

Project title:

Smart

Interactive CPR

Training App

Learn. Practice. Save Lives.

TEAM ID:-Team(CLB)_3_14



TEAM MEMBERS:-

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Origin of the creative idea

Many people, especially in remote areas or non-medical communities, lack the confidence or training to perform CPR accurately in emergencies. Traditional CPR training requires physical classes, mannequins, and medical trainers — resources that are expensive or unavailable to the average person. Incorrect CPR technique can lead to ineffective or even harmful interventions.

Identifying Stakeholders

Our primary stakeholders include the general public, educators, and first-aid trainers who seek accessible, low-cost CPR training. Secondary stakeholders include healthcare NGOs, emergency response teams, and rural outreach programs aiming to improve life-saving readiness.

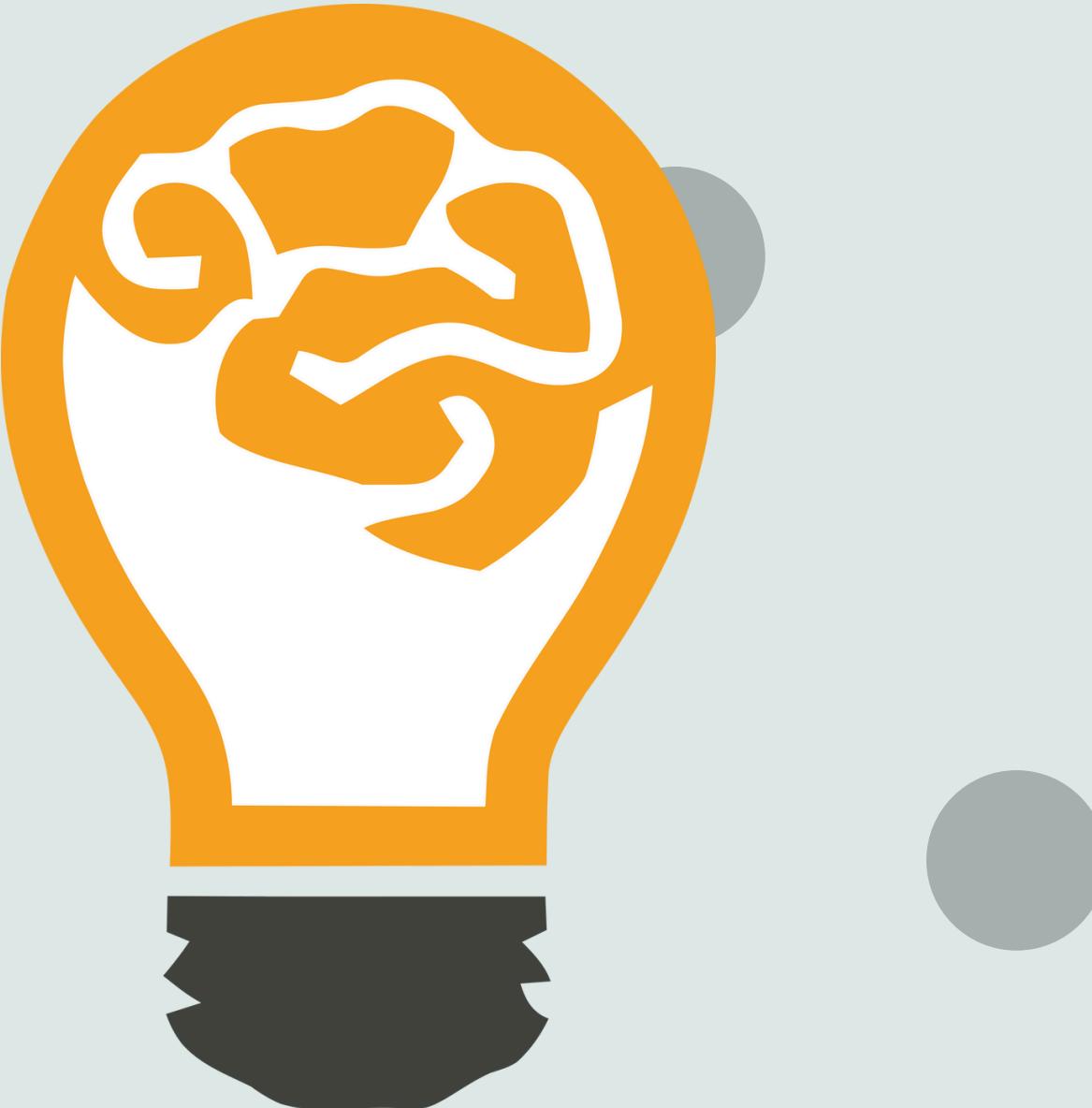
- General Public
- Students & Schools
- First Responders (non-medical)
- Healthcare NGOs
- Rural Health Workers

Stakeholder Problems



- 01** Lack of access to CPR training equipment
- 02** No means to practice proper compression rate/depth
- 03** Fear or hesitation to perform CPR incorrectly
- 04** Low retention of CPR technique after initial training
- 05** Lack of certified trainers in rural areas

Our Solution



- 01 Real-time feedback on compression rhythm
- 02 Gamified scoring system
- 03 Visual & audio instructions
- 04 User customization (child/adult, male/female)
- 05 Offline usability – no internet required for training

APP FLOW

01

Select user gender:
Male/ Female

Select user type:
Senior (>45), Adult
<45), Child

02

Place phone
on
pillow/dummy

03

Begin CPR
training

04

App provides
real-time
feedback
Score,
summary, and
retry option



Tech Stack



Frontend: Flutter
(Dart)



Voice: flutter_tts
for audio
feedback



Sensors:
sensors_plus for
accelerometer



AI/ML (Future
Scope): CPR
compression
classification via
sensor data

Unique Value Proposition

No hardware needed – just a smartphone

Engaging – gamified with real-time feedback

Scalable – can be used by anyone, anywhere

Customizable – adjusts instructions based on patient type

Future Scope

- Advanced ML model for depth classification
- AED (Automated External Defibrillator) education modules
- Community leaderboard & certification mode
- Multilingual voice training
- Integration with NGOs for CPR awareness drives

**Thank you
very much!**