A smartphone application that obtains a clear affirmative act to use precise geolocation data typically follows industry best practices to ensure explicit user consent. Below is an example of how a well-designed app handles this process:

## Example: SecureMaps – A Location-Based Navigation App

## **Step 1: Pre-Permission Context (User Awareness)**

Before requesting access, the app explains why location data is needed.

Example Popup Before Permission Request:

"SecureMaps needs access to your precise location to provide real-time navigation and location-based alerts. You can manage your preferences in settings anytime."

User Action: "Continue" (to proceed to actual permission request).

# **Step 2: Explicit Permission Request (OS-Level Prompt)**

After providing context, the app triggers the **official OS permission prompt** for precise location access. *iOS Example Prompt*:

"Allow SecureMaps to use your location?"

- "Allow While Using App"
- · "Allow Once"
- · "Don't Allow"

Android Example Prompt:

"Allow SecureMaps to access this device's location?"

- "While Using the App"
- "Only This Time"
- · "Deny"

User Action: Must select a positive option to proceed.

## **Step 3: Additional Consent for Background Location (If Needed)**

If the app requires **background location tracking**, it **must obtain separate explicit consent**. *Example Prompt:* 

"SecureMaps needs access to your location even when the app is closed to provide turn-by-turn directions and nearby alerts."

- · "Allow Always"
- "Only While Using the App"
- · "Don't Allow"

User Action: Must opt-in separately for continuous tracking.

## **Step 4: Clear Opt-Out & Data Control**

The app includes easy-to-access settings for users to revoke or modify location access.

Example Path: Settings > Privacy > Location Access > Manage Permissions

**User Control:** Users can disable **precise location** or revoke permissions at any time.

## Why This Meets Legal & Ethical Standards

**Explicit user consent** via an **affirmative act** (tapping "Allow" or equivalent).

Clear purpose explanation before requesting access.

Separate consent for background tracking (if applicable).

Easy opt-out with control over settings.

This approach complies with GDPR, CCPA, and Apple/Google privacy policies by ensuring users actively approve location tracking with a clear affirmative action.