

Mild

Mental health companion



DSTRS.CO

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Graphic Design

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Shipbuilding and Maritime Technology

Júlia
Design

Gema
Industrial Engineering



PROBLEM

PROPOSED SOLUTION

PROTOTYPE

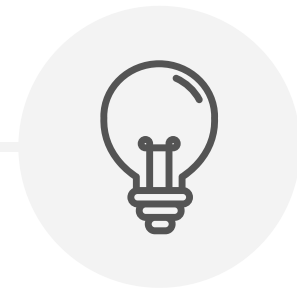
CONCLUSION

VIDEO



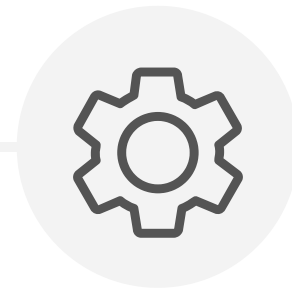
1

Problem



2

Proposed
solution



3

Prototype



4

Conclusion



5

Vídeo



STATISTICS

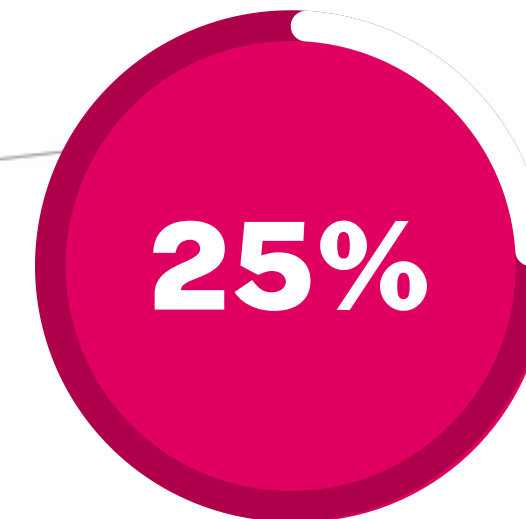
and the impact of COVID-19



Mental health and substance use disorders affect 13% of the world's population.



Million people are affected by Anxiety, the most common mental illness in the world.



COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide

SURVEY

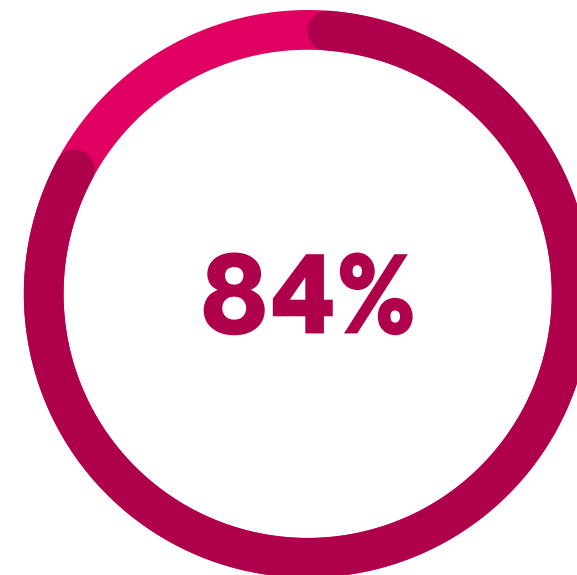
and target audience

People like you and me
Struggling with anxiety
18-30 years old

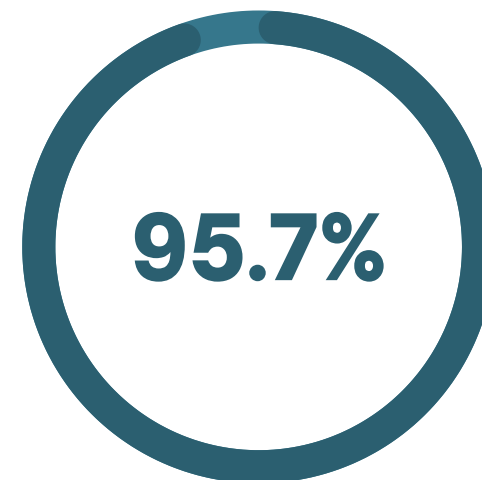
People who have a
restless routine

Daily life earphones
users

People who need stress
relieve



Had experience with the
feeling of anxiety



Don't have a smart
companion or a device that
supports mental health
issues

RESEARCH



Mild

