Foeto -Care

Our Approach

A walkthrough of our project for saving our future generation.

Agenda

What we'll discuss today

01 Need of the product

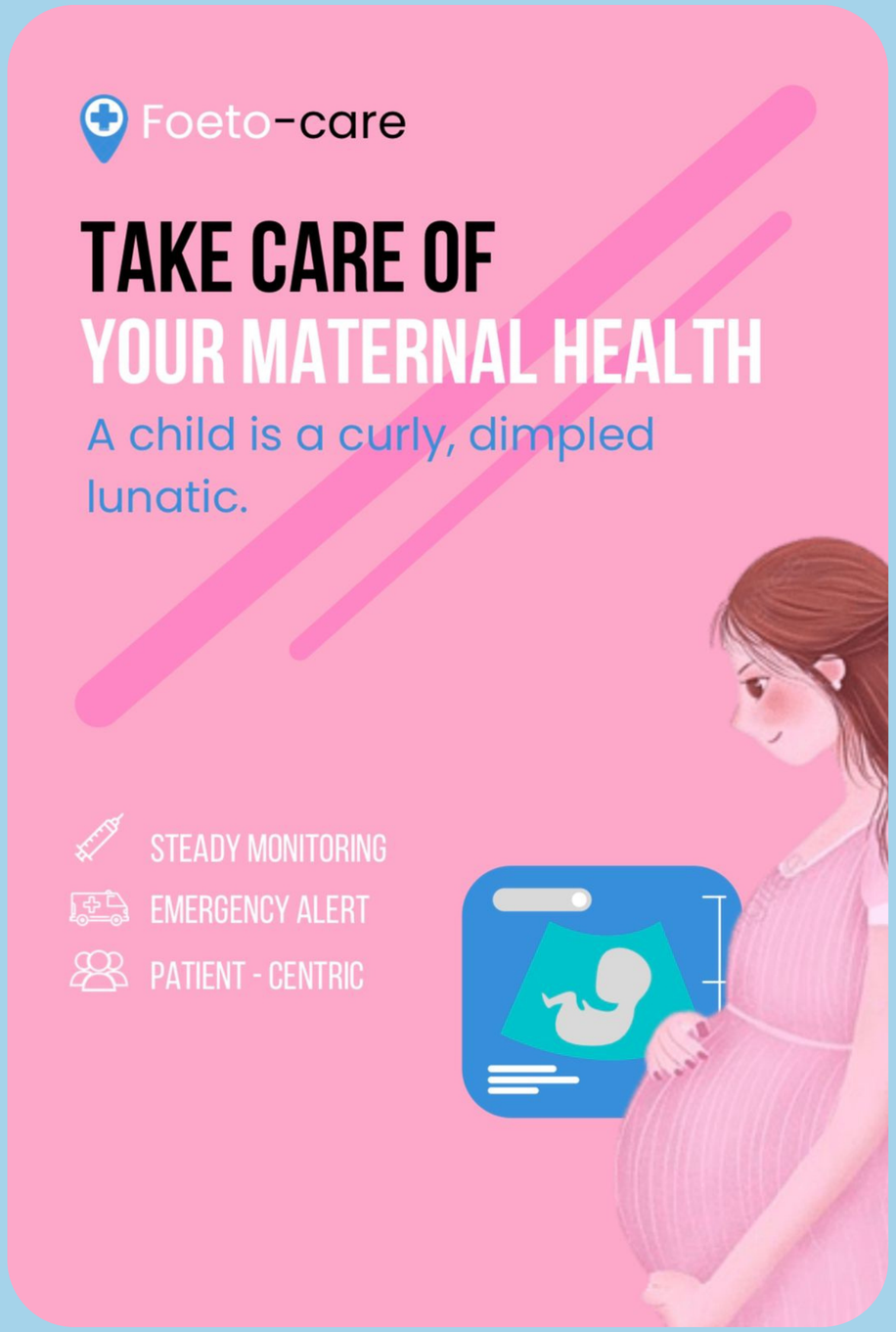
02 Product construction and working

03 Bussiness model

Why , Foeto-care ?

- Offers continuous foetal monitoring, any complication arises to the foetus will be found advanced.

