

Global Warming Tracker



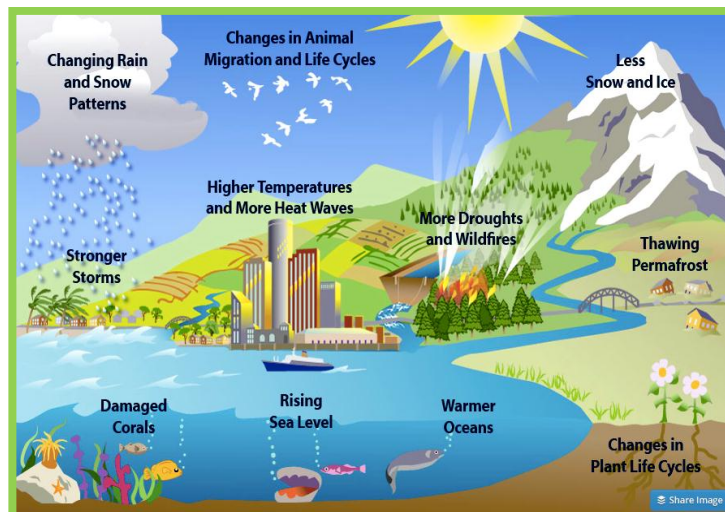
Story

Mr. Green is an environmentalist and concern about the Global warming impact, rises the Mother Earth's surface temperature gradually which leads to adverse impact to nature as well as world communities.

Mr. Green and Team does campaigning to create awareness of Global warming among people and Road Show to emphasis on measures to follow to make our lives better. Now, He wants to get into Digital transformation arena via IoT driven solution which will closely monitor (in real time) and gather key warming parameters (Emission, Deforestation, Glaciers/ Sea levels) with respect to geographical area. By comparing collected data with historical data and their analysis could help to take necessary preventive steps to save the Earth from harmful effects. Also, sharing of those data to World communities to arrive collective measures and prediction.

Mr. Green recently visited a School as Chief Guest on World Environment, the synopsis and poster of his Key Note address as below:

We love nature and enjoy the endless beauty of bountiful natural resources. For example, Air, Water, Forest, Land, Metals and Minerals. However, in recent past time, we are more apprehension about our planet's Health due to Global Warming i.e. increase in earth surface's temperature. The key factors resulting in the warming of the Earth are deforestation and emissions of CO₂. The CO₂ emission comes from several sources like burning of fossil fuels from industries, gasoline for transportation, which continues to grow because of our needs are always high. Also, forests absorb large amounts of carbon, so deforestation is causing larger amounts of CO₂ to remain in the atmosphere.





Persona



Mr. Green

Environmentalist

“I care the Mother Earth and live closely with nature.”

About

- 45, married, 20 years of experience in Environmental science especially in EIA (Environmental Impact Assessment) study.
- I associated with various non-profit-making organizations for Global Warming awareness program.
- I visit Educational institutions to promote Healthy Food habits and Gardening
- I visit Villages to guide farmers on Organic farming.

Responsibilities

- I am responsible for EIA study area data collection from Primary Sources (field & Laboratory) and Secondary sources (study location - published records, area profile, maps, photos, internet)
- I am responsible for EIA data compilation and report preparation for Environmental Clearance Board.
- I do write blogs about Global Warming.

Needs

- I need Real Time Monitoring of measuring instrument work status, Calibration if any, Maintenance Schedule and send message to the suppliers in case of emergency.
- Need Remotely control the instrument data collection frequency, switch ON/OFF in case of overrun or change over to back-up instrument.
- I need better management of collected data and analysis.

Main Goals

- Efficient way of Global Warming related data collection.
- Emphasize on Global Warming in EIA report
- Compile the Data and Predict & recommend preventive procedures for healthier life.

Pain Points

- Travel to the study location and Manual collection of data from instrument console is time consuming.
- Sometime end up with no data due to instrument failure which is not known in advance.
- The consolidation of data comes from different instrument in different format from many study locations are frustrating.