PRODUCT DESIGN

Earphones

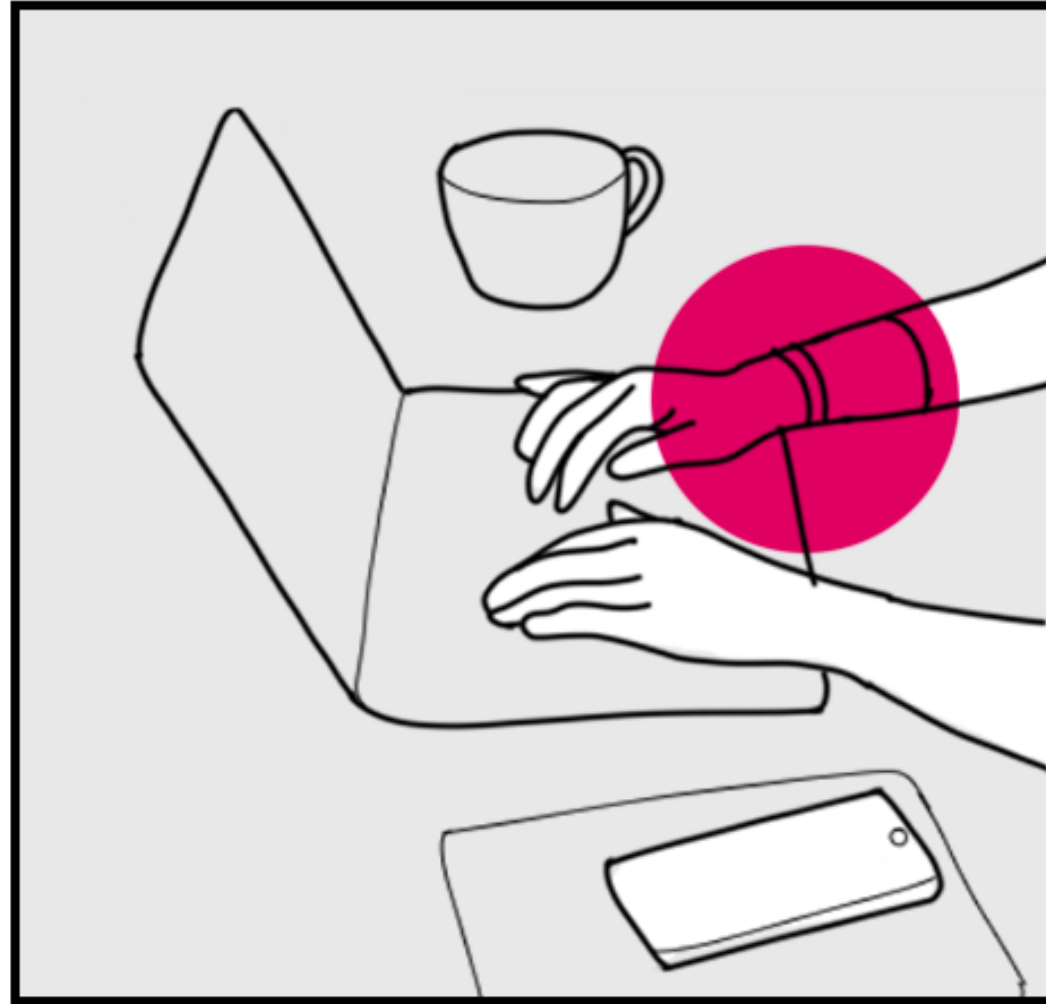


Smart case



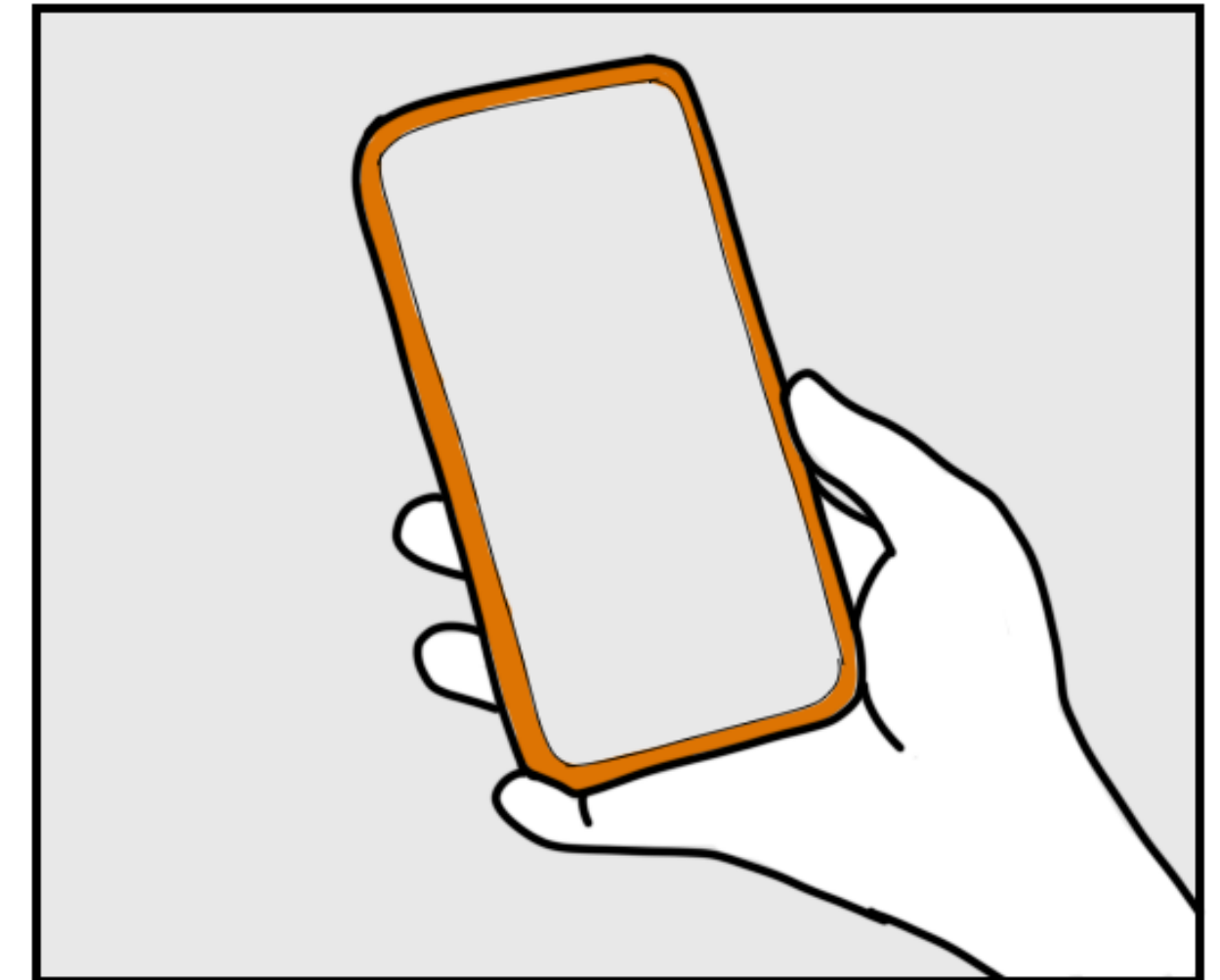
Smart bracelet





The user wears the bracelet during his daily life

Receives a notification when the bracelet detects anxiety levels



Can access the Mild application and choose among 4 options



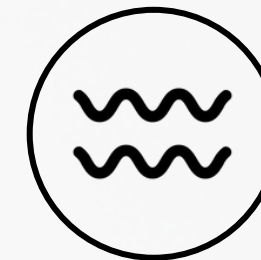
Sounds

Calming Sounds feature



Music

Songs that can calm you down



Vibration

