

Bedsore Prevention IoT Project

BACKGROUND AND PROBLEM

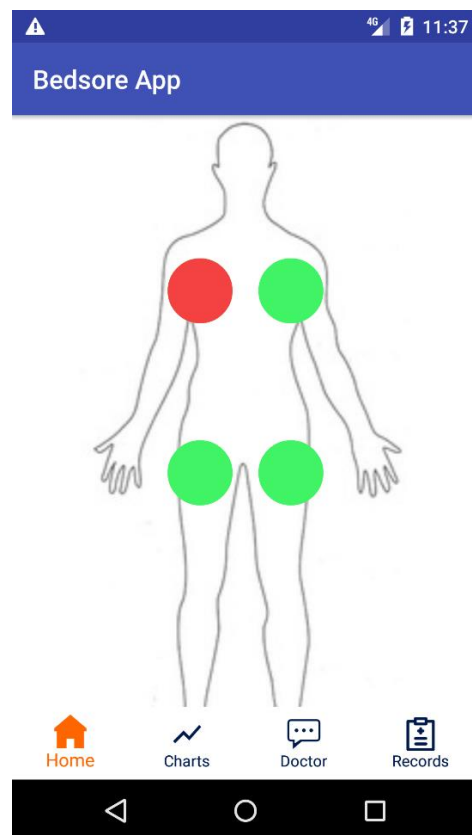
Bedridden patients at home often develop bed sores as they lie down in the same position for too long and their caretaker does not actively adjust their position.

They need to move their body to different positions regularly in order to prevent bed sores. However, bedridden patients, especially elderlies, are unable to move sufficiently in their bed, which causes bedsores. Caretakers may not be able to help them adjust regularly.

ANDROID APP

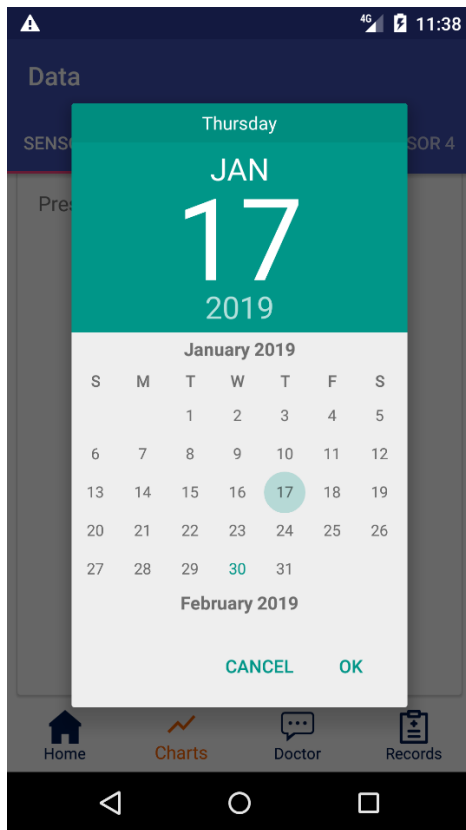
Android App, made for the caretaker in mind, was developed to have four particular functions.

1. Real-time heat map of pressure points
2. Graph containing history of pressure point activity over time
3. Communication with doctor (Telemedicine)
4. Note-taking specifically for patients. Allergies or important notes regarding patients to be kept in app



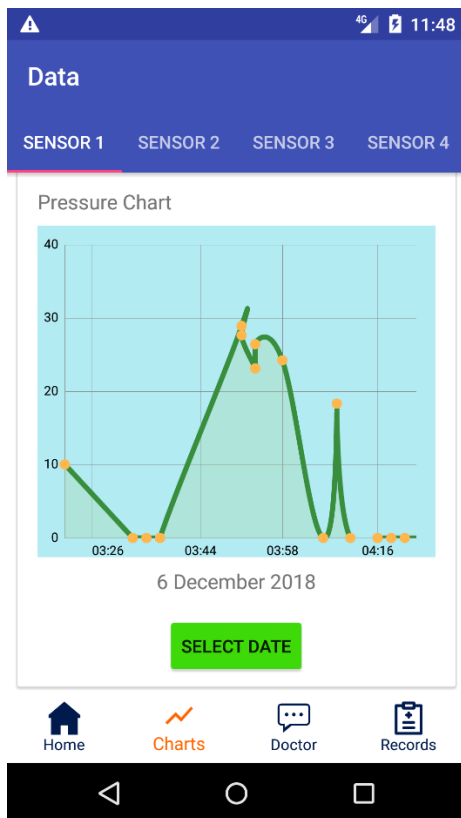
Home Screen

- Real time pressure points on the bedridden patient
- Red means that patient has been lying on that position for an extended period of time (> 12 hours).



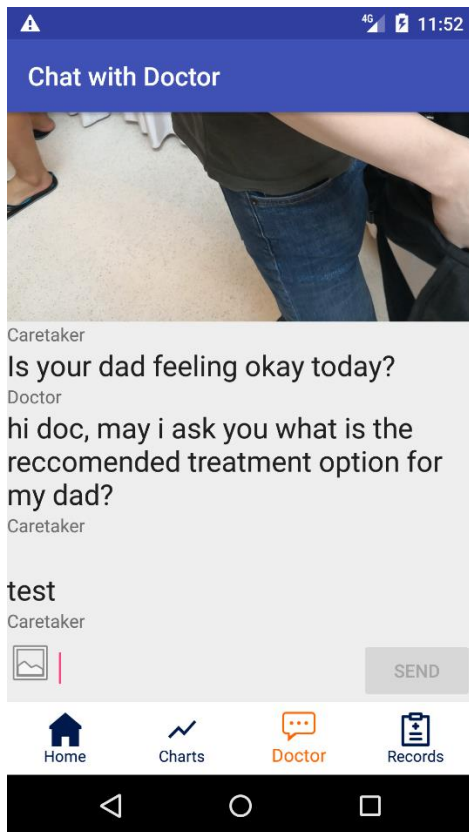
Charts

- DatePicker to view historical data.



Charts

- Line chart for a certain day to show the pressure from each of the sensors.



Chat feature

- For communication between doctor and caregiver.
- Allows sending of text and pictures.