



PRIDE

INNOVATION & TRANSFORMATION

CHALLENGE 2018 (PITCH)



PROJECT TITLE: WeCare Personnel Safety Monitoring System

IHL: University of Malaya

Group Name: WeCare

Group Member: Ong Jia Aun, Ong Seow Sze, Teoh Khau Kheng,
Wang Zhong Qi

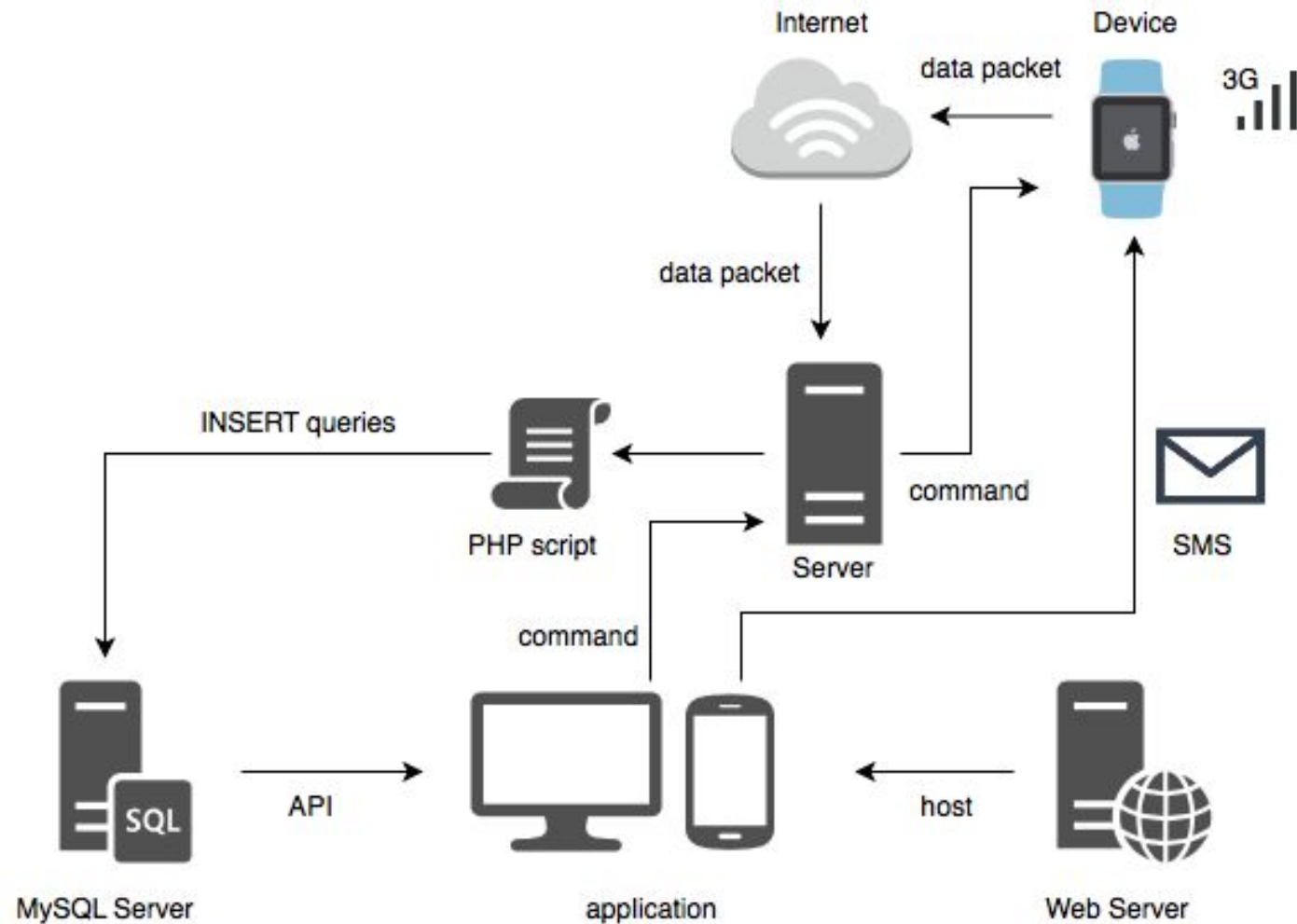
Objective/Problem Statement

Construction site workers, especially in Malaysia, usually does not comply to the OSHA standard of equipment requirement. This is very dangerous as it increases the rate of injury significantly. With buildings getting taller and bigger, so do construction sites. Site supervisors are having a hard time to determine where a worker might be at a given time. Thus, it might be hard for the supervisors to react on time when an accident occurs. Current market trend indicates that the worker health status and location is important to keep track as it provides some indicator to an accident might occur.

Below is the Objective of our Product :

- To be able to monitor the heart conditions of the worker in real time
- To be able to track the locations of the workers in real time
- To store and analyse workers' health and location data
- To enable two-way communication between site supervisors and workers