Guided breathing through vibrating headphone case



Breathing

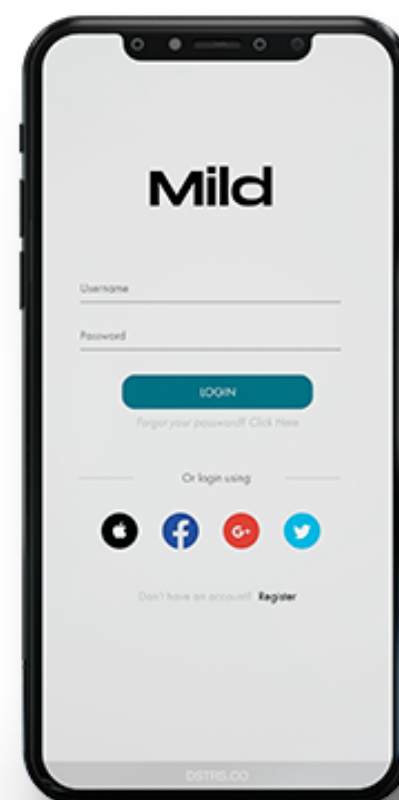
Sound to guided breathing

APPLICATION

Mild mobile application interface



User gets the notification



Login screen



The main page



Different features



Control the earphone and the case

PACKAGING



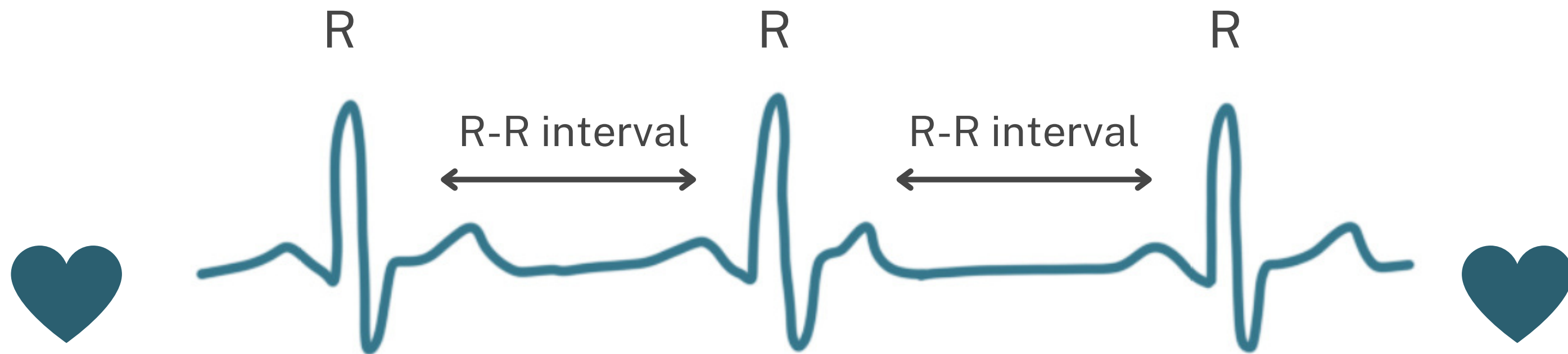
Eco-friendly

User experience

Circular Economy
concepts

HOW IT WORKS

Heart Rate Variability (HRV) indicates the state of mental health.

