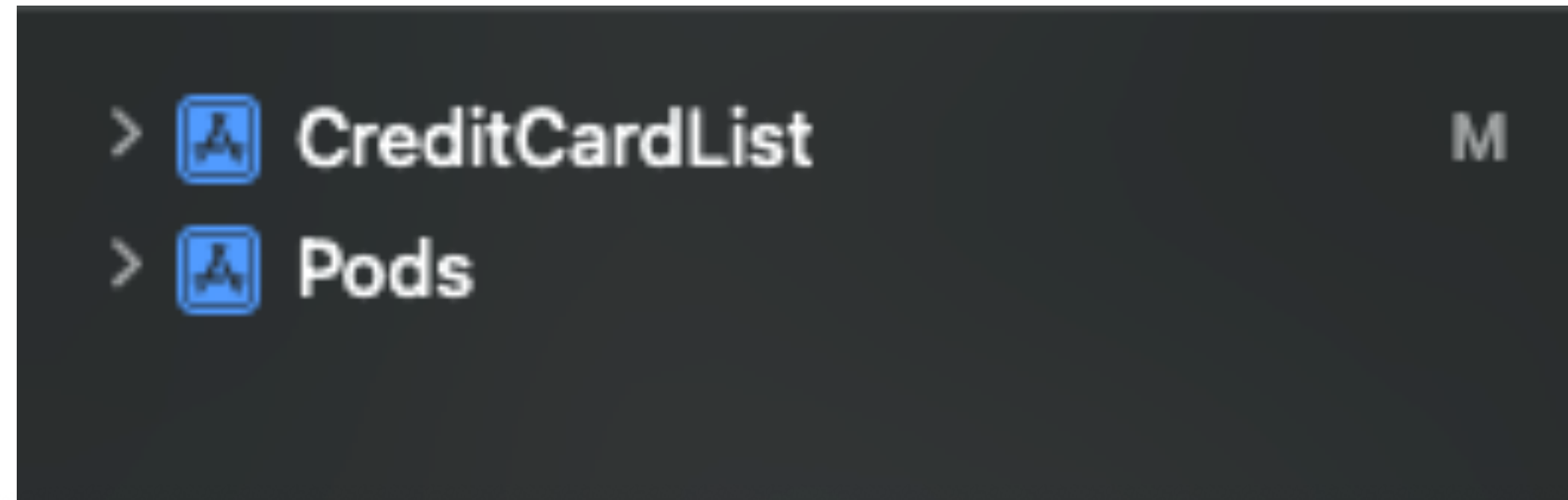
Project가 가지고 있는 정보

- 소스파일에 대한 참조
- Debug, release와 같은 build configuration을 설정 가능

Project.pbxproj

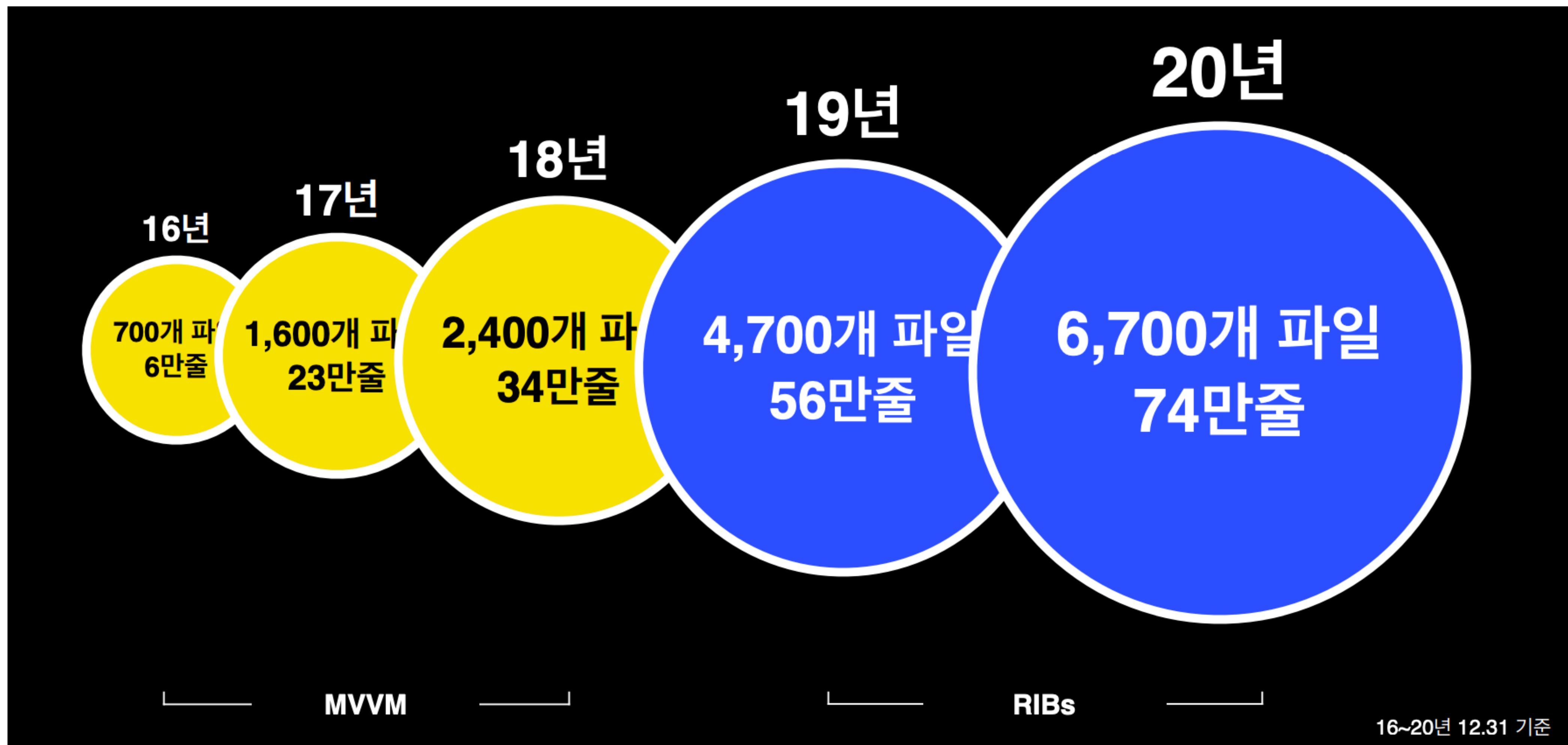
- 각 파일들의 참조값들을 UUID들로 정의

Workspace

