Fall Detection using Geo-location API

Rohan Sharma, Aditya Shukla, Prateek Sharma, Divyanshu Singh

Mentor : Dr Devika Kataria

JK LAKSHMIPAT UNIVERSITY
ज्ञानम् अमृतम्
JKLU
NAAC 'A' Grade Accredited

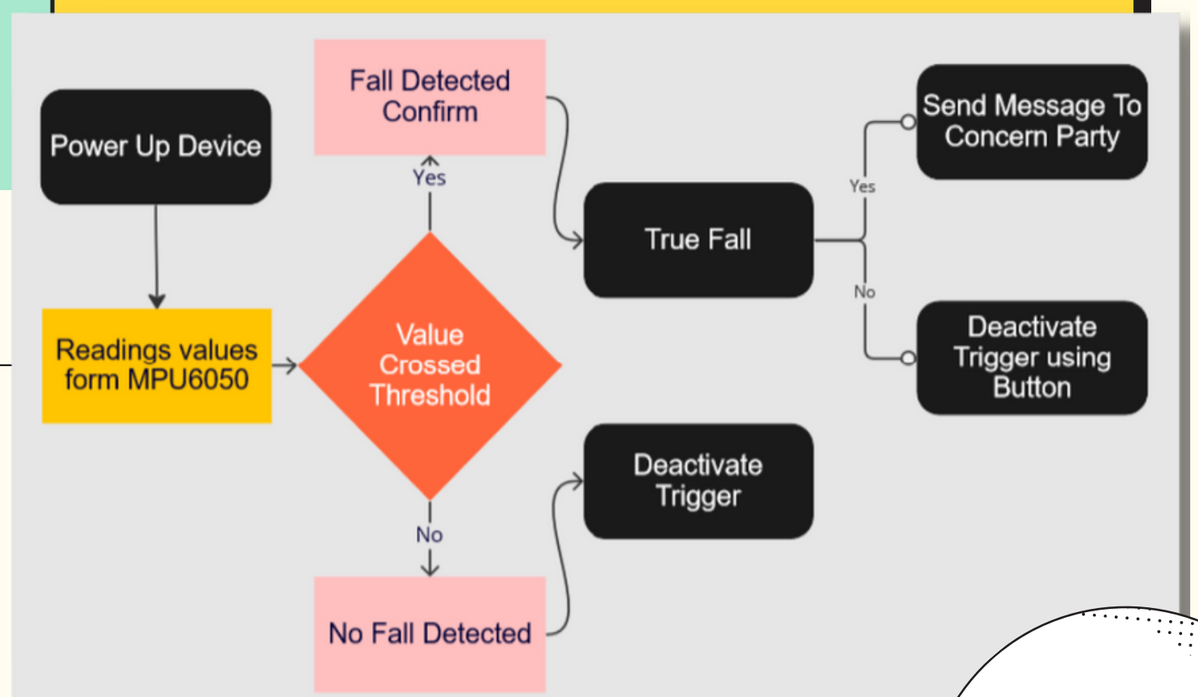
Objective- Device that alerts remote care taker on fall/accident by sending accurate location

Technology Used

- Google Geolocation API
- Google Geocode API
- Embedded C
- Firebase
- NodeJS
- Twilio

Distinct features

- Precise location of the accident.
- Cost economy
- Compact and Robust
- Reliable and Realtime
- Battery powered.
  Wearable and SAR compiant

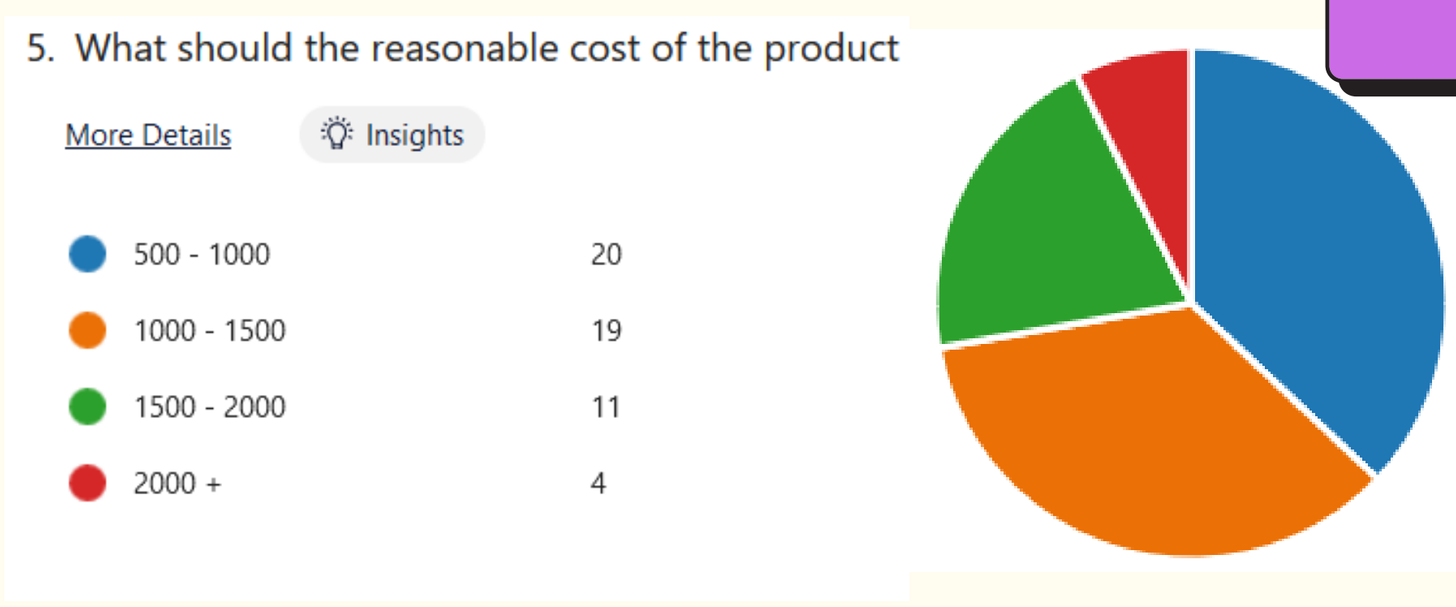


Typical alert message

Sent from your Twilio trial account - Accide
detected for Prateek Sharma on: 1-1-1970 05:30:39
at location - Latitude 26.8358329 & Latitude 75.6500723
Address:-
Neighbourhood: Jaipur
AdministrativeLevels: Rajasthan
City- Jaipur ZipCode- 302026 Country- India

Link google maps :-
https://www.google.com/maps/place/26.8358329N+75.6500723E/

Market Survey



38% of people answered 500 - 1000 for this question

8% of people answered 2000 + for this question, and the majority answered "Be it wearable".

Conclusion

- Prototype implementing the geolocation and messaging service for notifying the concerned parties.
- Product design and testing under progress