Point of View (PoV)


As an Environmentalist

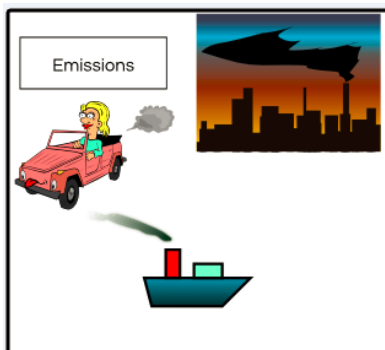
I need a way to monitor (real time) the parameters related with Global Warming and analyses the impact on Mother Earth so that we know where we stand now and what preventive measures to be recommended for our lives better and save the natural resources.




UX Journey

User Experience Journey: Global Warming Tracker - **Emission of CO₂**

| ACTIONS | <ul style="list-style-type: none"> Going for brisk Morning Walk | <ul style="list-style-type: none"> Starts from Sports Centre Road. | <ul style="list-style-type: none"> Felt Foul smell and Burning sensation at Nose | <ul style="list-style-type: none"> Cover my Nose with hand. | <ul style="list-style-type: none"> Got Air pollution protection mask and covered my Nose. | <ul style="list-style-type: none"> Completed Walk at Centre Park. |
|--------------|--|--|---|---|--|--|
| MINDSET | <ul style="list-style-type: none"> Have relax and energetic day ahead | <ul style="list-style-type: none"> Long Distance with good pace and stops at Centre Park. | <ul style="list-style-type: none"> Pollution in the air due emission from Vehicles/Industries which leads to Global warming. | <ul style="list-style-type: none"> Is there any shop nearby to get Mask? | <ul style="list-style-type: none"> Feel Better now | <ul style="list-style-type: none"> Mixed feeling due to pollution. Need to look for alternate place. |
| FEELING |  | | | | | |
| TOUCH POINTS | <ul style="list-style-type: none"> Pedometer | <ul style="list-style-type: none"> Water bottle Sweatshirt | <ul style="list-style-type: none"> Sweat Towel Mask | <ul style="list-style-type: none"> Mask | <ul style="list-style-type: none"> Mask | <ul style="list-style-type: none"> Stored the Distance, Duration and Calories burned. |




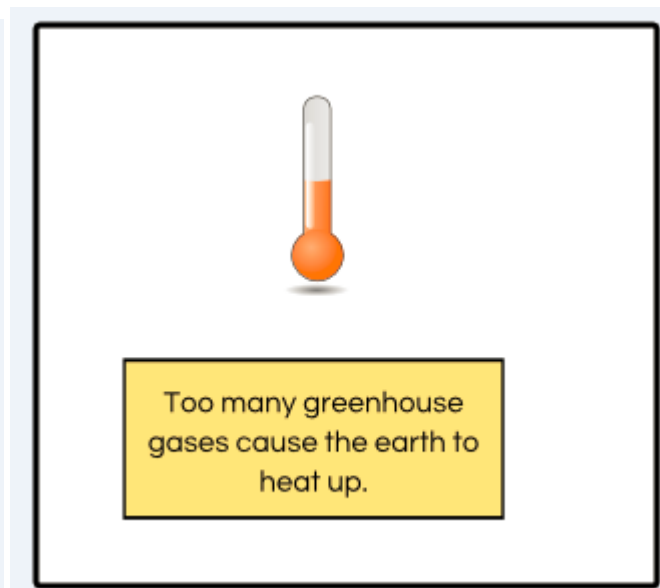
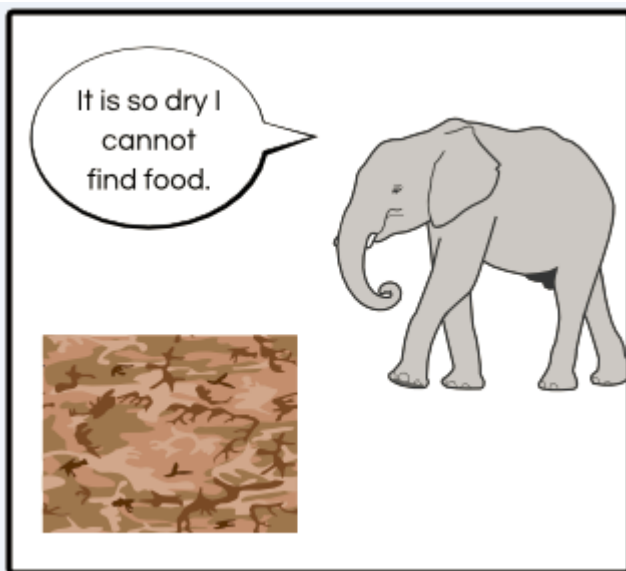
User Experience Journey: Global Warming Tracker – Rising Sea Level

