Declare and Request App Permissions

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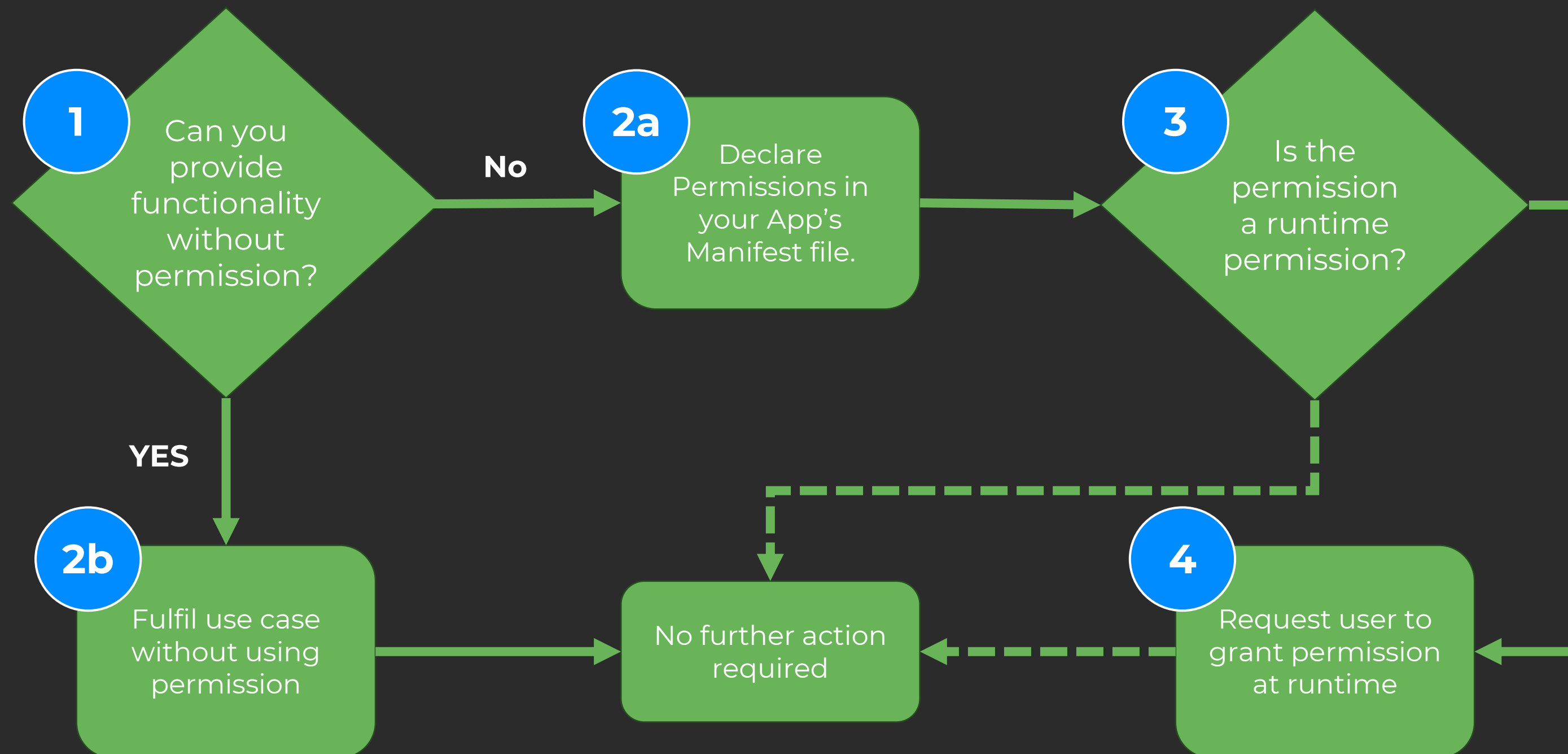🐦 @probelalkhan

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Overview

- Learn to declare app permissions.

- Learn to request permissions at runtime.

- Code Challenge.

