employed certified lifeguard is 26 year old.

Every candidate attending a National Pool Lifeguard Qualification

swim 50 metres in less than 60 seconds. The average age of an

(NPLQ) course must be 16-years-old and jump or dive into deep water.

# 1. CUSTOMER SEGMENT(S)

CS

6. CUSTOMER CONSTRAINTS

accident .

CC

# 5. AVAILABLE SOLUTIONS

AS

Explore

Focus on J&P, tap into BE, understand

Extract online & offline CH of

Prediction process take place only after drowning But we used

Deep learning algorithm for Pulse rate detection so that there is a

chance for predicting the drowning accident at earlier stage

Merits: predict before drowning under water

Demerits: If network is not available then it doesn't give a result.

.

# 2. PROBLEMS

J&P

TR

EM

 Beginners, often feel it difficult to breathe underwater which causes breathing trouble which in turn causes a drowning accident

causes breathing trouble which in turn causes a drowning accident in swimming pool

As water is much denser than air, so there is much more

resistance preventing people from being able to move through it quickly and freely so sometimes even the experienced people will find difficulty to swim.

9. PROBLEM ROOT CAUSE

The main problem is an alert is being sent to Lifeguard only after the person is drowned down.

In this a best Pulse Rate sensor is used to detect the pulse

rate of every swimmer it helps to prevent fro drowning

however, they cannot save a person before drowning down

# 7. BEHAVIOUR



- · Saving people life
- Take effective action in emergency situation
- · Attentive and energetic

# 3. TRIGGERS



- Send an alert message to the LifeGuard
- Helpful for earlier prediction of drowning

# 10. YOUR SOLUTION

SL

RC

 Swimming is one of the best exercise that reduce the stress but because of certain reason the drowning accident take place

 In our project we used pulse rate detection so there is an chance for earlier prediction and help to avoid the drowning accident.

# 8. CHANNELS of BEHAVIOUR



- 1. ONLINE
  - 1. Accurate pulse rate detection

#### 8.2 OFFLINE

Unaccurate pulse rate detection

#### 4. EMOTIONS: BEFORE / AFTER

Before the detection of active drowning there were many drowning accident worldwide after this ,they can only save the drowning person after he/she is drowned down by sending an alert to Lifeguard

