

# GAS PIPELINE MONITORING SYSTEM FOR HOSPITALS

## PROJECT DESIGN PHASE-II CUSTOMER JOURNEY MAP

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SCENARIO

Searching, finding and gathering information about the gas leakage sensors.



### Entice

How does someone initially become aware of this process?



### Enter

What do people experience as they begin the process?



### Engage

In the core moments in the process, what happens?



### Exit

What do people typically experience as the process finishes?



### Extend

What happens after the experience is over?



### Steps

What does the person (or group) typically experience?

Oxygen level measurement.

Arduino UNO (Atmega-328) is the main unit of the system which performs the following tasks.

A signal conditioning of the Arduino UNO is done by output signal of the sensor, provided input to Arduino.

The detection results displayed on LCD.

Indicates the people of danger in work place, factory, home.

Buzzer activity with beep(siren) sound is made.

Also send alert SMS.

The in charge of the plant whose number is saved in SIM card.

Email confirmation

Email reminder

It is used by GSM modem.

Use the guidelines.

Experiment the sensor use.

Prompt for review

Writing & submitting review

The SMS received depends upon the leak of gas in the detection area of the sensor.

Personalized recommendations



### Interactions

What interactions do they have at each step along the way?

- **People:** Who do they see or talk to?
- **Places:** Where are they?
- **Things:** What digital touchpoints or physical objects would they use?

Confirmation SMS will be received.

Applicable for iOS app or android app

Applicable for Windows OS.

Applicable for Linux OS.

Overall usage will be light and easy.

User friendly interaction.

Payment overlay within the website, iOS app, or Android app

Advertisement won't be there.

Usage of Raspberry Pi with Node Red is used here.

Customer's email (software like Outlook or website like Gmail)

Tour locations tend to start in specific public space (e.g. the steps of a statue in a town square)

Direct Interactions with the guide, and potentially other group members

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Customer's email (software like Outlook or website like Gmail)

"Leave a review" modal window within the profile on the website, iOS app, or Android app

Personalized services are done.

Deploy the sensor.



### Goals & motivations

At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")

Write a goal or activity

The environment from potentially hazardous exposure to gases.

The system comprises of sensors for microcontroller.

That will give an alert to user whenever there is a gas leakage, display warning information by using Liquid.

Gas leak Detection System is the process of identifying potentially hazardous gas leaks by sensor.

These sensors usually been detected.

These sensors usually employ an audible alarm to alert people when a dangerous gas has been detected.

An alarm management system represents the series of actions a system performs in an event of gas leakage.

Node Red is used to detect the gas leakage and update it to user.

Help user to feel safe and secure.

Safety of the industry and it's employees is it's first priority.

Help public make the most use of the resources provided.

Help people to deal with anxiety.

Gas leakage detection systems protect personnel.

Help people to spread the word about a great sensor which provide watch-outs and feedback for one that was not so good

Help People see what they've done before

Help user see what they could be doing next



### Positive moments

What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?

It's reassuring to read reviews written by past users.

Write an emotion you expect the customer to have.

Happy about this solution.

Embarrassed on the solution and promoted the good words towards the project.

Current payment flow is very bare-bones and simple

We've heard from several people that the reminder emails were essential, especially if they booked way in advance

Our guides tend to be so good that people are reassured when they meet their guide

People are Happy.

Encouraging towards this project and giving good feedbacks.

Help organization see ways to overcome their mistakes.



### Negative moments

What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?

Not reassuring to read reviews written by past users.

Several people expressed "information overload" as they browse

People express a bit of fear of commitment at this step

Trepidation about the purchase ("I hope this will be worth it!")

People expressed fear about not finding their guidelines at an emergency.

People are unhappy because of sensor failure.

People are unclear whether the sensor will work properly or not.

Customers report feeling review fatigue

People describe leaving a review as an arduous process

We have very low review rates (15% of people review experienced failure)

Negative feedback will affect the wholesome project.



### Areas of opportunity

How might we make each step better? What ideas do we have? What have others suggested?

Write a potential challenge to your goal

Higher Officials

Make it easier to compare and shop for experiences without having to click on them

Provide a simpler summary to avoid information overload

Show highlights or common phrases from reviews, or Uber style "great guide" badges?

How might we totally eliminate this awkward moment?

How might we make our guides easily identifiable (via a distinctive hat or shirt color, for example)?

How might we equip people to tip after the tour? (e.g. via Venmo or equivalent app)

How might we make it clear that tipping is appreciated but not necessary?

Could we A/B test different language to see what changes response rates?

How might we progressively disclose the full review so that each step feels more simple?

How might we help people celebrate and remember things they've done in the past?

How might we extend the personal connection even after the completion of the agreement.