Let's Think

Install Time Permission

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <uses-permission android:name="android.permission.INTERNET" />

    <application
        android:allowBackup="true"
        .
        .
        .
```
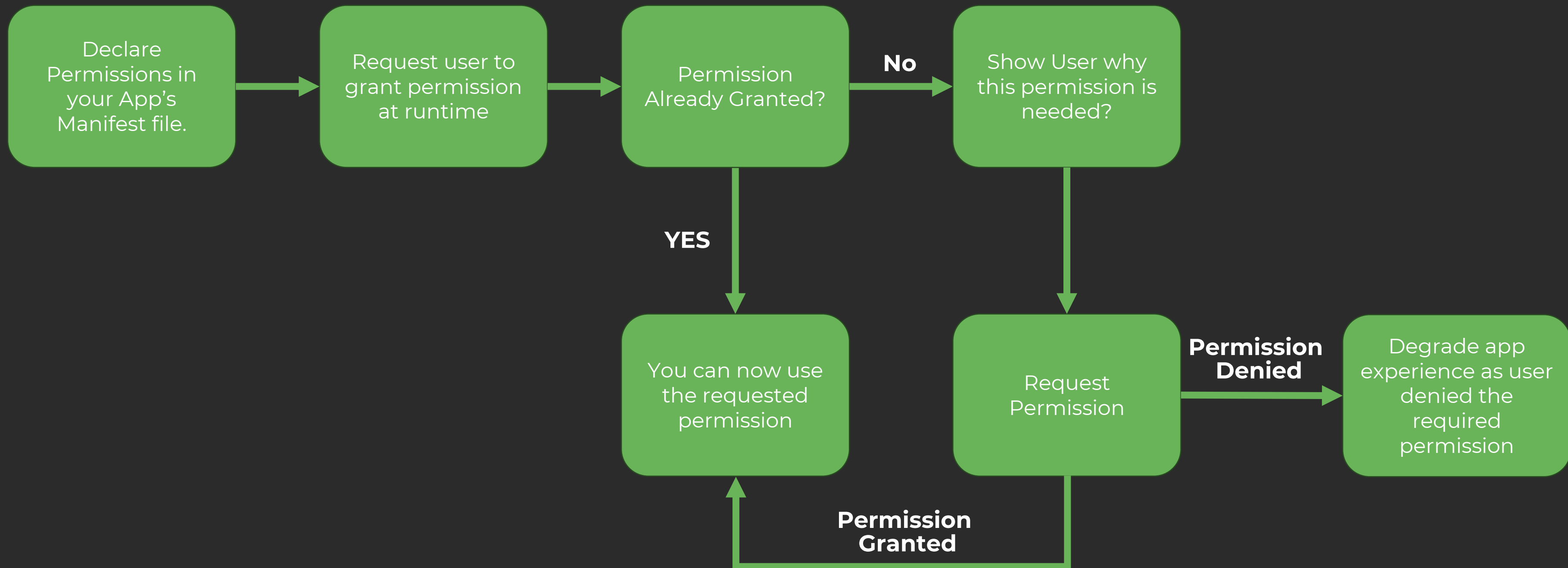
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Runtime Permissions

- Location

- Storage

- Notification (Android 13)

Steps to Request Runtime Permission

```
┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐   No   ┌─────────────────┐
│ Declare         │      │ Request user to │      │ Permission      │───────▶│ Show User why   │
│ Permissions in  │─────▶│ grant permission│─────▶│ Already Granted?│        │ this permission │
│ your App's      │      │ at runtime      │      │                 │        │ is needed?      │
│ Manifest file.  │      │                 │      │                 │        │                 │
└─────────────────┘      └─────────────────┘      └─────────────────┘        └─────────────────┘
                                                          │ YES                      │
                                                          ▼                          ▼
                                                  ┌─────────────────┐      ┌─────────────────┐  Permission  ┌─────────────────┐
                                                  │ You can now use │      │ Request         │   Denied     │ Degrade app     │
                                                  │ the requested   │      │ Permission      │─────────────▶│ experience as   │
                                                  │ permission      │      │                 │              │ user denied the │
                                                  │                 │      │                 │              │ required        │
                                                  └─────────────────┘      └─────────────────┘              │ permission      │
                                                          ▲                          │                      └─────────────────┘
                                                          │     Permission Granted   │
                                                          └──────────────────────────┘
```

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Things in Action

Code Challenge

- Request Storage Permission

Summary

- Declared Permission in Manifest

- Learned requesting permissions at runtime

- Code Challenge

Handling Permission Denials

Up Next