

WildReport — Store Deployment Requirements

(Permissions, Privacy, and Declarations)

Focus: Google Play (Android). Overview: Apple App Store (iOS).

Date: December 23, 2025

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1. Executive Summary

WildReport is a Flutter animal sighting reporting app. Current features include:

- Email-based login with verification codes
- GPS/map-selected location and timestamp for sightings
- Foreground-only location tracking (user can toggle)
- Local push notifications for alerts
- Account deletion capability
- Mandatory terms and conditions on first login

Photo and camera features are not part of the current release.

Critical issues to address before release:

Declared but not used:

- AndroidManifest declares READ_MEDIA_IMAGES, READ_MEDIA_VIDEO, and READ_MEDIA_AUDIO. Remove them before submission.

Already implemented:

- Foreground-only location
- Account deletion
- Notifications
- Terms and conditions

2. Scope and Assumptions

This review is based on codebase analysis (December 23, 2025).

Confirmed:

- Users submit sightings with species, location, and timestamp
- Uses geolocator (v14.0.0) for foreground-only GPS
- Bearer token HTTP authentication with the backend
- User accounts with email login
- Profile deletion implemented
- Local notifications implemented
- Location tracking is optional
- No camera/photo features
- Unused media permissions are currently declared
- iOS: code is present, but Info.plist configuration is incomplete

3. Key Definitions

OS/runtime permissions: what the operating system prompts users for.

- Android: declared in AndroidManifest.xml
- iOS: declared in Info.plist

Store compliance: what you declare in store consoles.

- Google Play: Data Safety form, privacy policy, account deletion
- Apple App Store: App Privacy form and required purpose strings

4. Google Play (Android) — Primary Focus

4.1 Required Play Console Items Related to Permissions and Privacy

Before publishing, ensure the following are complete:

- Privacy policy link (public URL)
- Privacy policy accessible in-app
- Data Safety form completed accurately
- Account deletion URL (web-based; backend must support deletion)
- App access instructions for reviewers (if login is required)

4.2 Android Permissions — Recommended Minimal Set for Current Release

Items to fix before submission:

1. Remove unused media permissions from android/app/src/main/AndroidManifest.xml: READ_MEDIA_IMAGES, READ_MEDIA_VIDEO, and READ_MEDIA_AUDIO. These are declared but not used and may trigger review issues.
2. Create and host a privacy policy at a public URL, add the link in Play Console, and link to it inside the app (for example in Profile or Settings).
3. Complete the Data Safety form in Play Console to match actual behavior (data collected, purposes, security, account deletion).

Permissions summary:

Permission	Current release	Action / Notes
ACCESS_FINE_LOCATION	Yes	Keep (foreground-only)
ACCESS_COARSE_LOCATION	Yes	Keep
POST_NOTIFICATIONS	Yes	Keep (Android 13+)
READ_MEDIA_IMAGES	No	Remove (not used)
READ_MEDIA_VIDEO	No	Remove (not used)
READ_MEDIA_AUDIO	No	Remove (not used)

4.3 Location Permissions (Foreground vs Background)

Current: foreground-only (recommended for an animal reporting app).

The app uses Geolocator.getPositionStream() only while the user is active. Background location is not required for the current release.

Suggested Play Store justification:

- Required to display the user position on the map and submit accurate sighting coordinates.

4.4 Photos and Camera (Not in the Current Release; Guidance for Later Versions)

Current: not implemented.

If photo selection or camera capture is added in later versions:

- Use the Android system photo picker so the user selects specific images without broad gallery access.
- Request CAMERA permission only if an in-app take photo feature is added.
- Avoid MANAGE_EXTERNAL_STORAGE.
- Update the Data Safety form when behavior changes.

4.5 Account Deletion and Data Deletion (Only if Accounts Exist)

Status: implemented in-app, with additional store requirements.

- In-app deletion button in ProfileScreen
- Backend endpoint: DELETE /profile/me/ (confirm it removes the account and associated data)
- Web-based deletion URL: create and provide it in Play Console

4.6 In-App UX Expectations

- Request permissions just-in-time (only when the user initiates the feature).
- Show a brief explanation before the OS permission prompt (especially for location).
- Allow manual map pin selection if the user denies GPS.
- Make the privacy policy reachable from within the app (Settings/Profile).
- Ensure the app does not crash if permissions are denied.