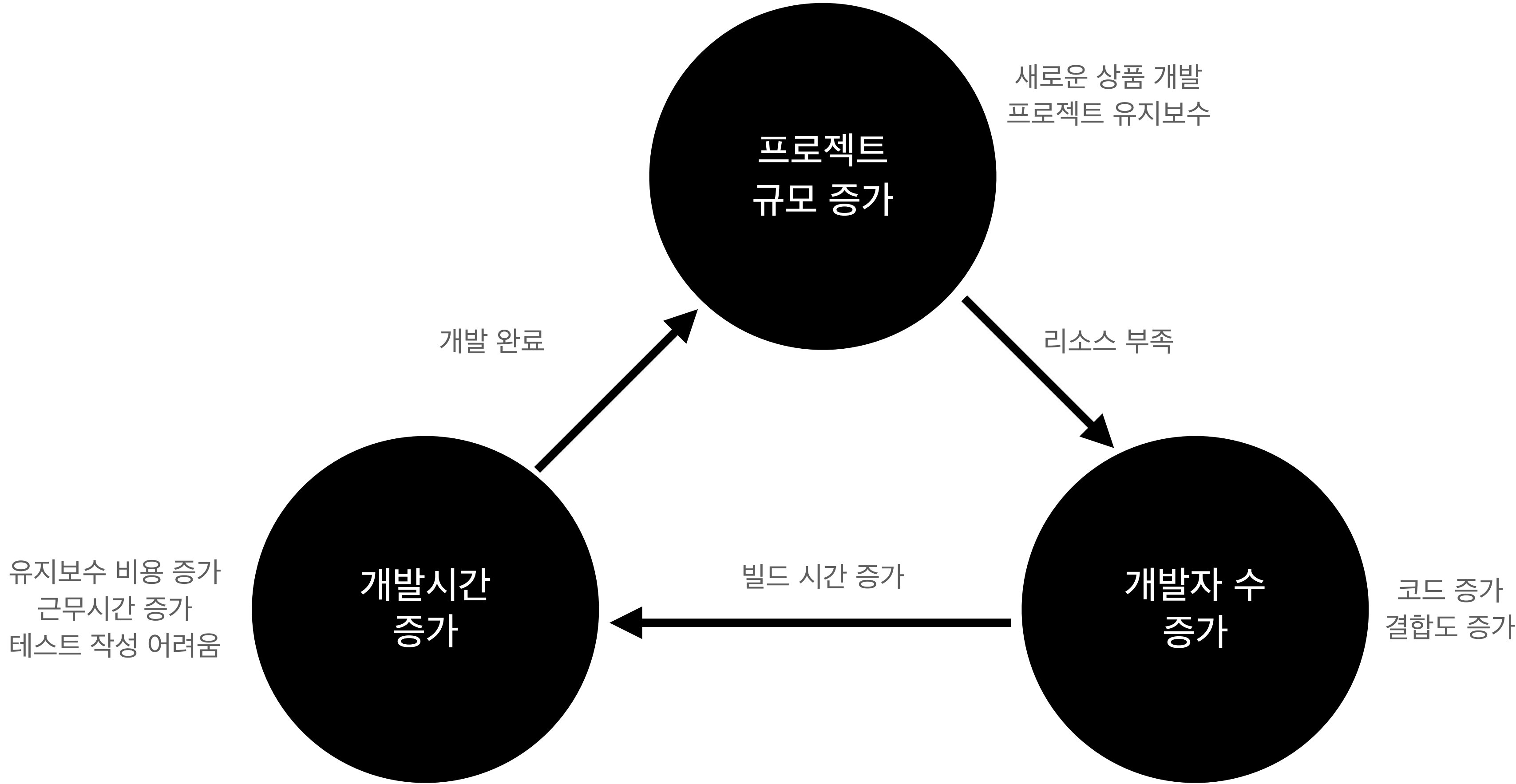


- Xcode의 Project 및 기타 리소스를 그룹화하여 함께 작업할 수 있는 Xcode document
- 다수의 Project를 사용하고 싶은 경우, workspace 하위로 관리
- 각 Project의 파일을 구성하는 것 외에도 workspace에 포함된 Project들과 Target간의 관계를 제공

