

Life Span

The **life of data** (where and how it is **stored/managed**) in these systems is as follows:

1. SQLite

- **Data Location:** Stored locally on the user's device as a file (**.db** file).
- **Persistence:** Fully offline; data remains on the device even after app closure or loss of internet.
- **Lifespan:** Tied to the app's storage; if the app is deleted, the data is deleted unless explicitly backed up.

2. Sqflite

- **Data Location:** Same as SQLite, as it's a Flutter plugin for SQLite.
- **Persistence:** Offline storage; persists locally within the app.
- **Lifespan:** Depends on the app lifecycle and user actions, similar to SQLite.

3. Hive

- **Data Location:** Stored locally in binary files managed by Hive.
- **Persistence:** Offline; data remains on the device unless deleted explicitly.
- **Lifespan:** High speed and simplicity make it ideal for long-term storage if the app is not uninstalled.

4. Moor (Drift)

- **Data Location:** Similar to SQLite; stored locally as a **.db** file.
- **Persistence:** Data is managed through the app and stored offline.
- **Lifespan:** Long-lived and follows SQLite's behavior unless explicitly cleared.

5. Firestore

- **Data Location:**
 - **Primary:** Stored in Google's Firebase cloud servers.
 - **Secondary** (optional): Cached locally for offline use.
 - **Persistence:** Offline caching is temporary; data syncs back to the cloud when online.
 - **Lifespan:** Cloud data is persistent and tied to the user's Firebase account, allowing access across devices.
-

Key Takeaway for Your Use Case (Disease History)

- If the app's data should **always stay on the user's device** and not rely on the internet, use **Hive** or **Sqflite/Moor**.
- If you want **optional cloud backup** or multi-device synchronization, consider adding **Firestore** alongside local storage