- Complication arises,
will alert the consultant doctor,
 pre-procedure will be advanced.



Product Working

1

Patient buys the device.

fixed on top of the mothers womb.

2

The device is connected to mobile phone.

Can be connected to mobile devices via bluetooth.

3

Foetal health is monitored

Can monitor the health of her baby on a regular basis.

4

Emergency alerts.

Devices engages alerts in case of emergencies .

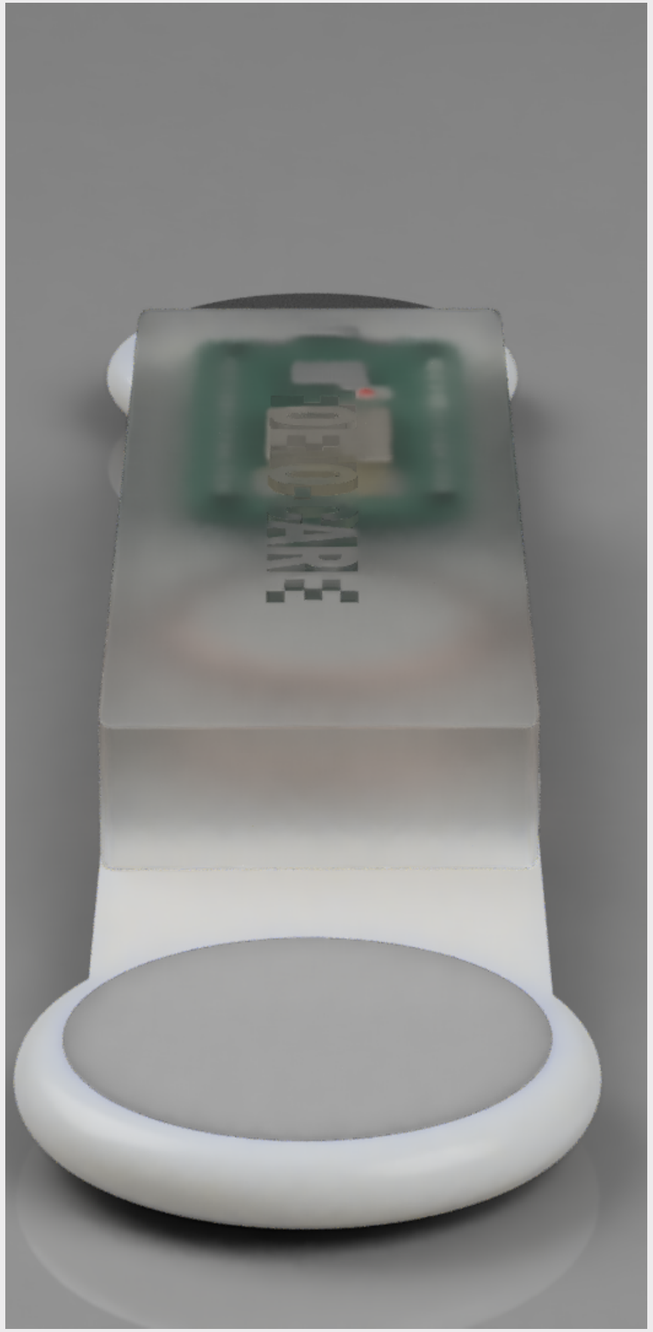
5

Medical assistance

Mother can order services to provide at her home from the app interface .

Product design and lookup.

