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| Phones | Notable feature |
| iPhone 13 Pro |  |
| Google Pixel 6a |  |

perform facial recognition

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| --- | --- | --- | --- | --- | --- | --- |
| Actions | Features | | | | Performance  criteria | Compatibility |
| Hardware | | Software | |
|  | Necessary | Unnecessary | Necessary | Unnecessary |  |  |
| Provide walking directions | * GPS * Compass sensor * Display screen * Speaker * Battery |  |  |  |  |  |
| Scan the area | * Camera * Depth sensor / LiDAR * IMU * GPU/CPU * Memory (RAM) * Storage | * Networking |  |  |  |  |
| Warn user if someone is getting too close | * Speaker * Proximity sensor * Processor and memory |  |  |  | User informed well in advance. |  |
| Recognise know individuals | * Camera * IR camera/sensor * Dot projector/3D sensor * Proximity sensor * CPU/GPU/NPU * Secure enclave * Biometric data storage | * Machine learning hardware | * OS * UI * Facial detection software * Facial landmark detection * Feature extraction and encoding * Face database / repository * Matching algorithm * MLM * Security and encryption |  | Time taken to recognise individuals isn’t noticeably long. |  |
| Detect obstructions | * CPU/GPU/NPU * Camera * Memory (RAM) | * Camera APIs and Software Development Kits (SDKs): * Machine Learning Models |  |  | User informed well in advance. |  |
| Read signs | * Camera * Processor * Memory (RAM) * Storage * Connectivity * Sensors |  | * OS * Software/algorithm performing OCR * UI |  | * Text read at user’s pace. * Time taken to find the text isn’t noticeably long. |  |