모듈화



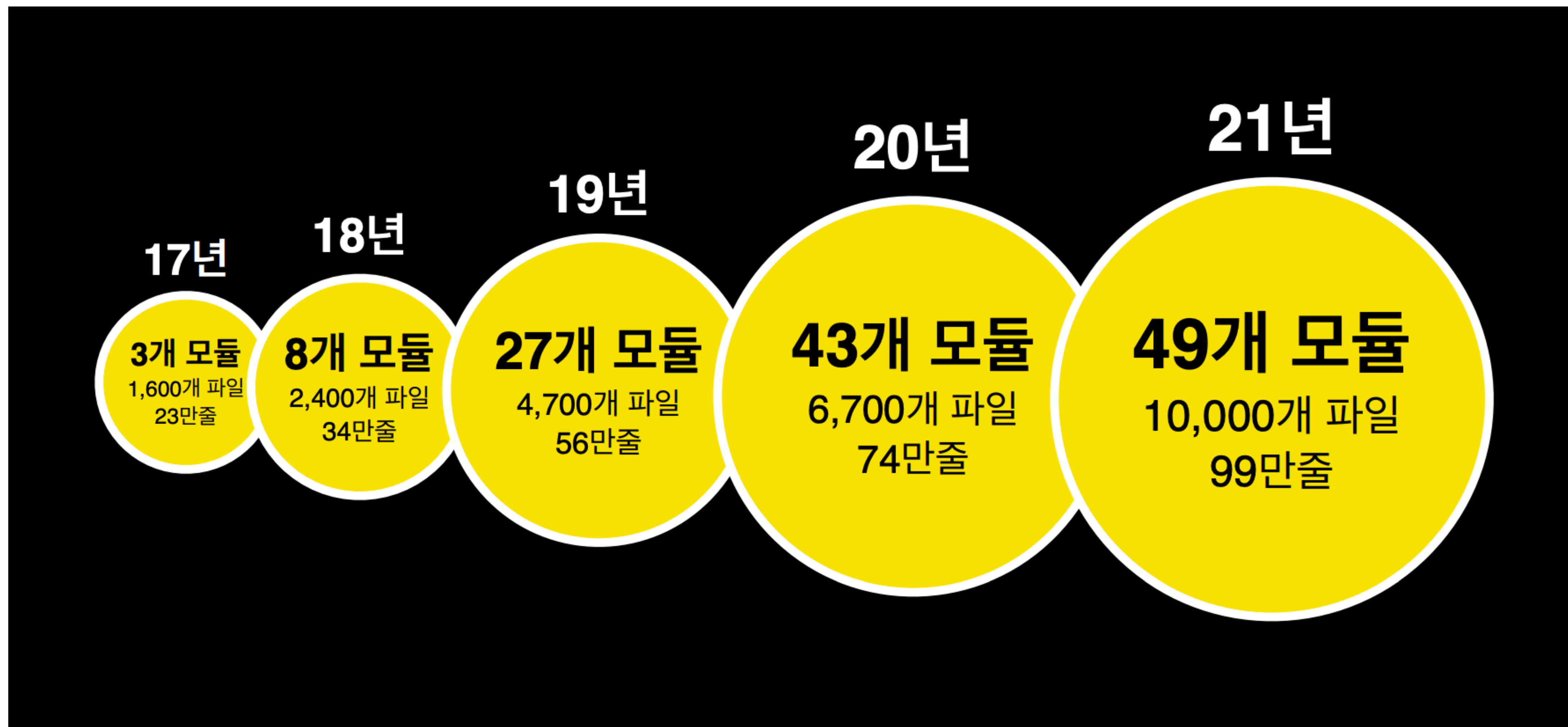
개발 프로세스