| ACTIONS | <ul style="list-style-type: none"> Evening Jogging | <ul style="list-style-type: none"> Starts from Jogging Track at Beach. | <ul style="list-style-type: none"> After a while, the Sea is Very rough and track covered with sea water | <ul style="list-style-type: none"> Wait for water to drain | <ul style="list-style-type: none"> Calm Sea and restart the Jogging |
|--------------|--|---|--|--|--|
| MINDSET | <ul style="list-style-type: none"> Had hectic day, want Stress Relief and have Good night sleep | <ul style="list-style-type: none"> Hope not much crowded at Track. | <ul style="list-style-type: none"> Other Joggers says it is happening very often now-a-day, may be due to Global Warming, the Sea level raising | <ul style="list-style-type: none"> How much time to take drain. | <ul style="list-style-type: none"> At last, I had enjoyable Jogging. May try to run indoors track. |
| FEELING |  | | | | |
| TOUCH POINTS | <ul style="list-style-type: none"> Shoes Jogging Arm Band Headset | <ul style="list-style-type: none"> Sweat Towel Water Bottle | <ul style="list-style-type: none"> Resting Shed | <ul style="list-style-type: none"> Quick Drain System | <ul style="list-style-type: none"> Google Map for indoor tracks. |



User Experience Journey: Global Warming Tracker – Deforestation

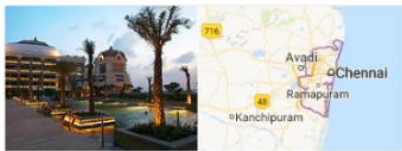
| ACTIONS | <ul style="list-style-type: none"> Trekking at Mountain Forest Green. | <ul style="list-style-type: none"> Reached the starting point by Car. | <ul style="list-style-type: none"> Trekking nearly 1 hr. through thick forest with Green patches | <ul style="list-style-type: none"> Noticed vast area of barren land due to deforestation. | <ul style="list-style-type: none"> Reached Camping site. |
|--------------|---|--|---|--|--|
| MINDSET | <ul style="list-style-type: none"> Want to enjoy the nature especially flora and fauna. | <ul style="list-style-type: none"> Weather is pleasant but there are chances of rain. | <ul style="list-style-type: none"> Amazing Trees, Streams and Birds | <ul style="list-style-type: none"> Deforestation drives climate change. larger amounts of greenhouse gases entering the atmosphere | <ul style="list-style-type: none"> Time to rest and relax Need to take meditation for leg cramp. |
| FEELING |  | | | | |
| TOUCH POINTS | <ul style="list-style-type: none"> Backpack Sun hat or scarf First Aid Kit | <ul style="list-style-type: none"> Raincoat Compass Walking sticks | <ul style="list-style-type: none"> Binocular Camera | <ul style="list-style-type: none"> Map Compass | <ul style="list-style-type: none"> Camping Tents Inflatable Sleeping Pad. First Aid Kit |



Prototype

The UX – describes three journeys i.e. Emission of CO₂, Rising Sea Level and Deforestation. The prototype covers one i.e. Emission scenario.