The computer renders

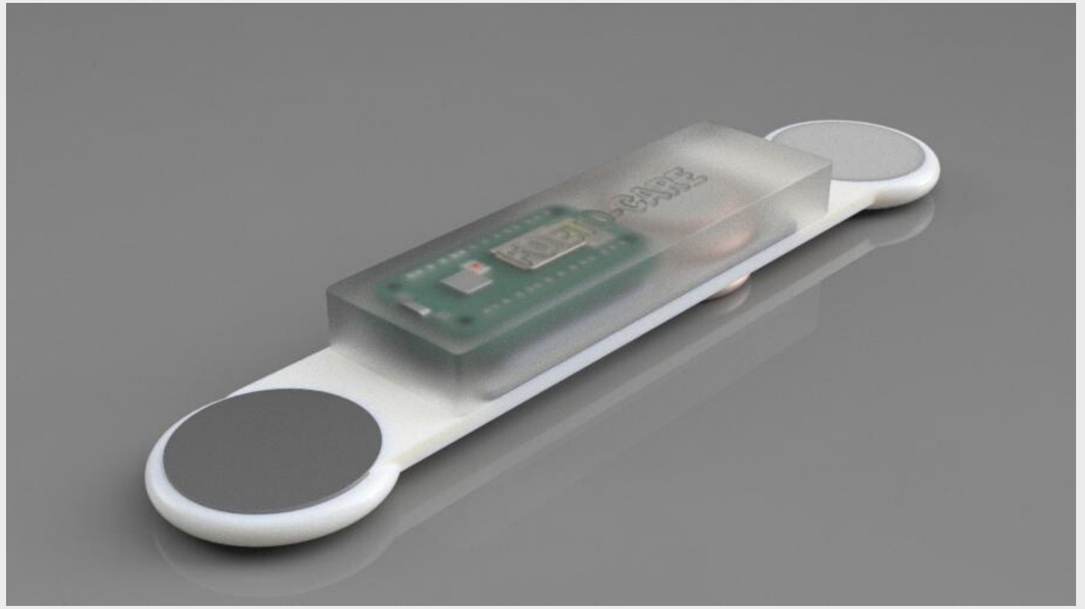


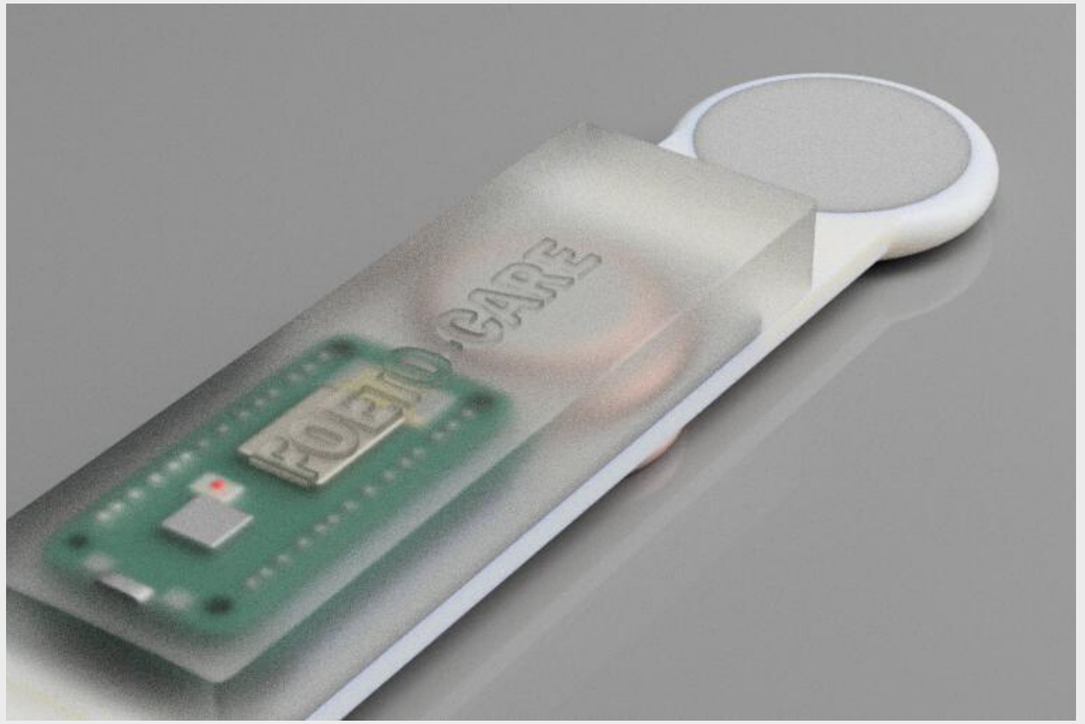
Product design and lookup.

- **Rendered** view of our product.

- Done using **fusion 360** a product modelling software.

- This defines the **compactness** and ease of use of our product.