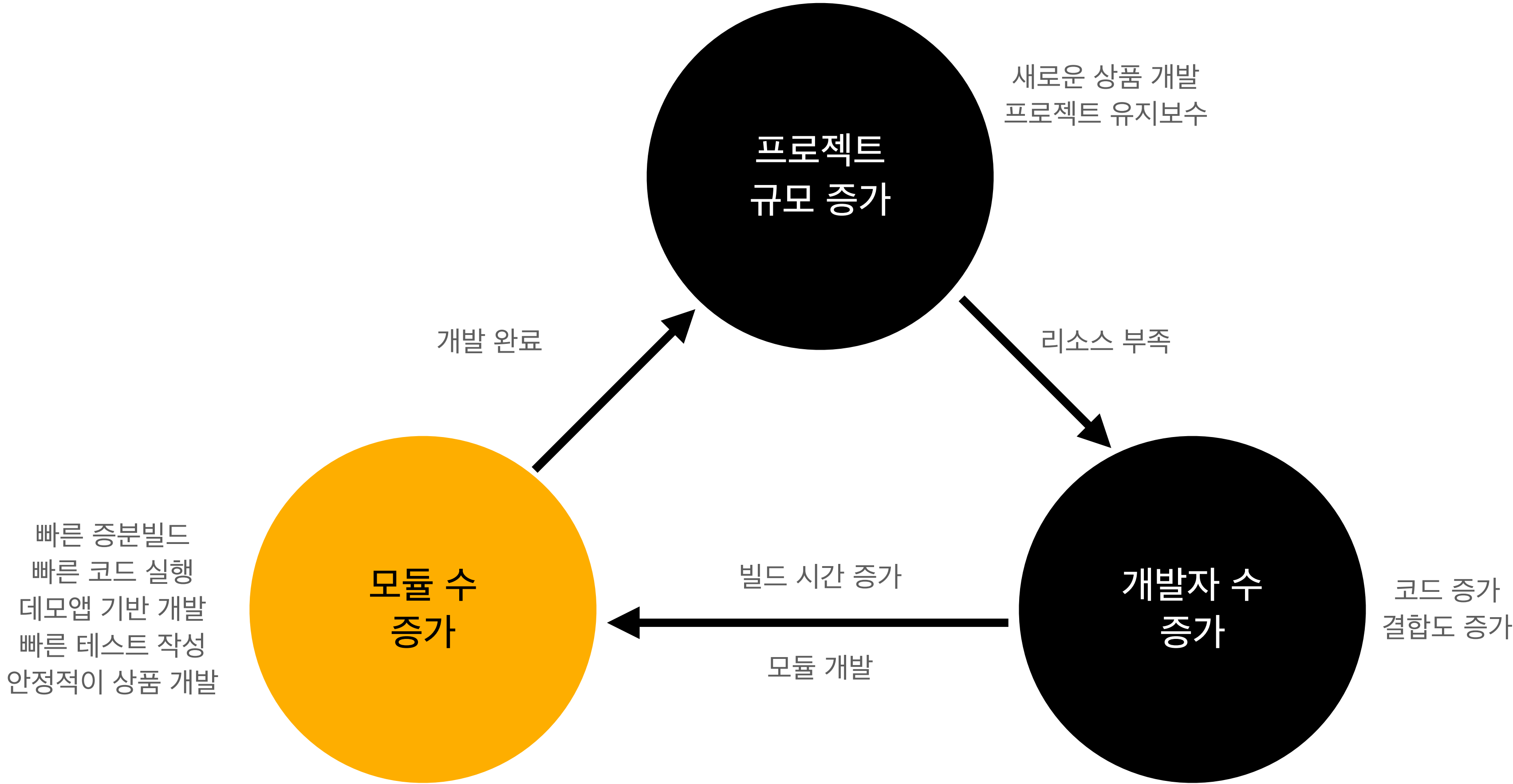


모듈화로 해결할수 있지 않을까?

