Women Safety App

■ DFD – **Level 0** (**Context Diagram**)

Entities:

- User (Woman in danger)
- Police Department
- Hospital / Safe Shelter
- Firebase (Backend)

Process:

• Women Safety App System

Data Flows:

- User → App: Input (location, emergency alert, audio/video)
- App → Police: Alert + Location + User Info
- App → Hospital: Request for help/shelter
- App ↔ Firebase: Store/Fetch Data (location, recording, logs)

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■ DFD – **Level 1** (**Detailed**)

Processes:

- 1. 1.0 User Input Handling
- 2. 2.0 Emergency Alert System
- 3. 3.0 Location & Recording Management
- 4. 4.0 Data Sync with Firebase
- 5. 5.0 Send Alerts to Contacts / Police

Data Stores:

- D1: User Profile
- D2: Location Logs
- D3: Media Recordings
- D4: Emergency Contacts

Data Flows:

- User → 1.0 → GUI Inputs
- $1.0 \rightarrow 2.0 \rightarrow \text{Triggers SOS}$
- 2.0 → 5.0 → Sends alerts to police/hospital
- $3.0 \leftrightarrow Firebase$
- $3.0 \rightarrow D2/D3$
- 4.0 → Firebase Sync

Women Safety App

™ Data Stores (D1–D4)

- **D1:** Stores user profile and settings.
- **D2:** Location logs and shared coordinates.
- **D3:** Audio/video recordings during incidents.
- **D4:** List of emergency contacts, hospital numbers, police station numbers.

■ Women Safety App – DFD Summary Table	
Level	Description
Level 0	User taps SOS → App sends location, audio/video → Alerts go to Police, Hospital
Level 1	1. Capture user input 2. Share live location 3. Start audio/video 4. Save to Firebase 5. Send alerts
External Entities	User, Police Station, Hospital, Firebase Cloud
Processes	SOS Button Activation, Location Sharing, Media Recording, Data Sync, Alert System
Data Stores	User Info, Location History, Emergency Contacts, Media Files