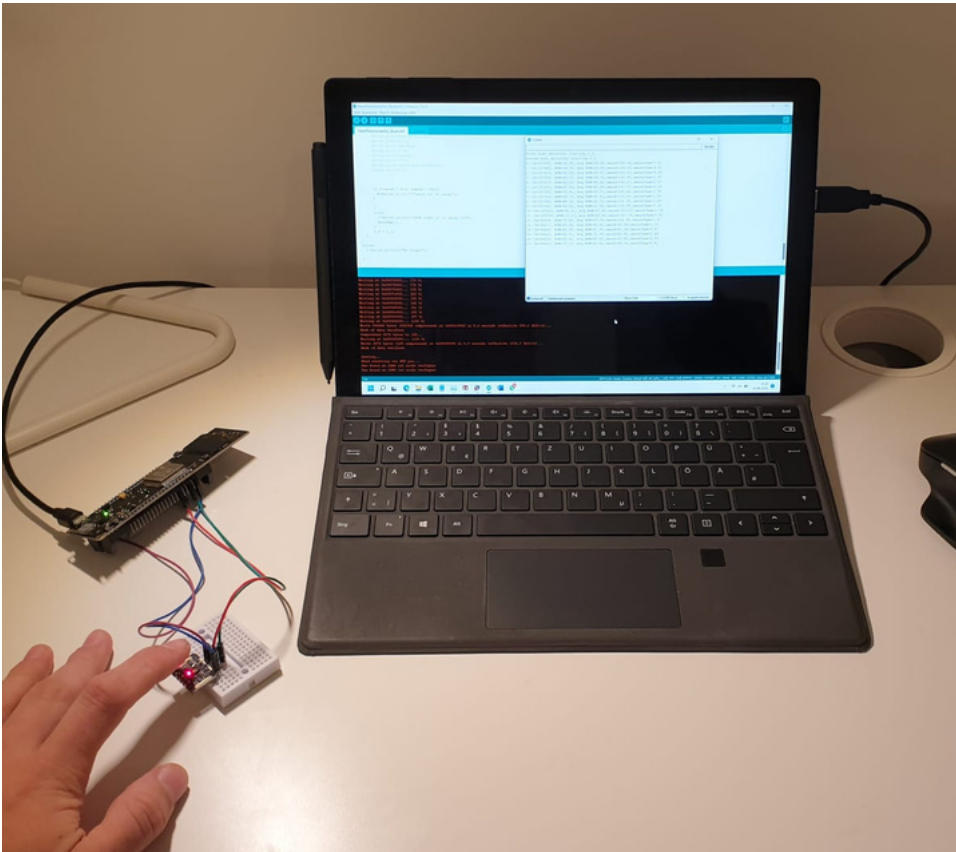


RMSSD is high
You're calm.

RMSSD is low
You're anxious.