모듈화



모듈화



모듈 조립

안정적인 기능, 상품 개발

빠른 빌드

UI, 비즈니스 로직 개발 및 실행

모듈화

상품에 필요한 기능

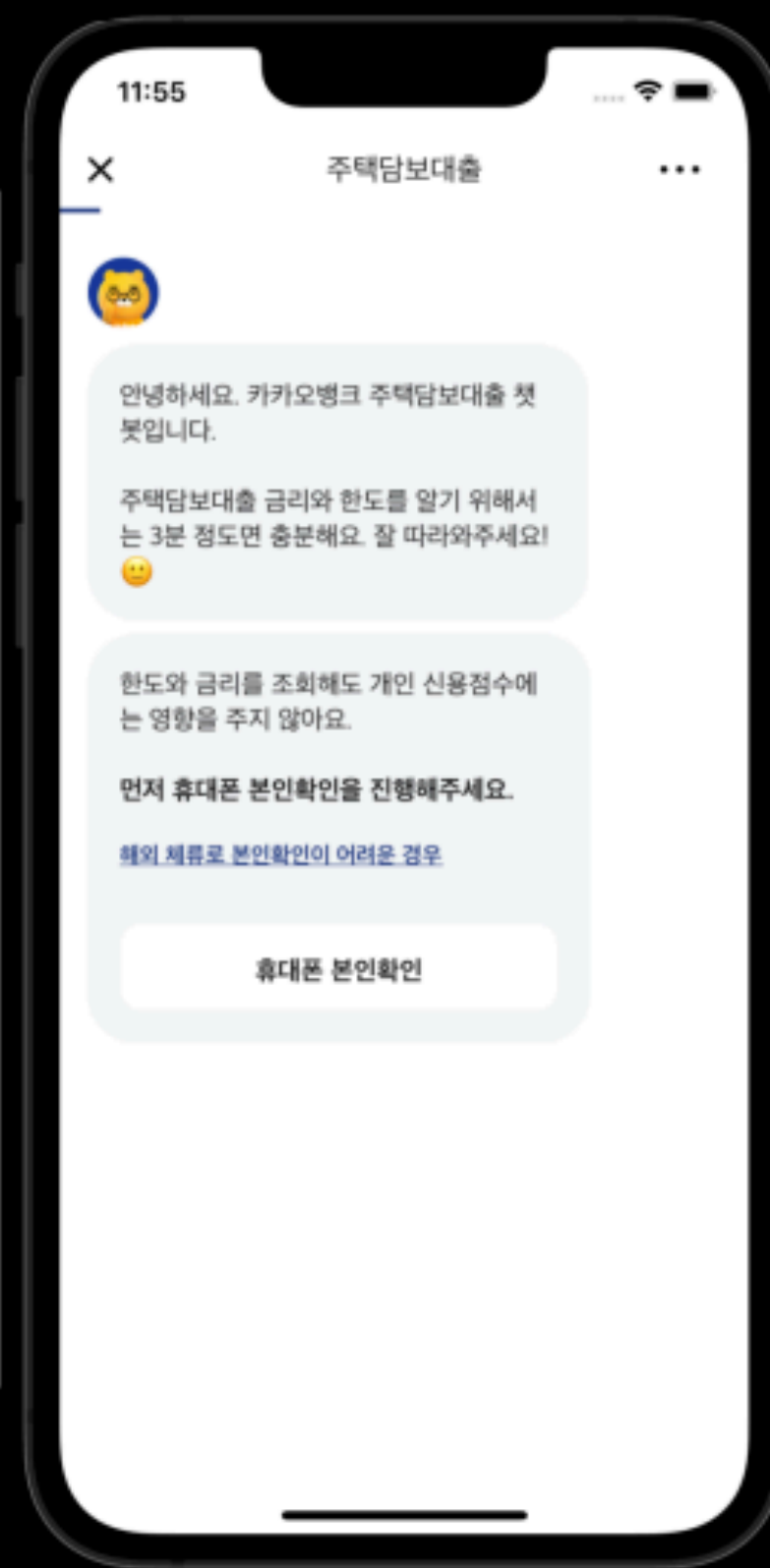
UI

UI
Component

UIHelper

Popup

Resource



Business

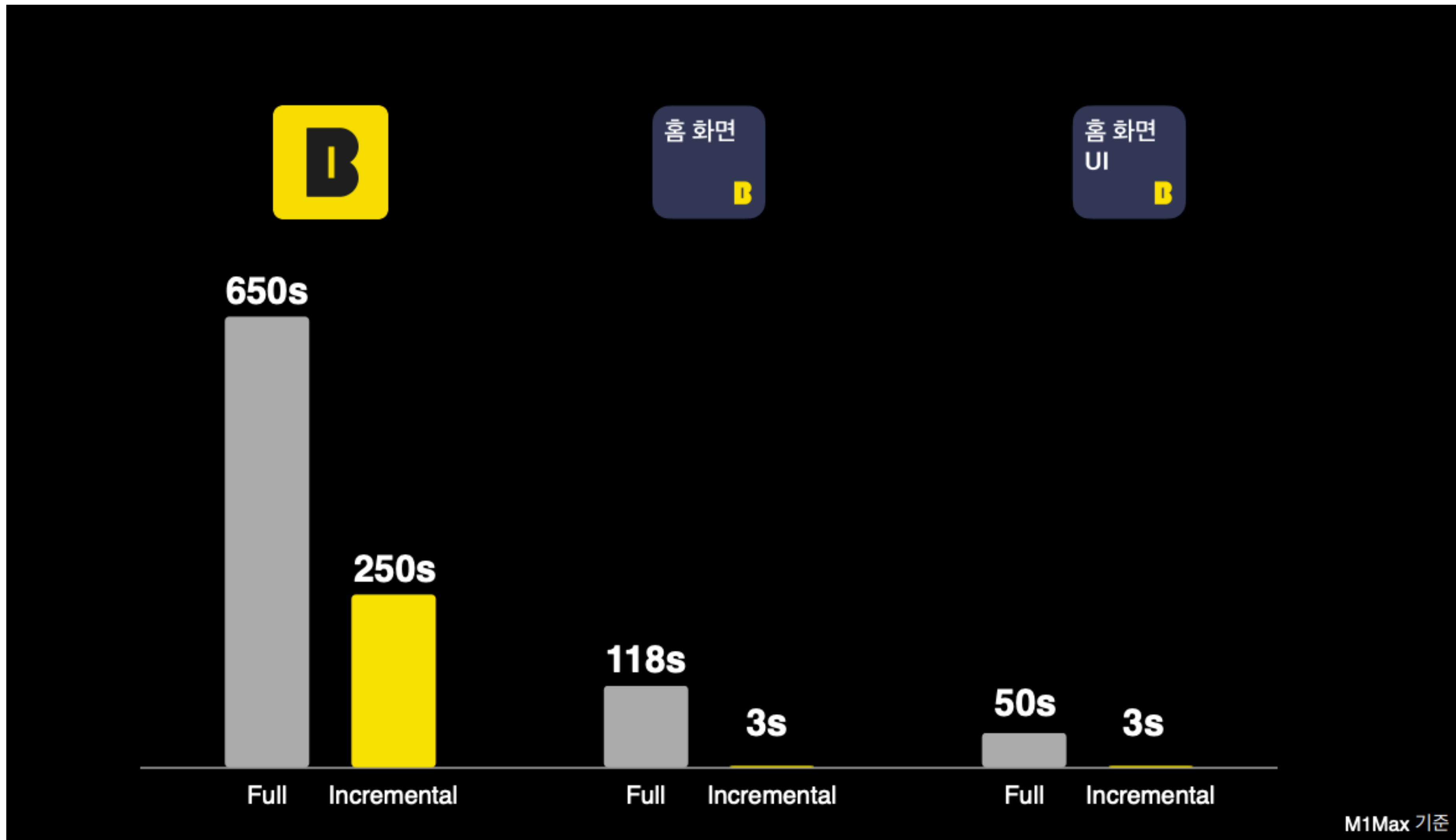
Network

Auth

FDS

Log

모듈화



Tuist 사용해 보기

Install

The first thing that we need to do to get started is installing the tool. To do so, you can run the following commands in your terminal:

```
curl -Ls https://install.tuist.io | bash
```

```
tuist init --platform ios
```

The `init` command will bootstrap an iOS application, which includes the `Info.plist` files, an `AppDelegate.swift`, a tests file, and a **`Project.swift` that contains the definition of the project.**

If you have used the Swift Package Manager before, the `Project.swift` file is the equivalent to the `Package.swift`.

❗ SWIFTUI TEMPLATE

`tuist init --platform ios --template swiftui` will bootstrap a SwiftUI iOS project instead.

Tuist 사용해 보기

```
tuist edit
```

```
import ProjectDescription

let project = Project(
  name: "MyApp",
  organizationName: "MyOrg",
  targets: [
    Target(
      name: "MyApp",
      platform: .iOS,
      product: .app,
      bundleId: "io.tuist.MyApp",
      infoPlist: "Info.plist",
      sources: ["Sources/**"],
      resources: ["Resources/**"],
      headers: .headers(
        public: ["Sources/public/A/**", "Sources/public/B/**"],
        private: "Sources/private/**",
        project: ["Sources/project/A/**", "Sources/project/B/**"]
      ),
      dependencies: [
        /* Target dependencies can be defined here */
        /* .framework(path: "framework") */
      ]
    ),
    Target(
      name: "MyAppTests",
      platform: .iOS,
      product: .unitTests,
      bundleId: "io.tuist.MyAppTests",
      infoPlist: "Info.plist",
      sources: ["Tests/**"],
      dependencies: [
        .target(name: "MyApp")
      ]
    )
  ]
)
```



