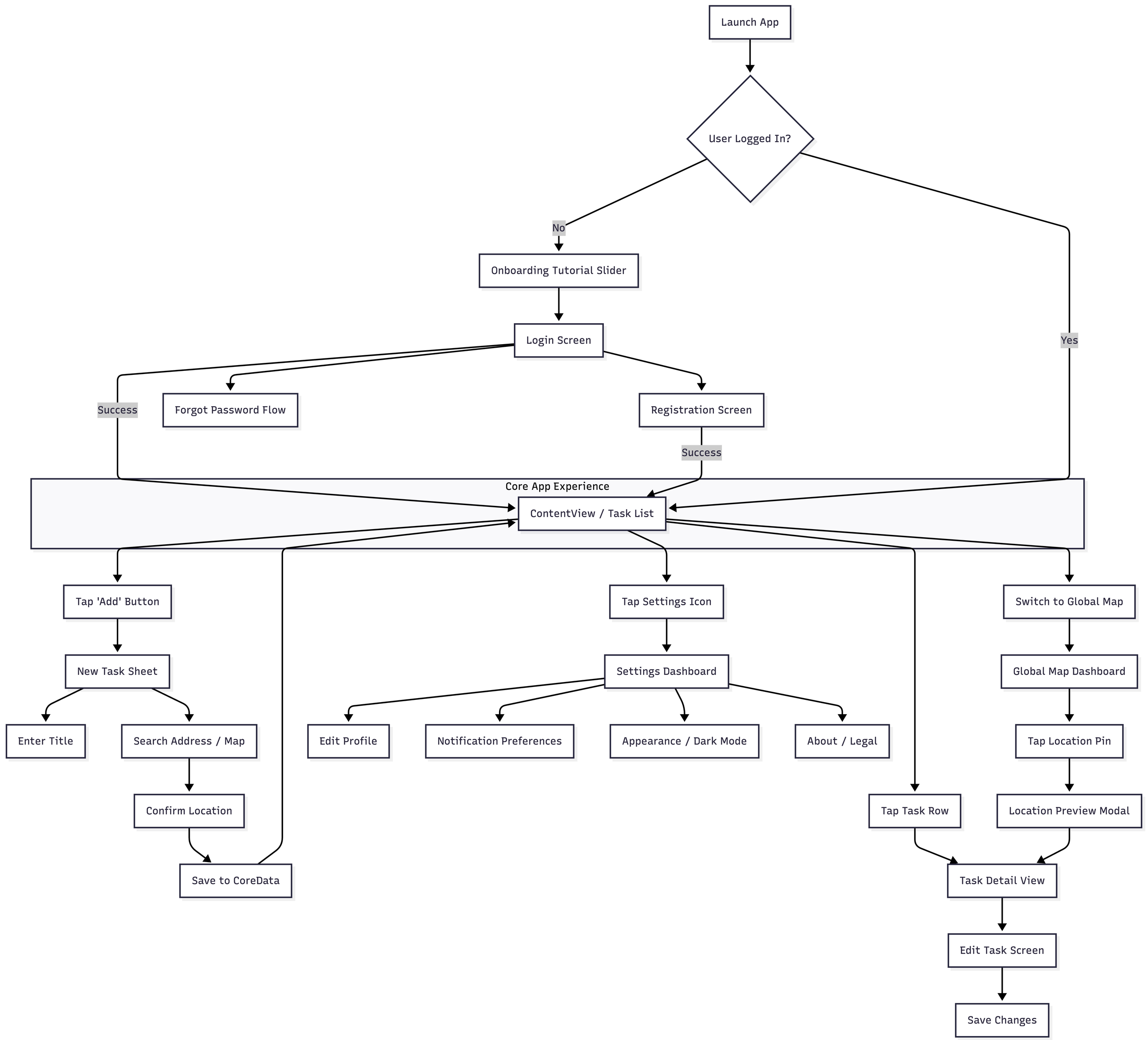
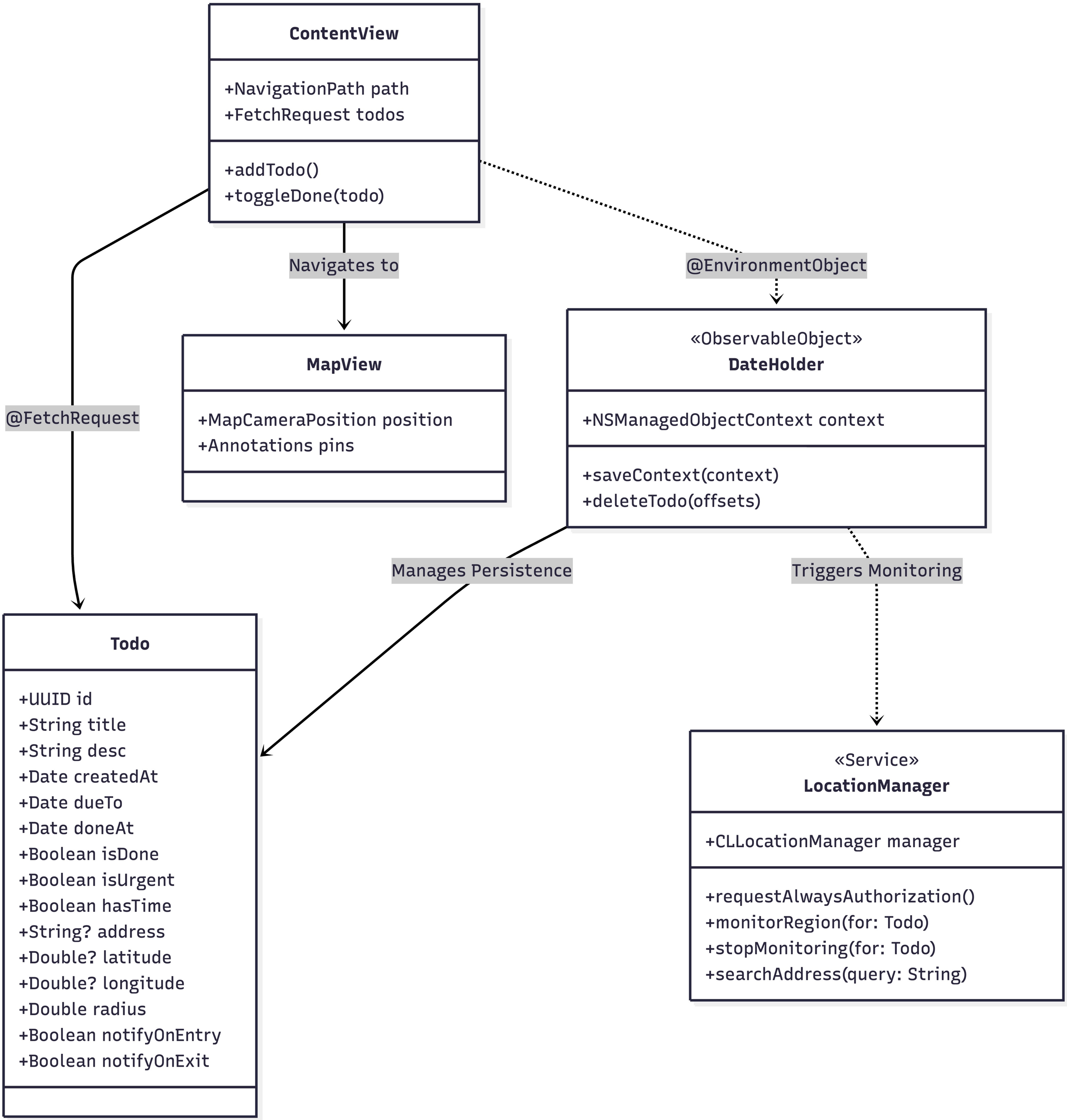
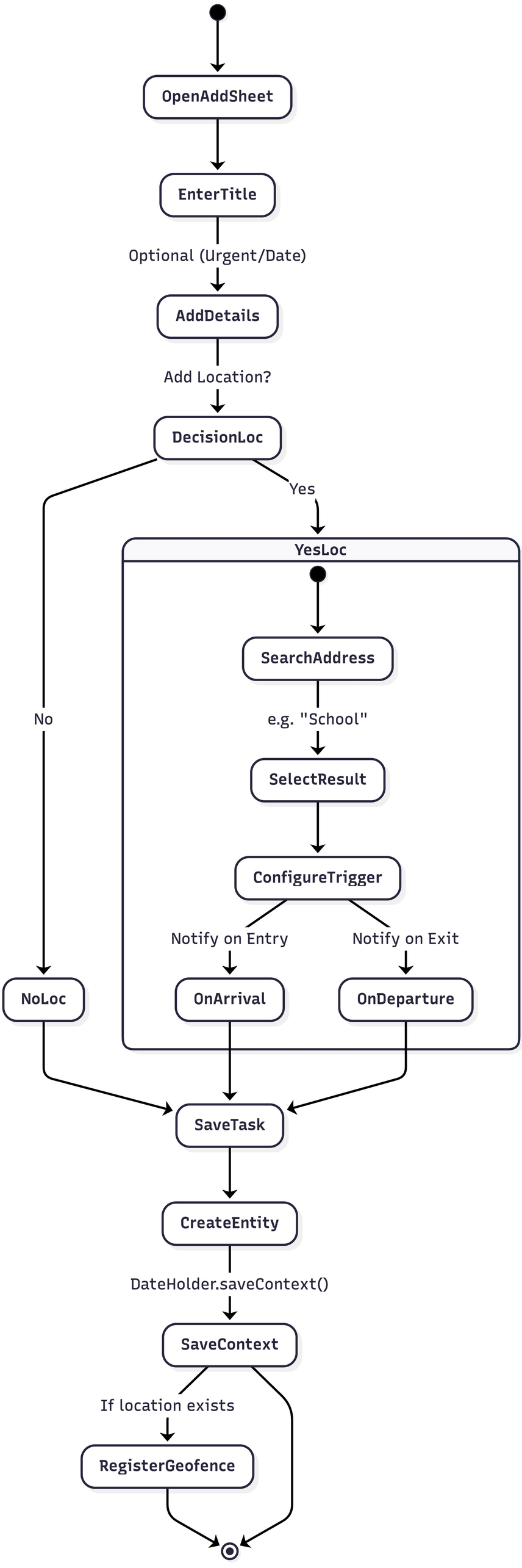
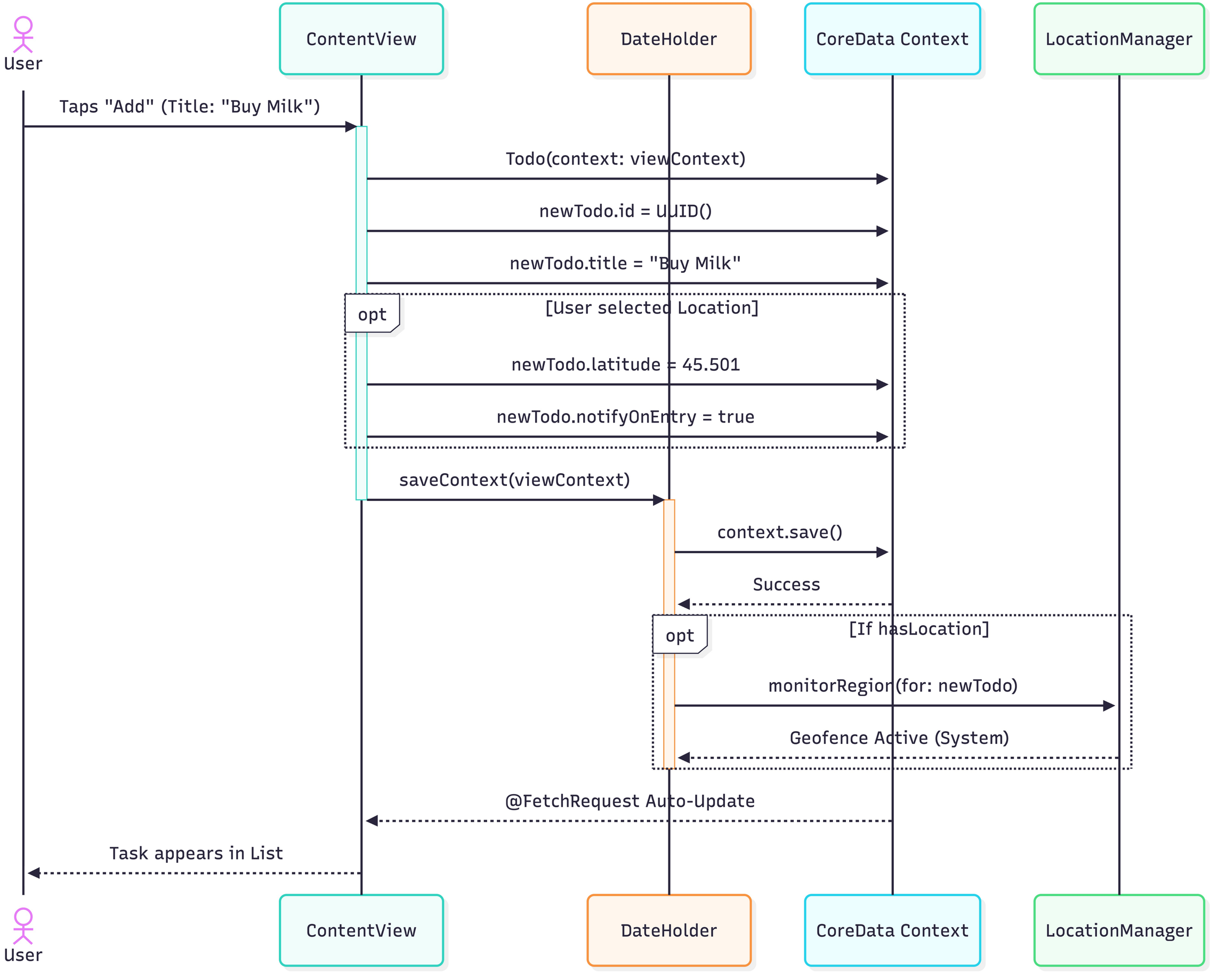
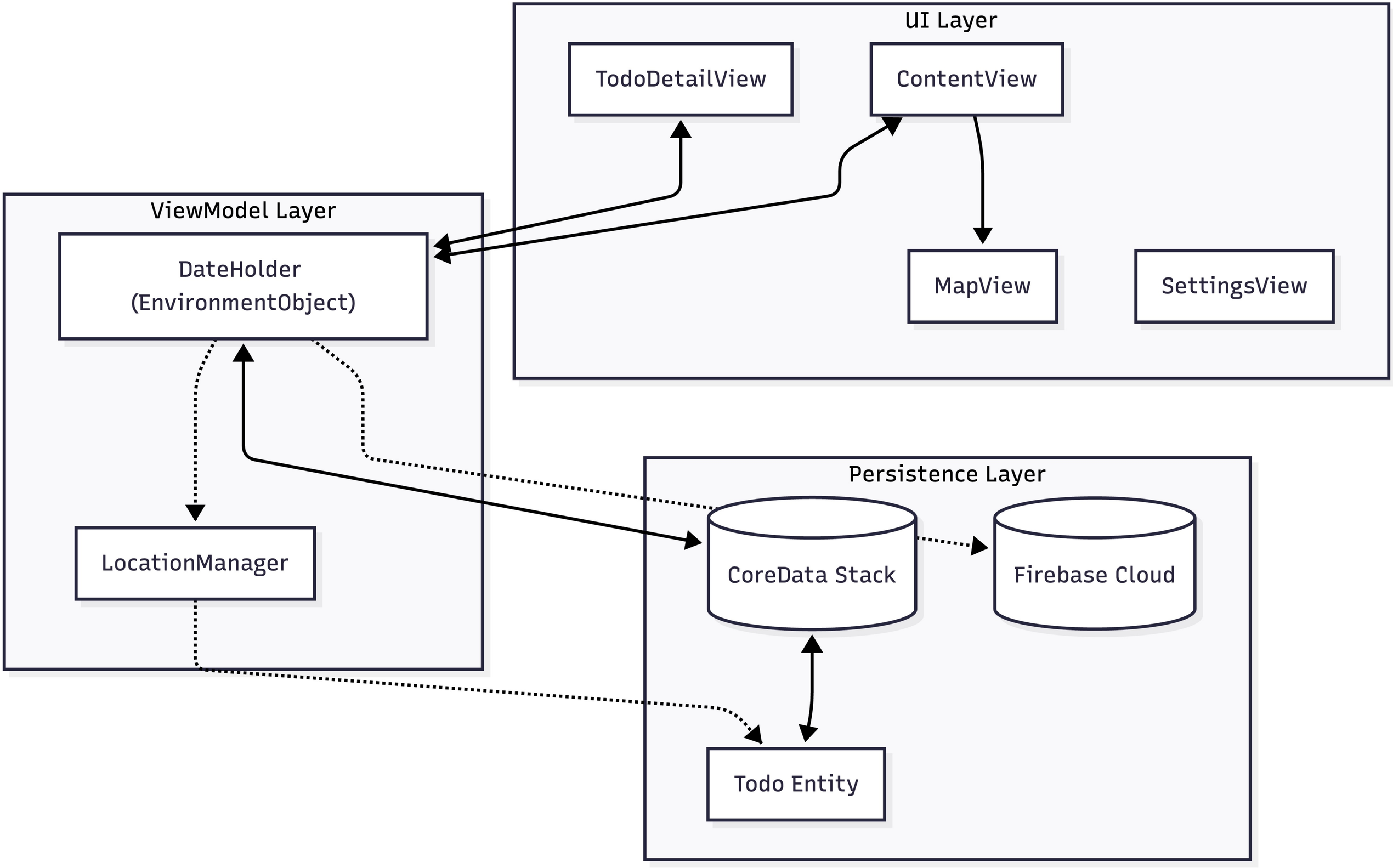

Launch App
User Logged In?
No
Yes
Onboarding Tutorial Slider
Login Screen
Success
Forgot Password Flow
Registration Screen
Success
Core App Experience
ContentView / Task List
Tap 'Add' Button
New Task Sheet
Enter Title
Search Address / Map
Confirm Location
Save to CoreData
Tap Settings Icon
