

Deployed Real Time Mobile & Remote Monitoring vital signs for BP, Heart rate functions, oxygen saturation

CLIENT OVERVIEW

Sensogram Technologies is a research and development company that designs, produces and markets innovative biosensors that are easy-to-use wireless mobile devices. Sensogram allows real-time, continuous, remote and mobile monitoring of vital signs such as blood pressure, heart rate, respiration rate, oxygen saturation, and others.

Founded by Dr. Vahram Mouradian, who's vision was to enable people to take control of their own health and wellness. Our first product, SensoSCAN, is the result of many years of US and International research, transforming advanced medical technologies into an affordable, lightweight devices suitable for everyday use.

Industry : Healthcare

- Angular
- Node
- Express
- Mongo
- D3 Graphs
- Android
- Bluetooth

Aws

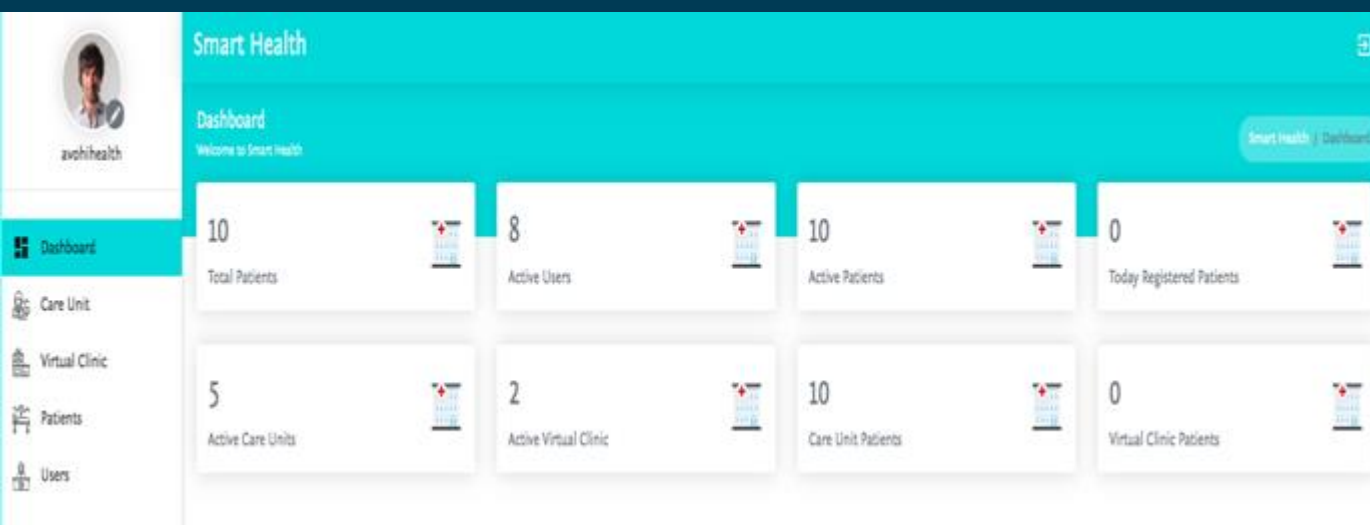
CHALLENGE

- To create a single platform for all available healthcare wearables
- Reading the data of wearables device through app by any patients/elderly people/ Doctor/Nurse
- Detecting fall and sending signals/Alarms to Doctor/Nurse/care taker
- Enable exploration of business model with quick POC

PROBLEM STATEMENT

- ✓ End-to-end development and Integration with **BLE health monitoring devices** to detect and capture heart beats, respiration rate, pulse, SPO2, Blood pressure, weight ECG etc.
- ✓ Detecting fall action and sending Alerts to Doctors/Nurse/Care takers.
- ✓ Admin dashboard for care takers with progress card
- ✓ Admin dashboard to take action on fall alerts
- ✓ Admin dashboard for providing prescription to patients
- ✓ DevOps for the infrastructure deployment and management in Amazon

ADMIN DASHBOARD



CREATE CARE UNITS

The screenshot shows the 'Smart Health' Admin Dashboard with the 'Care Unit' section selected. The main content area is titled 'Create Care Unit' and contains a form with the following fields: Care Unit Name, User Name, Address, Email, Mobile No, Domain Url, and GSTIN. At the bottom of the form are 'Submit' and 'Cancel' buttons. The sidebar on the left is identical to the previous screenshot, showing navigation options: Dashboard, Care Unit, Virtual Clinic, Patients, and Users.

EDIT UNIT CARE

Smart Health

avohihealth

Smart Health | Edit Care Unit

Edit Care Unit

MATRUCHAYA Address MORIZKLEIN42@GMAIL.COM

789789789 Domain Url MA123456789

Save Cancel

VIEW CARE UNIT

Smart Health

avohihealth

Smart Health | Care Unit

Care Unit

Care Unit Detail

List Care Unit

Sl No.	Name	Mobile No	Email	GSTIN
1	MATRUCHAYA	789789789	MORIZKLEIN42@GMAIL.COM	MA123456789
2	Chaitanya old age home	789789789	daviddsouza155@gmail.com	CH123456789
3	democareunit3	868961496	suzhma@avohi.com	123456789
4	careunit2	9964497307	charanraj.d@avohi.com	123456789
5	Avohi	8887979797	krupa.s@avohi.com	7965

Chaitanya old age home

Address: 3rd cross, 1st main, hsr layout, sector 3 bangalore

Email: daviddsouza155@gmail.com

Mobile No: 789789789

Domain Url: http://www.chaitanyatruster.org/

ACTIVATE AND DEACTIVATE CARE UNIT

Smart Health

avohihealth

Admin

Smart Health | Care Unit

Care Unit

List Care Unit

Create New Care Unit

Search

Sl No.	Name	Mobile No	Email	GSTIN	Action
1	karthik care unit	789789789	karthik@avohi.com	123456789	Edit View Deactivate
2	MATRUCHAYA	789789789	MORIZKLEIN42@GMAIL.COM	MA123456789	Edit View Deactivate
3	Chaitanya old age home	789789789	daviddsouza155@gmail.com	CH123456789	Edit View Deactivate
4	democareunit3	868961496	suzhma@avohi.com	123456789	Edit View Deactivate
5	careunit2	9964497307	charanraj.d@avohi.com	123456789	Edit View Deactivate
6	Avohi	8887979797	krupa.s@avohi.com	7965	Edit View Deactivate

Items per page: 20 1 of 6

Are you sure? Confirm to Deactivate the Care Unit.

Cancel OK

OUTCOME

- ✓ The vitals rate can be shown in graph of particular patients
- ✓ Monthly/yearly vitals fluctuation can be shown .
- ✓ The entire data of particular patient is available

QUANTIFICATION OF BENEFITS

- Vital Reading – Vitals reading time can be reduced Ex : consider manually a man takes 5 minute to record vitals of one patient, for 1000 patients it will be 5000 minutes . From our application , it takes 1 minute to record vitals of one patient, for 1000 patients it will be 1000 minutes, We have reduced 4000 minutes of work.
- When ever There is a manual effort there will be chances of errors , consider 2% error rate involved , If there are 1000 patients then 20 patients reading may go wrong , but in application the error rate will be 0.2 . Out of 1000 patients 2 patients reading may go wrong.

HIGH LEVEL ARCHITECTURE DIAGRAM