The working process.

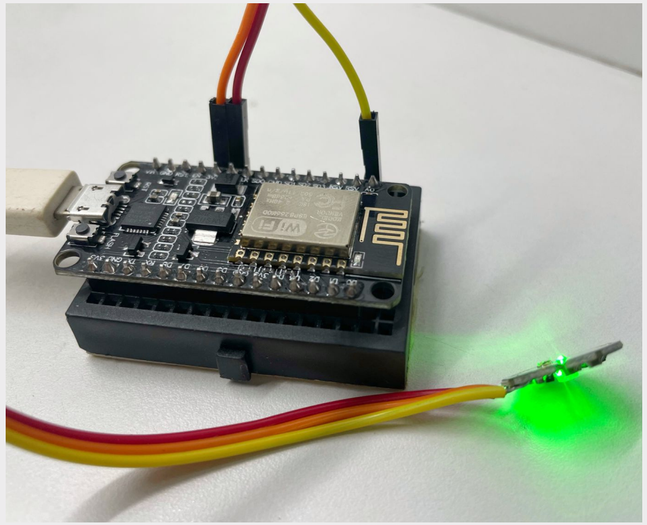
Guided walkthrough of how the product works in detail.

Nanotech for the device

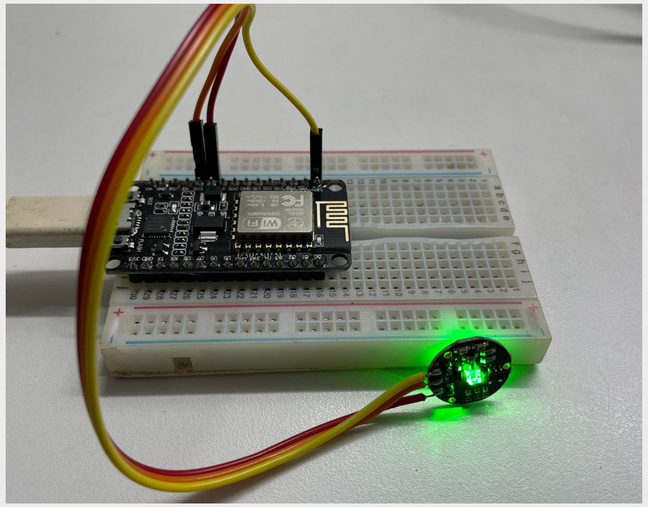
Less than **(₹)500** WI-FI **MCU ESP8266** integrated and easy to prototype development kit. It provides the best platform for
IOT application development at the **lowest cost.**

The Development Kit based on ESP8266, integrates GPIO, PWM, IIC, 1-Wire and ADC all in one board.