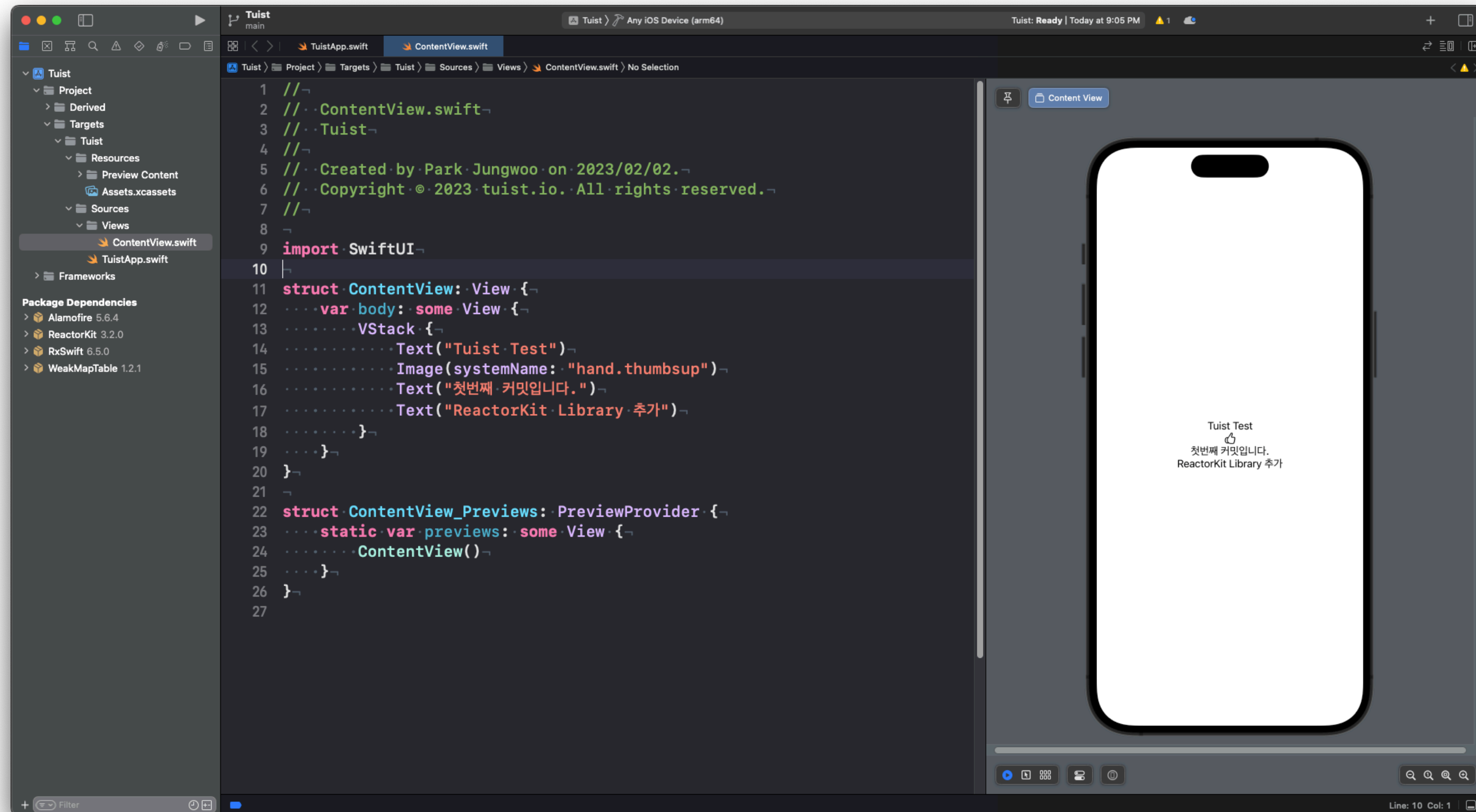
터미널에서 ctrl + c 입력하여 편집 종료

Tuist 사용해 보기

```
tuist generate
```



우리가 알던 프로젝트가 나옴



Tuist 사용해 보기

중요한 점

Git push

항상 tuist generate

Pbxproj conflict 해방

```
< > project.pbxproj No Selection

186 2318F2F218D4A95JH245318WLL231F58LPU /* Observable.swift in Sources
    */ = {isa = PBXBuildFile; fileRef =
    B583D0C98356C8866113F8747FE84CC2 /* Observable.swift */; };
187 2287C88298FD767381F650036F858843 /* Observable.swift in
    Sources */ = {isa = PBXBuildFile; fileRef =
    CED844898165F14A88E7752A404E78D /* Observable.swift
    */; };
188 221DAE8B77648A6A5452140E78A5E611 /* RLMObjectBase.h in Headers
    */ = {isa = PBXBuildFile; fileRef =
    64CA32F875889988A6C1A7CA82E4E3D1 /* RLMObjectBase.h */; };
189 225262C43C468CABAF18A76889888732 /* UIScrollView+Rx.swift in
    Sources */ = {isa = PBXBuildFile; fileRef =
    5FA670735FD8387BC547A37864808084 /* UIScrollView+Rx.swift
    */; };
190 2283376C8C99789CFA7EEDA8CE903D88 /* ImageProcessor.swift in
    Sources */ = {isa = PBXBuildFile; fileRef =
    8E439FA734425F51782ED1811FE458F8 /* ImageProcessor.swift
    */; };
191 228E8A3890D40073FAB125C58738C8D0 /* EasyPeasy-dummy.m in
    Sources */ = {isa = PBXBuildFile; fileRef =
    B8DA843ED4327ED672836C4966133D18 /* EasyPeasy-dummy.m
    */; };
192 235583C26668A94D184C2A4293FCA129 /* Take.swift in Sources */ =
    {isa = PBXBuildFile; fileRef =
    FDC2288CFC71EE46B668A2E1A6F8683D5 /* Take.swift */; };
193 2382F8F1376688168A843D983EB3D553 /* UITabBarItem+Rx.swift in
    Sources */ = {isa = PBXBuildFile; fileRef =
    D837F82DA88658981FDF8CAF99FE7828 /* UITabBarItem+Rx.swift
    */; };
194 23F81883483396AA68A82768CDF8D6A /* BugfenderSDK-dummy.m in
    Sources */ = {isa = PBXBuildFile; fileRef =
    2856C4753CB4431698818417E68F1715 /* BugfenderSDK-dummy.m
    */; };
195 249EEF188FAF884A52A8F8426867981A /*
    RLMRealmConfiguration_Private.h in Copy . Private Headers
    */ = {isa = PBXBuildFile; fileRef =
    D895A971E71983195D677961C79E87E8 /*
    RLMRealmConfiguration_Private.h */; };
196 24F8889F858A28EF278AF5AE883C857 /* RLMObjectBase_Private.h in
    Headers */ = {isa = PBXBuildFile; fileRef =
    D3C3A1F1818957EC82F78D64DA78FF1E /*
    RLMObjectBase_Private.h */; };
197 2668A39759D5E3959F835D87D1D2E536 /* Localize-Swift-dummy.m in
    Sources */ = {isa = PBXBuildFile; fileRef =

    in Headers */ = {isa = PBXBuildFile; fileRef =
    2C2A6EBC556AF77DC3EAE47EA3D833A5 /*
    GULReachabilityChecker.h */; settings = {ATTRIBUTES =
    [Private, ]; }; };
198 35565924E2658989AC8F21113C884291 /* SwiftySignature-dummy.m in