Program Overview



How does it work/What problem does it solved

Hardware side

Worker wears the device on duty

Device will automatically transmit location data and heart rate to server

Server will process the data packets and store into database

Worker can send SOS signal via device to the server

Software side

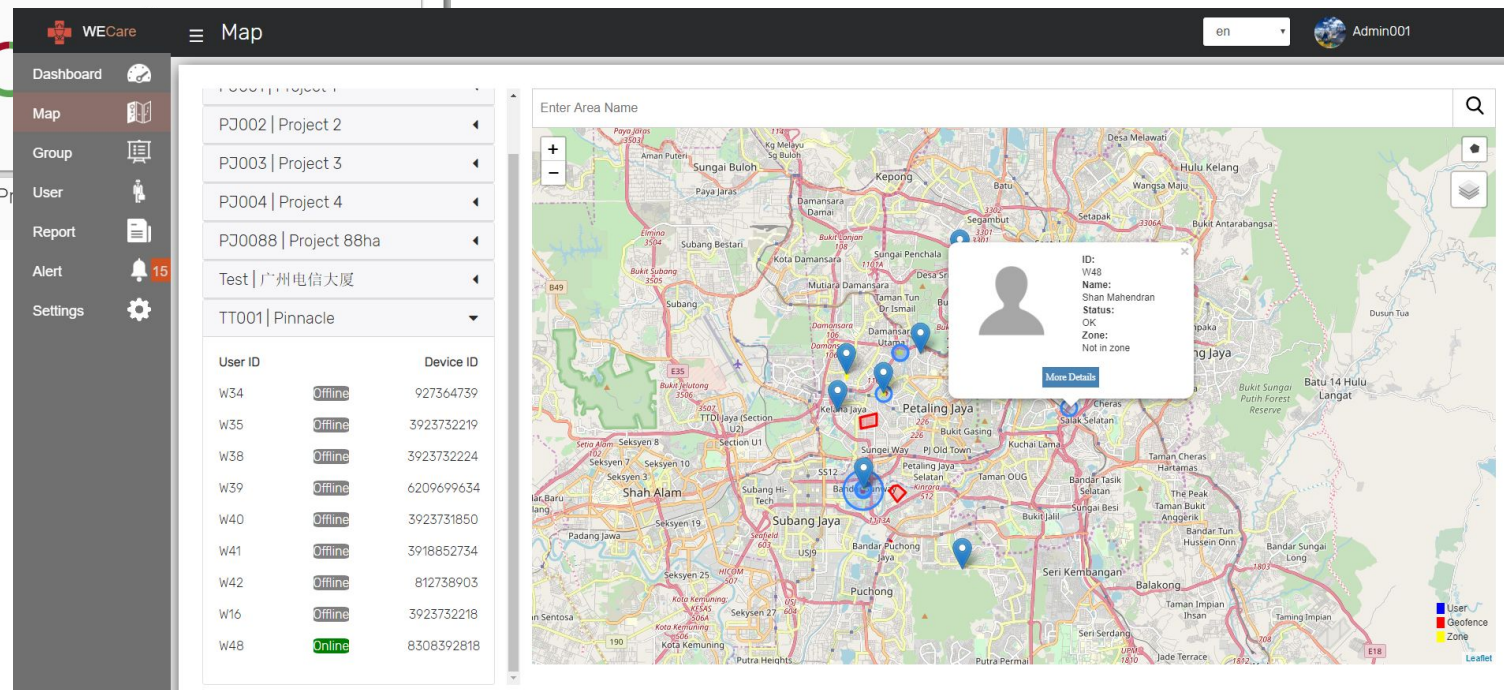
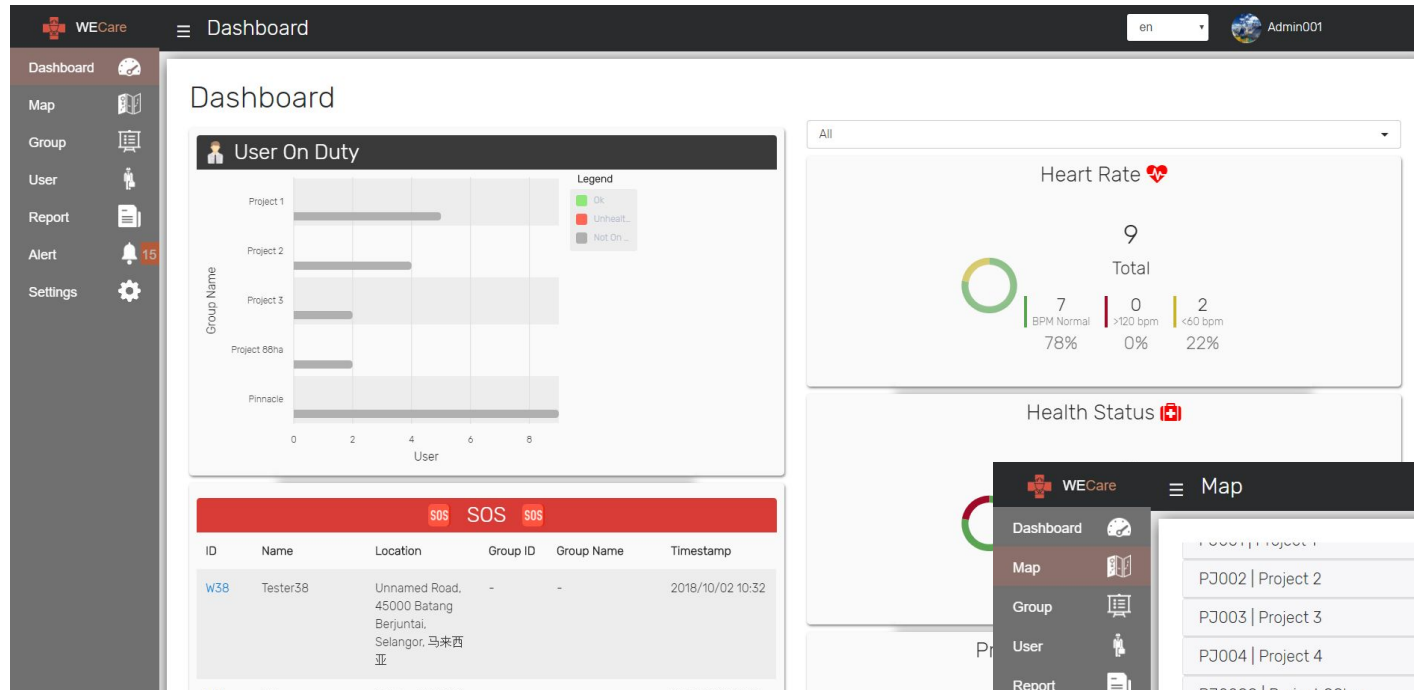
Application will query server API every few seconds