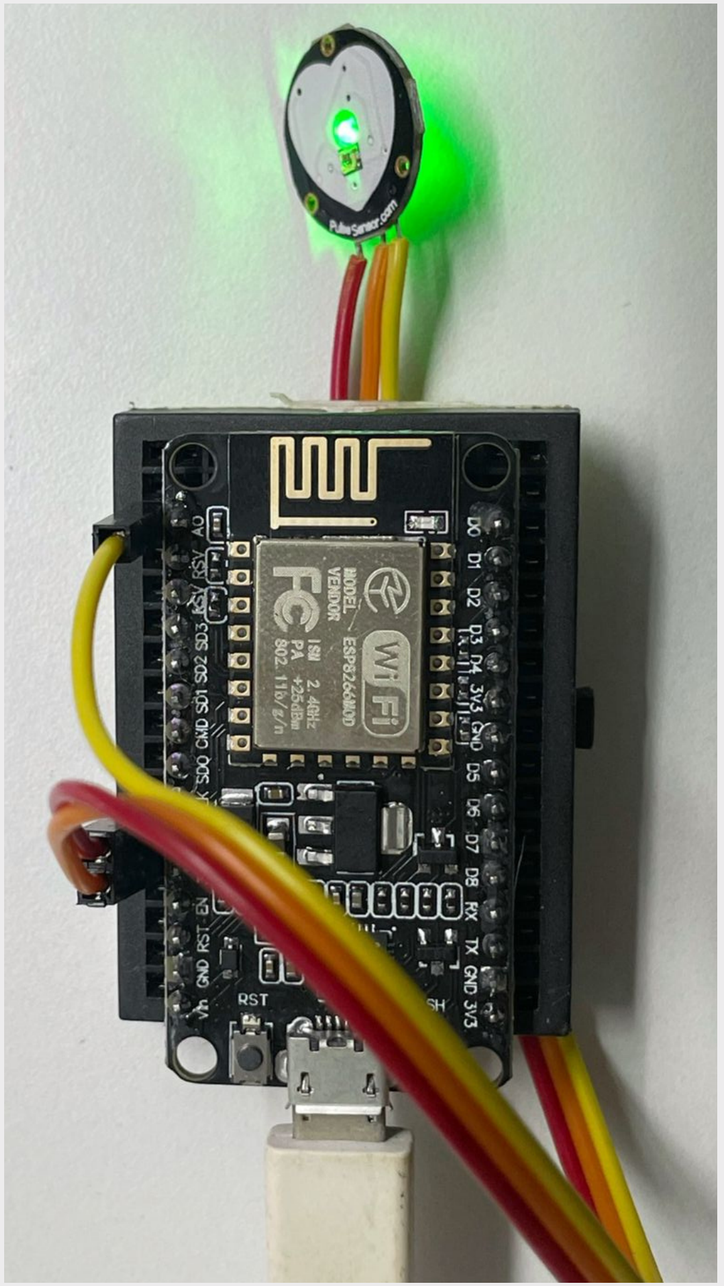
Proof of concept



The construction has a Nodemcu
fixed in a mini bread board and
a pulse heart rate sensor is fixed
to this construction .



The nodemcu has an inbuilt wifi module
which can be used to send
and receive data between the app
and device.



Sensing and processing.

Brief overview of how the signals are sent and processed.

01

Sensing and transmission of the foetal heart rate.

A high-quality doppler wave is transmitted through the mother's womb and the waves are returned with some data, which is sensed by the sensing unit. These signals are transmitted to mobile via bluetooth.

02

Processing of the signals.

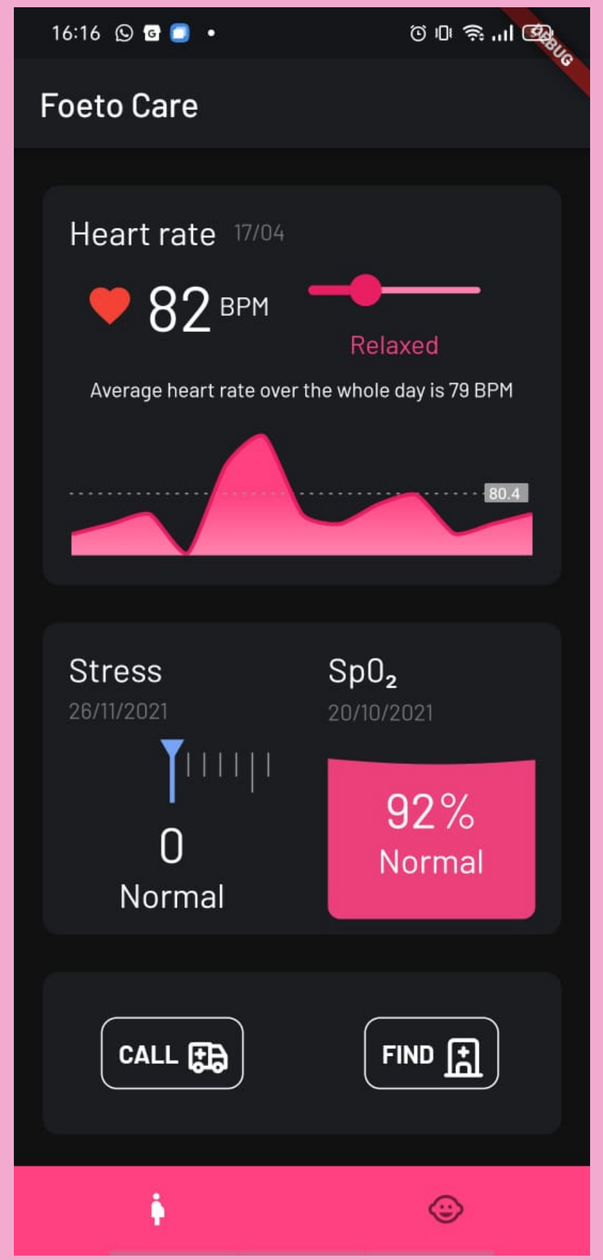
The signals sent from the device, are processed using the phone's processor and are displayed as medical data in the users phone. Irregularity in data is measured using machine learning processes.