$$RMSSD = \sqrt{\frac{\sum_{i=1}^{n-1} (RR_i - RR_{i+1})^2}{n-1}}$$

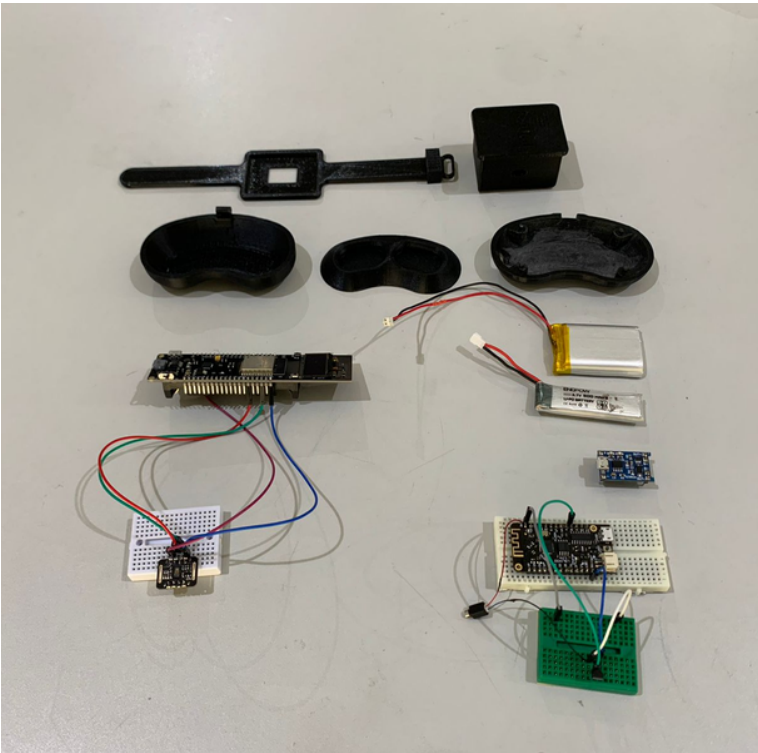
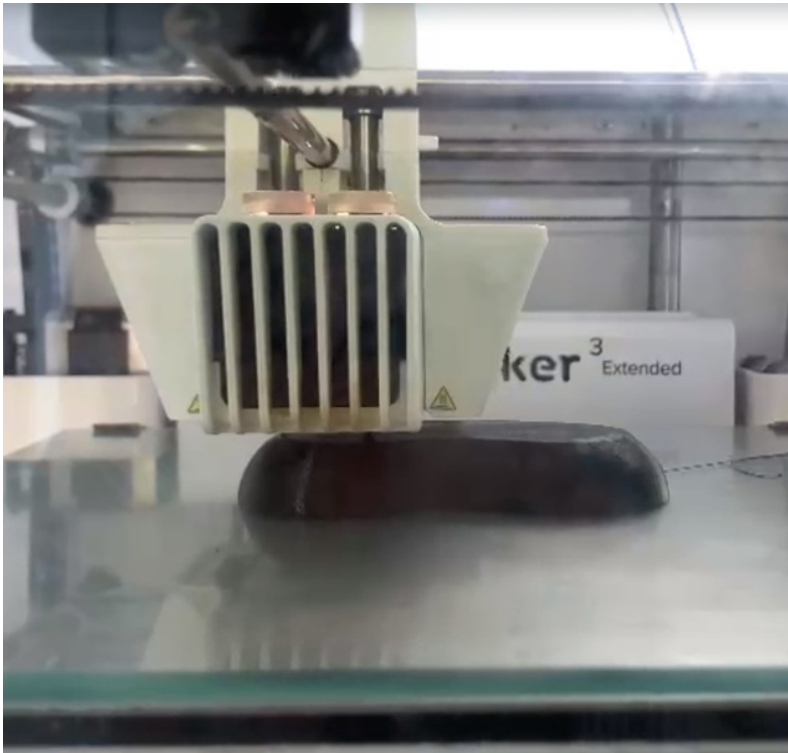
Testing of the Heartrate Sensor



```
COM4
75--IR=103621, BPM=83.33, Avg BPM=60.60, rmsd=45.75, rmsd/bpm=0.55
76--IR=104334, BPM=56.55, Avg BPM=61.40, rmsd=46.27, rmsd/bpm=0.02
77--IR=104308, BPM=68.18, Avg BPM=61.40, rmsd=45.20, rmsd/bpm=0.66
78--IR=104259, BPM=65.22, Avg BPM=62.20, rmsd=44.94, rmsd/bpm=0.69
79--IR=104208, BPM=49.96, Avg BPM=64.20, rmsd=34.28, rmsd/bpm=0.69
80--IR=104166, BPM=71.43, Avg BPM=65.90, rmsd=22.25, rmsd/bpm=0.31
81--IR=104100, BPM=65.15, Avg BPM=65.90, rmsd=21.66, rmsd/bpm=0.33
82--IR=104048, BPM=71.43, Avg BPM=67.20, rmsd=21.58, rmsd/bpm=0.30
83--IR=103954, BPM=50.77, Avg BPM=65.40, rmsd=21.00, rmsd/bpm=0.36
84--IR=103846, BPM=56.60, Avg BPM=64.20, rmsd=20.81, rmsd/bpm=0.37
85--IR=103768, BPM=73.17, Avg BPM=63.20, rmsd=21.56, rmsd/bpm=0.29
86--IR=103511, BPM=29.69, Avg BPM=60.50, rmsd=47.32, rmsd/bpm=1.43
87--IR=103388, BPM=54.50, Avg BPM=59.10, rmsd=51.04, rmsd/bpm=0.94
88--IR=103299, BPM=62.50, Avg BPM=58.80, rmsd=51.21, rmsd/bpm=0.82
89--IR=103207, BPM=60.00, Avg BPM=59.90, rmsd=50.45, rmsd/bpm=0.84
90--IR=103129, BPM=55.50, Avg BPM=58.30, rmsd=49.21, rmsd/bpm=0.89
91--IR=103099, BPM=76.92, Avg BPM=59.40, rmsd=50.06, rmsd/bpm=0.65
92--IR=103034, BPM=57.64, Avg BPM=58.00, rmsd=50.67, rmsd/bpm=0.88
93--IR=102858, BPM=54.55, Avg BPM=57.60, rmsd=50.38, rmsd/bpm=0.92
94--IR=102856, BPM=66.67, Avg BPM=58.60, rmsd=50.76, rmsd/bpm=0.76
95--IR=102782, BPM=69.69, Avg BPM=58.20, rmsd=50.21, rmsd/bpm=0.72
96--IR=102762, BPM=71.43, Avg BPM=62.40, rmsd=32.84, rmsd/bpm=0.46
97--IR=102709, BPM=49.14, Avg BPM=61.90, rmsd=31.43, rmsd/bpm=0.40
98--IR=102674, BPM=62.50, Avg BPM=61.90, rmsd=20.63, rmsd/bpm=0.33
99--IR=102667, BPM=62.43, Avg BPM=62.10, rmsd=20.59, rmsd/bpm=0.33
100--IR=102645, BPM=56.60, Avg BPM=62.20, rmsd=20.67, rmsd/bpm=0.37
101--IR=102549, BPM=24.99, Avg BPM=57.00, rmsd=46.21, rmsd/bpm=1.85
102--IR=102519, BPM=61.22, Avg BPM=57.40, rmsd=46.92, rmsd/bpm=1.04
103--IR=102163, BPM=61.22, Avg BPM=58.10, rmsd=63.89, rmsd/bpm=1.04
104--IR=102403, BPM=39.97, Avg BPM=55.40, rmsd=65.68, rmsd/bpm=1.64
```