Application will refresh the displayed data automatically

Application will pop up alert or SOS triggered by device

User can send message or command to the device via application

Demo Page - Web Application



Demo Page - Web Application

WECare

Group

AllOngoingPast

enAdmin001

Dashboard

Map

Group

User

Report

Alert

Settings

Group List

Add New Group

Enter Group ID or Name

Group ID	Group Name	Location	Number of User	Number of Floor	Size (ft²)	Group Manager
PJ001	Project 1	Jalan SS2/27, Petaling Jaya	5	6	80000	Admin001
PJ002	Project 2	Jalan SS26/12, Petaling Jaya	4	10	95000	Admin003
PJ003	Project 3	Jalan SS6/5, Petaling Jaya	2	20	45000	Admin002
PJ004	Project 4	Jalan 17/29, Seksyen 17, Petaling Jaya	0	4	80000	Admin001
PJ0088	Project 88ha	马来西亚彭亨	2	3	2	Admin001
Test	广州电信大厦	Jln BK 5D/1D, 47180 Puchong, Selangor, Malaysia	0	0		
TT001	Pinnacle	Persiaran Lagoon, Bandar Sunway, 47500 Subang Jaya, Selangor, 马来西亚	9	30		

WECare

Group

AllOngoingPast

enAdmin001

Dashboard

Map

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User


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Settings

TT001 - Pinnacle

MapUser



Location

Number of User

Number of Floor

Size

Group Manager

Start Date

Time Elapsed

:

:

:

:

:

:

:

Persiaran Lagoon, Bandar Sunway, 47500 Subang Jaya, Selangor, 马来西亚

9

30

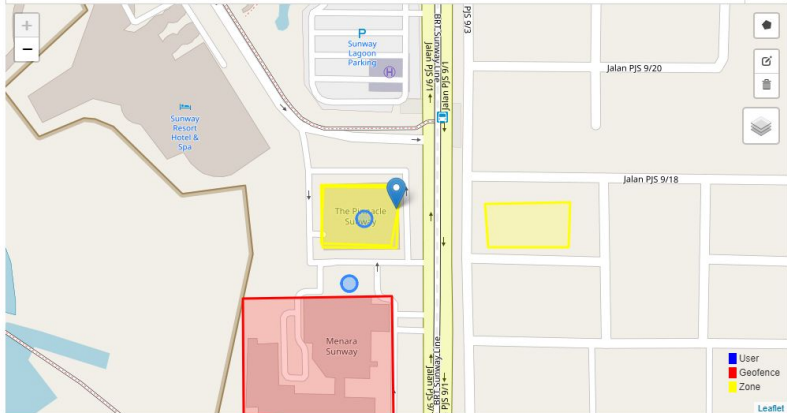
1000

A001

2018/01/17 18:06

42 weeks 6 days

Enter Area Name



Demo Page - Web Application

WECare

User

en

Admin001

Dashboard

Map

Group


User

Report

Alert

Settings

W38 (3923732224) Online



Name

Age

Email Address

Contact

Position

Emergency Contact Name

Emergency Phone Number

: Tester38

: 99

: shan@mmdt.cc

: 01140800589

: User

: MDT-Shan

: +60 19-301 9463

Command

Sensor Data

Last Receive Date

Location

Level

70 bpm

Heart Rate

2,514

Number of Steps

31,083

Total Number of Steps

55%

Battery Level

Location History

From: 2018/09/04 00:00 To: 2018/11/15 00:00 Filter

2018/09/18 17:34:57

2018/09/18 17:42:37

2018/09/18 17:43:17

2018/09/18 17:44:16

2018/09/18 17:44:16

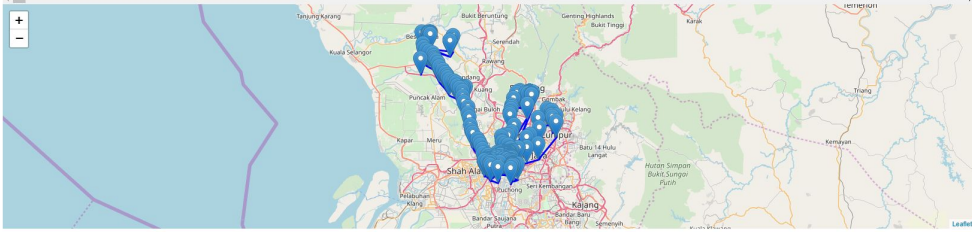
2018/09/18 17:50:12

2018/09/18 17:55:13

2018/09/18 18:01:46

2018/09/18 18:06:47

2018/09/18 18:06:47



Attached Projects

Group ID	Group Name	Location	Number of User	Number of Floor	Size	Group Manager
TT001	Pinnacle	Unnamed Road, 45000 Batang Berjuntai, Selangor, 马来西亚	2	30	1000	

Edit details

Delete

Demo Page - Web Application

WECare

Alert

en

Admin001

Dashboard

Map

Group

User

Report

Alert

Settings

SOS SOS SOS

User ID	User Name	Location	Trigger	Status	Timestamp	
W16	Celcom (3923732218)	7, Jalan SS 2/111, SS 2, 47300 Petaling Jaya, Selangor, 马来西亚	3923732218	UNSOLVED	2018/11/12 14:01	Resolve
W38	Tester38 (3923732224)	Unnamed Road, 45000 Batang Berjuntai, Selangor, 马来西亚	3923732224	UNSOLVED	2018/10/02 10:32	Resolve
W48	Shan Mahendran (8308392818)	Lebuhraya Kuala Lumpur - Seremban, 57100 Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur, 马来西亚	8308392818	UNSOLVED	2018/11/14 21:32	Resolve

Alert

User ID	User Name	Location	Trigger
W16	Celcom (3923732218)	7, Jalan SS 2/111, SS 2, 47300 Petaling Jaya, Selangor, 马来西亚	Battery level low