4.7 Release Checklist (Google Play)

Task	Status	Owner	Notes
Remove media permissions	To do	Dev	Remove READ_MEDIA_IMAGES, READ_MEDIA_VIDEO, READ_MEDIA_AUDIO from manifest
Verify location is foreground-only	Done	Dev	Confirmed in code
Verify notifications permission	Done	Dev	Handled via Flutter local notifications plugin
Create privacy policy	To do	PM	Must be a public URL
Add privacy link in app	To do	Dev	Add to Profile/Settings
Fill Data Safety form	To do	PM	Email, location, sightings; confirm sharing/SDKs
Provide account deletion URL	To do	Backend	Web URL required by Google Play
Provide app access instructions	To do	PM	Test credentials for reviewers if needed
Test permission denial flows	To do	QA	Android 10+
Test account deletion	To do	QA	Multiple Android versions
Test offline mode	To do	QA	No crashes when network unavailable

5. Apple App Store (iOS) — Overview for Future Submission

5.1 Info.plist Purpose Strings (Mandatory if Sensitive APIs Are Referenced)

Add purpose strings in ios/Runner/Info.plist before iOS submission. For location:

```
<key>NSLocationWhenInUseUsageDescription</key>
<string>We need your location to accurately mark where animal sightings occur on the map.</string>
```

Only include the following key if the app requests background location on iOS:

```
<key>NSLocationAlwaysAndWhenInUseUsageDescription</key>
<string>We need your location to support features that work when the app is not in use.</string>
```

For future photo/camera support:

```
<key>NSPhotoLibraryUsageDescription</key>
<string>We need access to select photos of animal sightings to attach to your reports.</string>
```

```
<key>NSCameraUsageDescription</key>
<string>We need camera access to take photos of animal sightings in-app.</string>
```

5.2 App Privacy (App Store Connect) Label

Before iOS submission, complete App Privacy in App Store Connect. Example disclosure:

Data type	Collected	Purpose	Shared
Location	Yes	Sighting accuracy, map display	No
Email	Yes	Account login	No
Name	Yes	Profile display	No

5.3 Account Deletion (If Accounts Exist)

Status: implemented in-app. Ensure the iOS build includes the same deletion entry point.

6. Quick Status

Item	Android	iOS
Location permission	Foreground-only implemented	Add purpose strings
Permissions: remove unused media	To do	Not applicable

Privacy policy	Create and host; add in app and Play Console	Use same policy
Account deletion	Implemented; add web URL	Implemented in app
Data Safety / App Privacy	Complete Data Safety form	Complete App Privacy form
Terms and conditions	Implemented	Implemented
Notifications	Implemented	Implemented
Ready to submit?	No (manifest + policy/forms)	Not yet

7. Next Steps

For Android:

1. Remove READ_MEDIA_IMAGES, READ_MEDIA_VIDEO, and READ_MEDIA_AUDIO permissions from AndroidManifest.xml.
2. Create and host the privacy policy, then add the link in Play Console and inside the app.
3. Complete the Play Console Data Safety form.
4. Test on Android 10+ (permission denial flows, account deletion, offline mode).
5. Submit for review.

For iOS (when ready):

1. Add required Info.plist purpose strings for location (and later photos/camera if implemented).
2. Complete the App Privacy form in App Store Connect.
3. Test on supported iOS versions.
4. Submit for review.

8. References

- Google Play - User Data policy (privacy policy requirement):
<https://support.google.com/googleplay/android-developer/answer/10144311>

- Google Play - Data safety form guidance:
<https://support.google.com/googleplay/android-developer/answer/10787469>
- Google Play - Photo & Video permissions policy (for future photo features):
<https://support.google.com/googleplay/android-developer/answer/14115180>
- Google Play - Background location permissions guidance:
<https://support.google.com/googleplay/android-developer/answer/9799150>
- Android Developers - Request location permissions:
<https://developer.android.com/develop/sensors-and-location/location/permissions>
- Apple - App Privacy details (nutrition label):
<https://developer.apple.com/app-store/app-privacy-details/>
- Apple - NSLocationWhenInUseUsageDescription:
<https://developer.apple.com/documentation/bundleresources/information-property-list/nslocationwheninuseusagedescription>
- Apple - NSCameraUsageDescription:
<https://developer.apple.com/documentation/BundleResources/Information-Property-List/NSCameraUsageDescription>
- Apple - NSUserTrackingUsageDescription:
<https://developer.apple.com/documentation/bundleresources/information-property-list/nsusertrackingusagedescription>
- Apple - Offering account deletion in your app:
<https://developer.apple.com/support/offering-account-deletion-in-your-app/>