



open**SAP**

TOUCH IOT  
WITH SAP LEONARDO  
PROTOTYPE CHALLENGE

# Story

This IoT prototype should be used by pool service companies. During the pool summer operations a lot of information about pool water and pool technical equipment should be collected in advance to preserve clean water during the whole summer.

Pool owners often don't want to do the sanitation - check water parameters - temperature, PH, chlorine, salinity and so, but they still want to have clean and healthy water. Especially the high temperature of the water (over 30 degrees) may lead to water parameters moving to unhealthy levels.

Pool service companies using this IoT system will be able to check all water information in advance to preserve the clean water. In addition, technical information about water pumps and filter systems, salt systems, chlorinators, heaters, PH systems and so can be collected in advance to prevent the technical failure.



# Jane

Customer service specialist at a pool service company

"I want to have everything perfect and as a mother of two young children I understand every pool must be clean and healthy."

## About

- 40, married, mother of two children.
- Employee responsible for checking customer pools and taking the care of them
- Desires to have perfect overview of all technical and chemical status of each pool installed and serviced by her company
- Works with pool owners, usually only via phone

## Responsibilities

- I am responsible for checking technical status of all pool components
- I am also responsible for chemical status of pool water, checking all relevant water properties
- I spend all my time at the office, making calls with pool owners
- Once per month I am creating "pool statuses"

## Needs

- I need to know all relevant information about our pools and the water within in advance to preserve dangerous quality of the water
- I need to have access to all pool information history to compare pools in the same location
- As a mother of two young children, I need to remain flexible – often I work from home

## Main Goals

- Keeping pool water healthy  
Ensure customers – pool owners – have their pool water's parameter within the healthy criteria range at any time by pre-warning them in the case the parameters get out of acceptable levels
- Prevention of pool equipment technical failures  
Ensure technical support is informed about necessary maintenance to prevent technical failures of pool equipment – pump and filter systems, salt systems/ chlorinators, heaters, PH systems and so

## Pain Points

- No access to information about all pools
- Water parameters are collected often too late which leads to e.g. algae in the pool
- Pool technical equipment often fails because of lack of control and missing predictive maintenance

## Point of View

As a customer service specialist

I need a way to check water parameters and technical status of pool equipment in advance

so that pool water will remain clean and healthy and our customers stay satisfied with their pools.

## User Experience Journey - checking water parameters in not fully automated pool

ACTIONS	- Open map dashboard with all pools - Check weather forecast	- Click on selected pool with the red light	- Check water temperature, PH, salinity, chlorine	- Get pool and customer details	- Make a call with the customer	- Wait for the confirmation from customer side
MINDSET	"Is there any red light?" "Is weather forecast showing high temperature for next days?"	"Is this fully automated pool?" "Are all technical systems working without any issues?"	"Aaahhh, PH is above 7.3 and water temperature is above 32 degrees"	"As this is not a fully automated pool, I need to immediately warn the customer." "Pool is small, only 30 m <sup>3</sup> of water"	"Please add 2 liters of PH-liquid to the skimmer right now"	"OK, he is adding PH- liquid to the pool and all other parameters are fine"
FEELING	😊					
	☹️					
TOUCH POINTS	- IoT map dashboard - Weather forecast	- Pool description - Technical status section	- Water parameters section	- Customer description section - Pool description section	- Mobile phone	- Mobile phone



# Prototype

Prototype screens for an IoT application to solve your PoV

Connected Goods - Salt Water Pool, Nicholson

## Salt Water Pool



West Olympic Blvd. Los Angeles, CA 90064 USA



SWP-744-Nicholson ● Mapped

Geo-Match



Connected



Contact Person  
Nicholson, Jack  
310-479-5611

Notify

### WATER TEMPERATURE

31 °C

July 1st, 2017



### Notifications (2)

PH is too high - 7,4

Water pump flow is too low - 10m3/h

July 1st, 2017

July 1st, 2017

### Temperature (in °C)

Daily



### PH

Daily



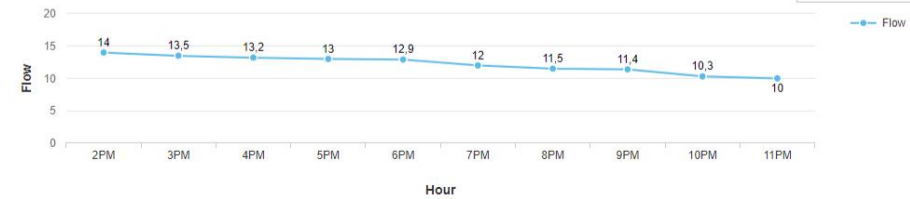
### Chlorine (in mg/l)

Daily



### Water pump flow (in m3/h)

Hourly



## Chlorine Pool



9560 Wilshire Boulevard Suite 500  
Beverly Hills, CA 90212



SWP-725-Ford ● Mapped

Geo-Match



Connected



Contact Person  
Ford, Harrison  
310-273-6700

Notify

### WATER TEMPERATURE

27,5/28 °C

July 1st, 2017



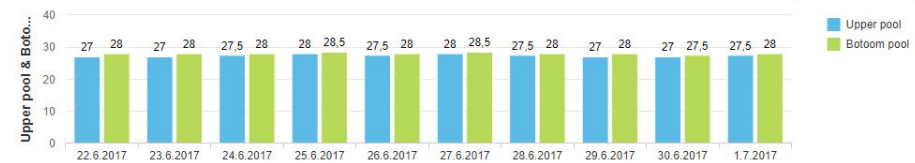
### Notifications (2)

Chlorine in upper pool is too low - 0,1  
Water pump 3 flow is too low - 15m3/h

July 1st, 2017

July 1st, 2017

### Temperature (in °C)



Day

### PH



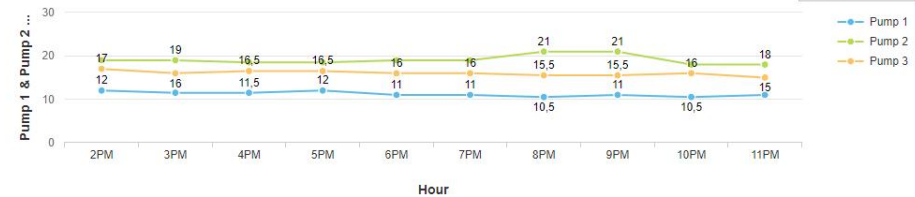
Day

### Chlorine (in mg/l)



Day

### Water pump flow (in m3/h)



Hour

Build.me prototype:

[https://standard.build.me/prototype-editors/api/public/v1/snapshots/7333bb40d61b62210e169afe/artifacts/latest/index.html#/launch\\_page](https://standard.build.me/prototype-editors/api/public/v1/snapshots/7333bb40d61b62210e169afe/artifacts/latest/index.html#/launch_page)