Settings Dashboard
Edit Profile
Notification Preferences
Appearance / Dark Mode
About / Legal
Switch to Global Map
Global Map Dashboard
Tap Location Pin
Location Preview Modal
Tap Task Row
Task Detail View
Edit Task Screen
Save Changes


ContentView
+NavigationPath path
+FetchRequest todos
+addTodo()
+toggleDone(todo)
Navigates to
@EnvironmentObject
MapView
+MapCameraPosition position
+Annotations pins
«ObservableObject»
DateHolder
+NSManagedObjectContext context
+saveContext(context)
+deleteTodo(offsets)
@FetchRequest
Manages Persistence
Triggers Monitoring
Todo
+UUID id
+String title
+String desc
+Date createdAt
+Date dueTo
+Date doneAt
+Boolean isDone
+Boolean isUrgent
+Boolean hasTime
+String? address
+Double? latitude
+Double? longitude
+Double radius
+Boolean notifyOnEntry
+Boolean notifyOnExit
«Service»
LocationManager
+CLLocationManager manager
+requestAlwaysAuthorization()
+monitorRegion(for: Todo)
+stopMonitoring(for: Todo)
+searchAddress(query: String)


OpenAddSheet
EnterTitle
Optional (Urgent/Date)
AddDetails
Add Location?
DecisionLoc
Yes
No
YesLoc
SearchAddress
e.g. "School"
SelectResult
ConfigureTrigger
Notify on Entry
Notify on Exit
NoLoc
OnArrival
OnDeparture
SaveTask
CreateEntity
DateHolder.saveContext()
SaveContext
If location exists
RegisterGeofence


User
ContentView
DateHolder
CoreData Context
LocationManager
Taps "Add" (Title: "Buy Milk")
Todo(context: viewContext)
newTodo.id = UUID()
newTodo.title = "Buy Milk"
opt
[User selected Location]
newTodo.latitude = 45.501
newTodo.notifyOnEntry = true
saveContext(viewContext)
context.save()
Success
opt
[If hasLocation]
monitorRegion(for: newTodo)
Geofence Active (System)
@FetchRequest Auto-Update
Task appears in List
User
ContentView
DateHolder
CoreData Context
LocationManager


UI Layer
TodoDetailView
ContentView
MapView
SettingsView
ViewModel Layer
DateHolder
(EnvironmentObject)
LocationManager
Persistence Layer
CoreData Stack
Firebase Cloud
Todo Entity