MVP (Minimum Viable Product)—the simplest version that proves the concept works.

Here is your 5-point MVP checklist:

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1. The Connectivity Core (Mesh Protocol)

Before you build a single button, you need to ensure two phones can talk without the internet.

- **The Task:** Integrate an existing SDK (like **Bridgefy** or **Google Nearby Connections**) that allows "String" data (small bits of text) to pass between an iPhone and an Android via Bluetooth.
- **The Goal:** Send a "Hello World" message from Phone A to Phone B with all Wi-Fi and Cellular data turned off.

2. The "Binary" Profile (The Two-Sided UI)

The app doesn't need a complex social media profile. It needs two distinct states.

- **The Task:** Build a home screen with two giant buttons: **"I Have..."** and **"I Need..."**
- **The Categories:** Limit the MVP to just 4 critical categories: **Medical, Water/Food, Tools, and Rescue. * The Card:** Create a basic "Tinder" card that displays the Category, the Distance (in meters), and a "Timestamp" of when the signal was last caught.

3. The "Compass-Only" Navigation

Since we assume the internet is down and Google Maps might not load, you need a navigation system that doesn't rely on "Tiles."

- **The Task:** Use the phone's built-in **Magnetometer** (Compass) and **GPS coordinates** (which work without data).
- **The Feature:** When a user "matches" with a need, show a simple arrow that points toward the coordinates of the other phone. No streets, no images—just a "North" style needle pointing at the target.

4. The "Pulse" Manager (Battery Saver)

To make this practical, the app can't be a battery hog.

- **The Task:** Create a background service that toggles the Bluetooth radio.
- **The Logic:** "Wake up" for 15 seconds every 3 minutes to broadcast the user's status and listen for others, then go to sleep.
- **Visual:** A simple progress bar showing "Next Pulse in 2:45."

5. The "Trust Handshake" (QR Confirmation)

You need a way to verify that a mission was actually completed without a central server.

- **The Task:** Build a QR code generator and scanner.
- **The Flow:** When the "Rescuer" reaches the "Victim," the Victim shows a QR code on their screen. The Rescuer scans it.
- **The Result:** The mission is saved as "Resolved" in the local memory of both phones, preventing other rescuers in the mesh from chasing the same "ghost" request.

The "Day 1" Testing Plan

Once you have these 5 things, you test it like this:

1. Take three friends to a basement or a remote park with **no cell service**.
2. Have one friend "post" a need for Water.
3. Have the second friend (100 meters away) "match" and find them using only the Compass.
4. Have the third friend (in the middle) see if the message "hopped" through their phone to reach the second friend.