App interface

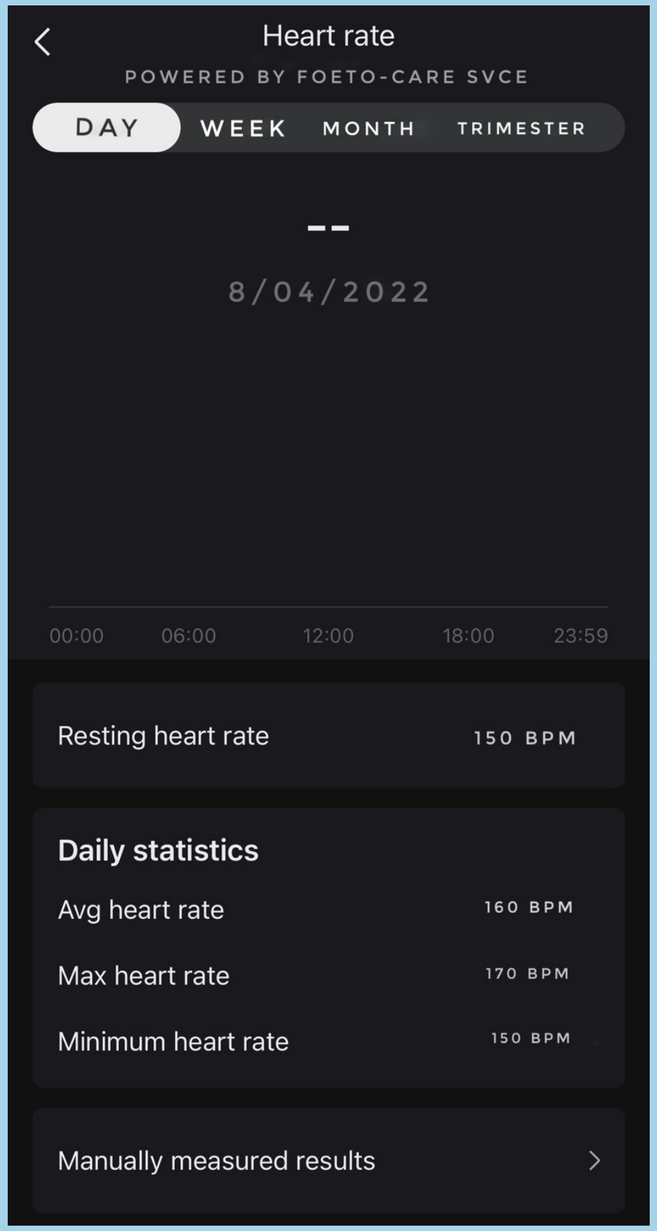
The medical data of maternal and foetal health

Shows both maternal and foetal health in the same app, eliminating the need to visit the clinics on a regular basis, the data is also sent to the obstetrician under practice to monitor the data from their workplace.

Maternal Data



Foetal Health



Foetal monitoring

24/7 monitoring and recording of data,
categorized by day, week, month, and by trimester. The data collected will be saved and will be sent to the obstetrician in practice.

BUSINESS MODEL

01

Gaining trust through marketing.

Initially, we sell our product to the obstetrician at a discounted price. When we get their trust our marketing phase will be successful.

02

Manufacturing and selling to large pharma companies.

Large batches of our products are sold to large pharma industries like Apollo, Cipla, etc as instruments for obstetrics treatments.

Pillars of Foeto-care

United we create, United we accelerate

Gokul Krishnan A

Akash R

Bharath Pughazhendhi

Darshan Arunachala J

Abdul Rehman