WECare

Settings

en

Admin001

Dashboard

Map

Group


User

Report

Alert

Settings

User Profile



Name

: Admin001

Age

: 55

Email Address

: admin001@gmail.com

Contact

: +60138958293

Position

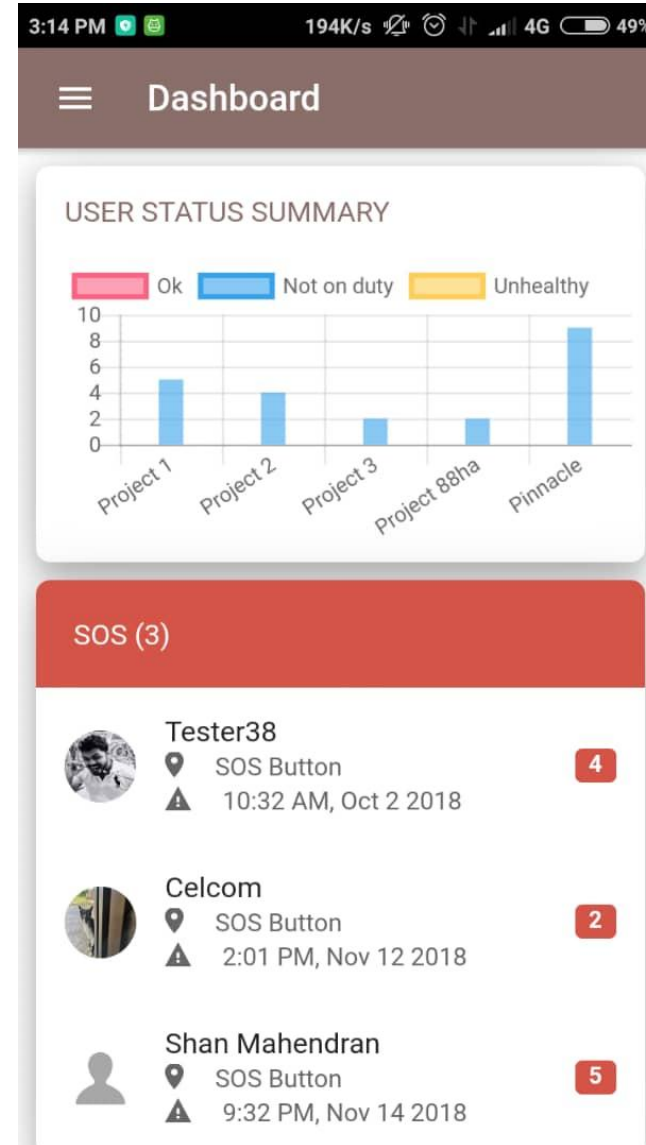
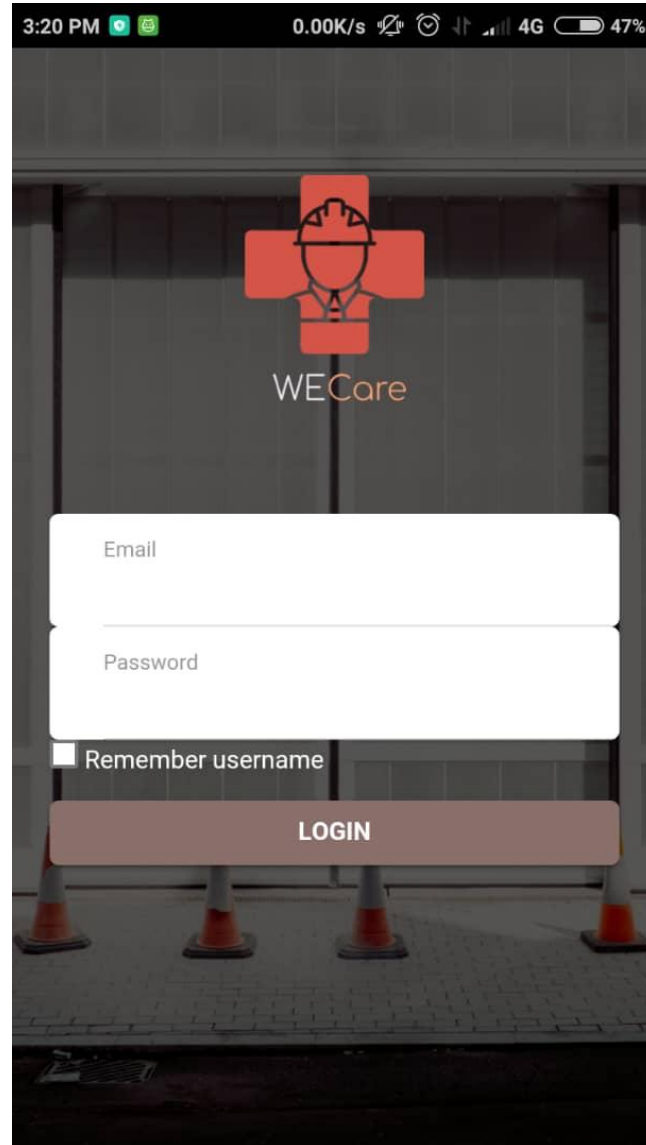
: Site Supervisor