    Sources */ = {isa = PBXBuildFile; fileRef =
    C4289E54595DAD4E42F28C84EFC1A388 /* SwiftySignature-
    dummy.m */; };
199 36749EED87C3CF74AF47D8D9ED8262F4 /*
    PrimitiveSequence+Zip+arity.swift in Sources */ = {isa =
    PBXBuildFile; fileRef = B88389C61D59A84568E8236627824738 /
    * PrimitiveSequence+Zip+arity.swift */; };
200 3586F3880C3822778E3F91989643F889 /* RLMObjectStore.h in Copy .
    Private Headers */ = {isa = PBXBuildFile; fileRef =
    83FD822C279A88F87D2AF4AF3AD41A49 /* RLMObjectStore.h
    */; };
201 3488868684888764C9CD6691C543A86E /* placeholder.cpp in Sources
    */ = {isa = PBXBuildFile; fileRef =
    D8C1533488E8A92CB88A16884847C817 /* placeholder.cpp */;
    settings = {COMPILER_FLAGS = "-DREALM_HAVE_CONFIG -
    DREALM_COCOA_VERSION=\"@\"3.12.0\" -D__ASSERTMACROS__ -
    DREALM_ENABLE_SYNC"; }; };
202 3426894894672CB1C90EA3289F9582E1 /* TaskDelegate.swift in
    Sources */ = {isa = PBXBuildFile; fileRef =
    8D156584139A898682A898808D767CDC /* TaskDelegate.swift */;
    };
203 345F85081A6F4187418834961760D73A /* GPBExtensionRegistry.h in
    Headers */ = {isa = PBXBuildFile; fileRef =
    EA98D6832F88F7B7FF58D851553568AE /* GPBExtensionRegistry.h
    */; settings = {ATTRIBUTES = [Public, ]; }; };
204 348588CA72583D87580F384864E08531 /* TCPClient.swift in Sources
    */ = {isa = PBXBuildFile; fileRef =
    88F886858896446AF8AF3E192881AA98 /* TCPClient.swift */; };
205 3495A9A3117EC45CBF9FABE1D183ABCA /* ObserverType.swift in
    Sources */ = {isa = PBXBuildFile; fileRef =
    A3647EFD278A44E27C3A793A1867DC9E /* ObserverType.swift */;
    };
206 34984422FE71E4C886866D3FABC241B3 /*
    FIRMessagingPersistentSyncMessage.m in Sources */ = {isa =
    PBXBuildFile; fileRef = AB952A25E1E8CAA2D1C9809F3857B48D /
    * FIRMessagingPersistentSyncMessage.m */; };
207 34C168C9A96A29AADCA91A8C68375E5E /* AsSingle.swift in Sources
    */ = {isa = PBXBuildFile; fileRef =
    38A8C13C57677888F43A8F87ACD135F8 /* AsSingle.swift */; };
```

모듈화의 이점

- **코드 안전성**

- 모듈간 결합도가 낮아지고 응집도가 높아지는 만큼 안정성

- **개발 생산성**

- 모듈별 의존성이 낮아지면 고려해야하는 범위가 낮아져 개발속도 향상
- 코드 리뷰 시 관련 모듈만 검토 가능

- **빌드 속도**

- 자주 변경되지 않는 모듈의 빌드가 발생하지 않아 빌드 속도 증가

- **사용 목적에 맞는 코드 배치**

- 용도와 목적에 맞는 코드 배치로 이해하기 쉬운 프로젝트 구성

참고

- <https://www.youtube.com/watch?v=7rvwGLhor-I&t=173s>
- <https://ios-development.tistory.com/1004>
- <https://leeari95.tistory.com/74#Tuist%EB%A5%BC-%EC%82%AC%EC%9A%A9%ED%95%98%EA%B8%B0-%EC%A0%84%EC%97%90-%EC%95%8C%EC%95%84%EC%95%BC-%ED%95%A0-%EA%B0%9C%EB%85%90>
- <https://docs.tuist.io/tutorial/get-started/>
- <https://www.youtube.com/watch?v=Up0wYoyY3o0&t=1497s>