TOUCH IOT WITH SAP LEONARDO PROTOTYPE CHALLENGE

InfraSecure

SAFETY AND SECURITY SOLUTION PROVIDER

InfraSecure... New Way!
Discussion on how InfraSecure can improve their safety and security using IOT
ABOUT INFRASURECURE:

InfraSecure as an organization, we are the most trusted safety and security provider in the city. We provide safety and security to across infrastructures types including corporate buildings, residential buildings, commercial buildings, airports, hotels, railway stations to name a few.

WHY INNOVATE OUR SOLUTIONS?

Recent fire incident (Jun 20, 2017) in London killed 79 people in a tower block started at a Hotpoint fridge freezer has opened our eyes... and we are thinking how to face this kind of incidents if occurred with our customer.

As a service provider, we would not have control on which brand fridge the customer is going to buy either we have recommendations to certain brands and products are safe or we cannot enforce customer to use only those products.

HOW IOT CAN HELP?

Using IOT we would like to sense motion, light, smoke, heat and sound like information from every part of the security area and upon connecting these we would like to control and act as quick as possible. We would like to store and analyze the incidents for learnings and share the information to customers and/or stakeholders how we have been doing it!
Persona – Meet Mr. Babu

Babu
Security Officer at SAP Building

“Keep calm let your security office handle it!”
I would like to be available for the customer all time and act instantly to minimize impacts to zero

About
- 35 M. Married, father for a 2-year-old baby girl
- I work for InfraSecure, posted at SAP office
- I am dynamic and energetic which is required for my job
- Very flexible at work can take any level of responsibilities
- I work with co security officers and junior security assistants.
- I also need to interact hospitals, fire brigades, taxi and many other facility providers

Responsibilities
- I am responsible for of 3 buildings which has approximately 1500 seating capacity
- I spend more than half of time in visiting different places in the building to make sure things are fine
- I keep note of all contact numbers, help lines and other records

Main Goals
- To keep track of people and things entering and exiting into the building
- To keep track of safety in the building from fire, crime, or any sort of harm to the facility and people
- I need to act on the hazards using locally available resources
- I need to connect to other service providers like ambulance, fire brigade, hospital and more

Needs
- I need to know which part of the building is under risk
- I need to act as quick possible
- I need to how worst the situation is
- I need to contact people ambulance, fire brigade and other service providers
- I need to inform maximum people as soon as possible

Pain Points
- Difficult to locate the issue in the huge building
- Difficult to assess the situation without looking at it
- It will get late by the time we reach, assess and act on it
- Action and situations would be different as per area type like kitchen, dining, work area and meeting room or it is a toilet
- Information wouldn’t be handy to call or connect people
- Security learnings are not documented
Point of View

As a Security Officer, I need a way to monitor safety and security situation of the building in real time, so that I can assess the situation, act accordingly, inform people and bring service providers together to minimize the impact to zero.
### Babu's Experience Journey for Recent Fire Alarm in Kitchen

#### ACTIONS

<table>
<thead>
<tr>
<th>Receive call from the affected area</th>
<th>Locate the affected area in the building</th>
<th>Visit the place and assess the situation</th>
<th>Initial actions like vacating people, opening widows etc.</th>
<th>Connect to the relevant service provider like ambulance, fire brigade etc.</th>
<th>Be available until the situation is back to normal</th>
<th>Prepare a report to the police, customer and for InfraSecure</th>
</tr>
</thead>
<tbody>
<tr>
<td>[📞] Hold up phone symbol</td>
<td>✋ Point to location symbol</td>
<td>👀 Point to eyes symbol</td>
<td>🐈 Point to cat symbol</td>
<td>🎥 Point to ambulance symbol</td>
<td>🕵️ Point to person symbol</td>
<td>📂 Point to file symbol</td>
</tr>
</tbody>
</table>

#### MINDSET

- "Hope things are fine with people there!" "Wish it is not an issue"
- "Oh! in the call they just said 3rd floor but not which block and side"
- "Sad! These people should be bit careful" "Thanks for opening the window"
- "Please take staircase not lift" "Please vacate the place fast"
- "None of them injured!" "This elder person looks bit shocked and needs hospitalization" "Oh! I don't have ambulance number in hand"
- "Let me inform to the reception and be here" "Fire extinguisher was available on the floor... really helped me"
- "I am not aware what has happened actually" "looks like short circuit" "What to write?" "how to say it was not normal?" "Why do they need report after everything is back to normal"

#### FEELING

<table>
<thead>
<tr>
<th>Information</th>
<th>Phone Call</th>
<th>Location</th>
<th>Fire Smoke People</th>
<th>Fire exit People</th>
<th>Contacts Phone call Ambulance</th>
<th>Fire extinguisher Reception</th>
<th>Date and time Report Measures</th>
</tr>
</thead>
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<td>☹️ Frowning</td>
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</table>
“In this mockup, there is a fire incident in kitchen with which smoke and temperature sensor levels crossed the threshold and there was a person injured needs ambulance”

1) Babu finds there is emergency in 7th floor B wing North Side! Also, he notices that it is active area by light on.

2) Upon clicking the location Babu will see it is kitchen area and he finds that smoke and temperature is above threshold!

3) Immediately he will call the exact location Extn, A chef there informs one of the person is injured needs ambulance.

4) Just by clicking ambulance icon, he will arrange ambulance.

5) He knows the exact location and he completes all these activities by the time reaching the emergency area.

6) Babu will send group email with the report that smoke incident

7) Babu will flag this smoke level is an issue in the kitchen. flagged incidents can be used for learning purposes.
Prototype – MOCK 2

Machine Learning

“In this mockup, there is NO emergency incident occurred in kitchen but smoke and temperature detected are above normal. It could be the type of food they are cooking today. By understanding that this smoke and temperature levels are normal we can update our system threshold to this so that next time it won’t show as emergency”

1) Babu finds there is emergency in 7th floor B wing North Side! Also, he notices that it is active area by light on.

2) Upon clicking the location Babu will see it is kitchen area and he finds that smoke and temperature is above threshold!

3) Immediately he will call the exact location Extn, A chef there informs that things are normal

4) He will update the system to latest threshold level of smoke, so the system learns and sets it back to normal.

5) System returns to normal

Please try build prototype in mobile device.
https://standard.build.me/prototype-editors/api/public/v1/snapshots/8b8ff9871a42dd120e1eab70/artifacts/latest/index.html#/home
If difficulty, please view in youtube - https://youtu.be/Zt_63opJbPg