Edit details

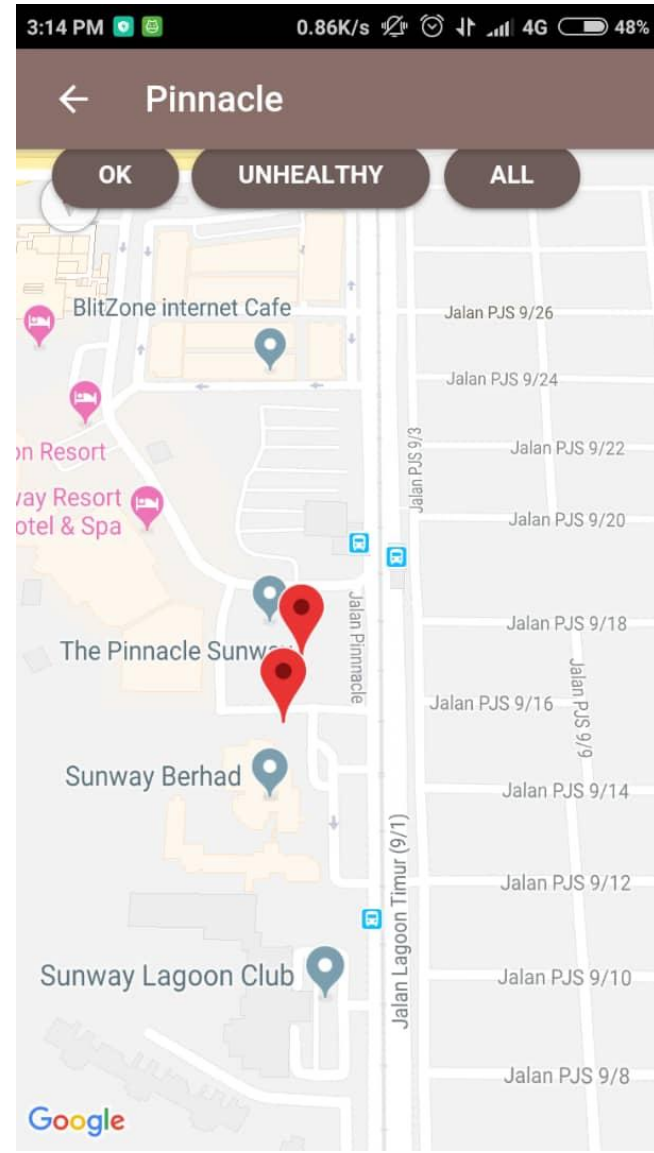
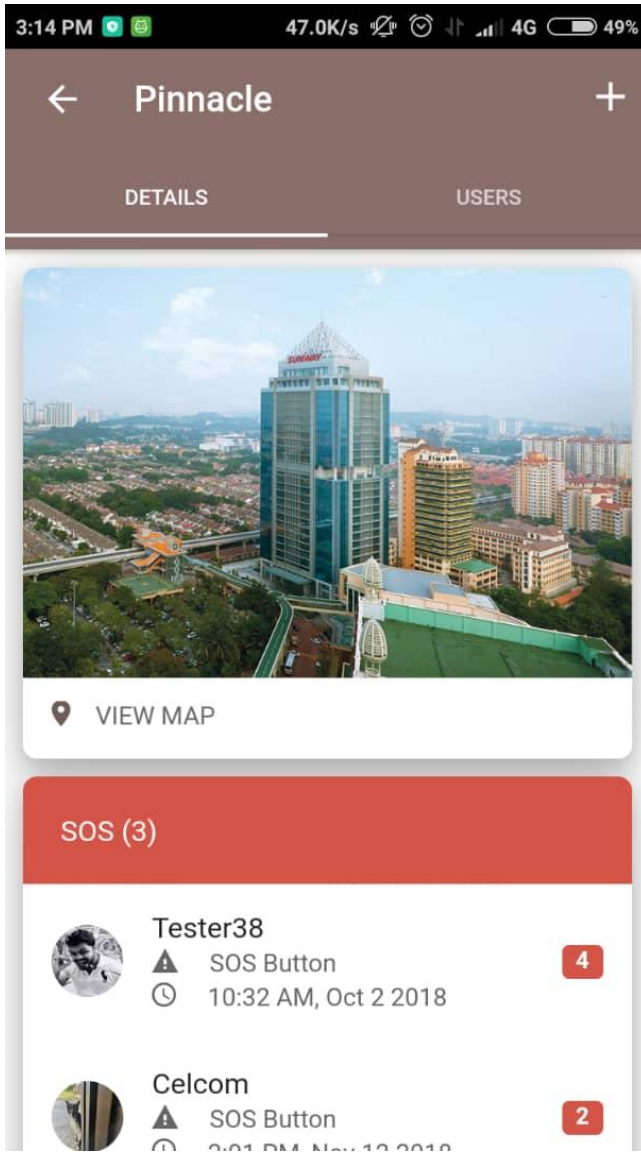
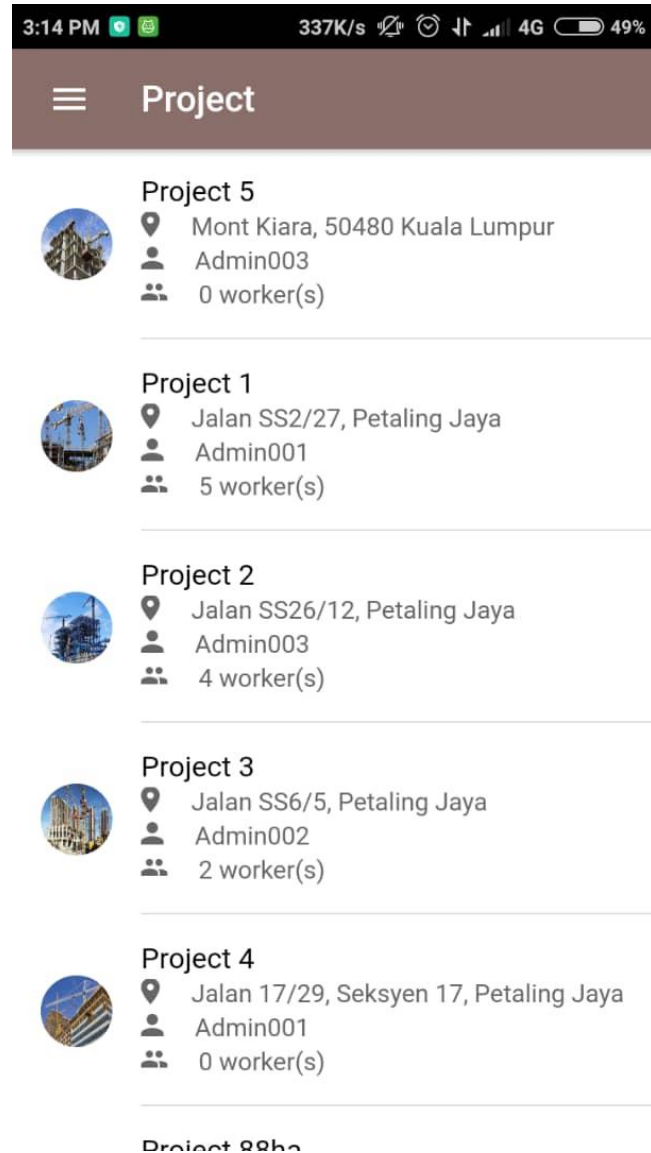
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Test	广州电信大厦	Jln BK 5D/1D, 47180 Puchong, Selangor, Malaysia	0	0	0	
TT001	Pinnacle	Persiaran Lagoon, Bandar Sunway, 47500 Subang Jaya, Selangor, 马来西亚	9	30	1000	

Demo Page - Mobile Application




Demo Page - Mobile Application



Demo Page - Mobile Application

3:15 PM 0.00K/s 4G 48%

← Tester38 (W38) 📍 ✎



AGE
99

EMAIL ADDRESS
shan@mmdt.cc

CONTACT
01140800589

POSITION
User

EMERGENCY CONTACT NAME
MDT-Shan

3:15 PM 0.21K/s 4G 48%

← Tester38 (W38) 📍 ✎

DEVICE 📞 ⚙️ 🔌

DEVICE ID
3923732224

LAST DETECTED
3:34 PM, Oct 2 2018

BATTERY
55%

HEART RATE
70 bpm

STEPS
2514

TOTAL STEPS
31083

3:16 PM 0.00K/s 4G 48%

Configure user device

- 🕒 Set data packet interval
- 📶 Set heartrate packet interval
- 🔧 Set server IP and port number
- 🌐 Set language and timezone
- 🔄 Restart device
- 📏 On/Off pedometer
- 🔍 Find device
- 🔋 On/Off low battery alarm
- 💬 Send SMS through device
- 📍 Display a message on device
- 📶 Start GPS Module
- ✕ Cancel



THANK YOU

Team Members

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