THE PROTOTYPE



Achievements

For the solution and for the team



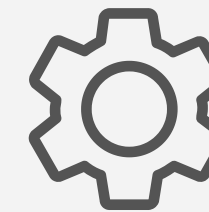
Group
Work



Problem-
solving
skills



Multidisciplinary
team

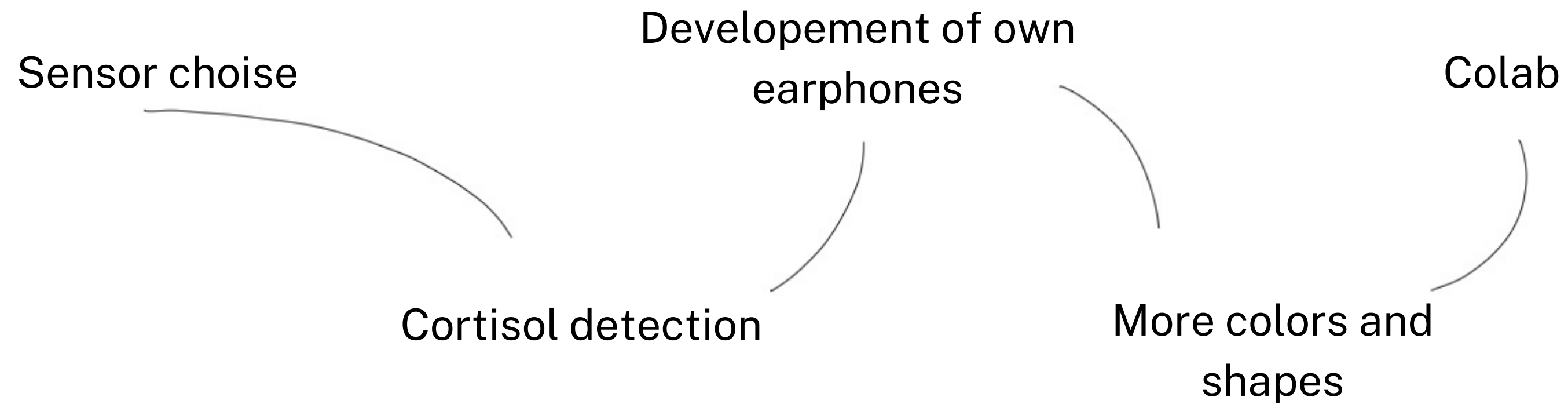


Knowledge in
distant topic



Product
ready for
investment

Future work







THANKYOU

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