BUILD URL: https://standard.build.me/prototype-editors/api/public/v1/snapshots/134a9ecec060efd60e1e7913/artifacts/latest/index.html#/geographical_location



Chennai
City in India



New Delhi
Capital of India

Exit



Mumbai
City in India



Kolkata
City in India

CO2 Dashboard

GMP343
Carbon Dioxide Sensor
VAISALA



Mount Road, LIC, Thousand Lights



CO2-10-0001

Connected

ON

Contact Person
Mr.CO2, Mumbai

Send Mail

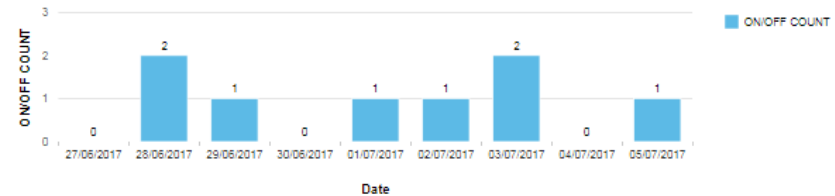
Instruction manual

Operations Manual

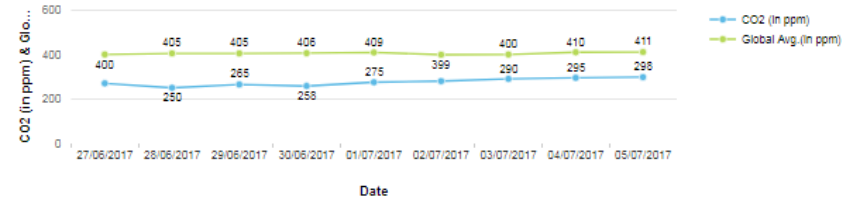
User Manuals

Troubleshoot Manual

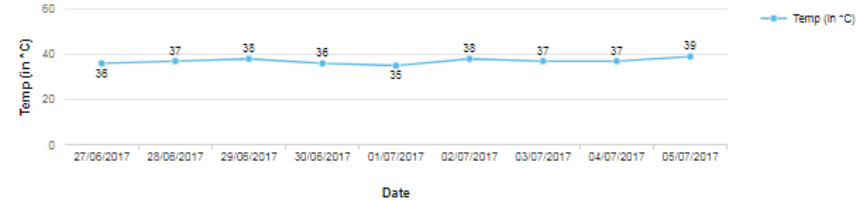
ON/OFF STATUS



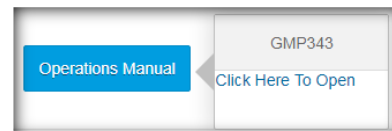
CO2 Level (in Parts Per Million)



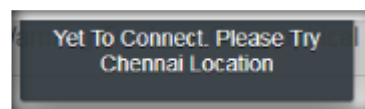
Temperature (in °C)



On Click on Manual Button Gives the pop-up with URL for the respective Manual



Click on Geographical Location other than "Chennai" gives Toast Message like



This prototype to be enhanced further to address all three scenarios for all Geographical locations.



List All the Devices Mapped with this Geographical Location.

| Device Id | Device Type | Device Location | Device Status | Last Calibrated | Next Maintenance |
|-----------|-------------|-----------------|---------------|-----------------|------------------|
| CO2-00001 | Sensor | Mumbai- 001 | ON | 01-01-2017 | 01-08-2017 |
| SEA-00001 | Tide Gauge | Mumbai- 002 | OFF | 01-01-2017 | 01-09-2017 |
| FOR-00001 | Satellite | Mumbai- 003 | ON | 01-02-2017 | 01-10-2017 |
| CO2-00002 | Sensor | Mumbai- 004 | ON | 01-01-2017 | 01-08-2017 |
| SEA-00002 | Tide Gauge | Mumbai- 005 | ON | 01-01-2017 | 02-08-2017 |
| FOR-00002 | Satellite | Mumbai- 006 | ON | 01-02-2017 | 03-08-2017 |
| CO2-00003 | Sensor | Mumbai- 007 | ON | 01-01-2017 | 04-08-2017 |
| SEA-00003 | Tide Gauge | Mumbai- 008 | OFF | 01-01-2017 | 05-08-2017 |
| FOR-00003 | Satellite | Mumbai- 009 | ON | 01-02-2017 | 06-08-2017 |
| CO2-00004 | Sensor | Mumbai- 010 | ON | 01-01-2017 | 07-08-2017 |
| SEA-00004 | Tide Gauge | Mumbai- 011 | ON | 01-01-2017 | 08-08-2017 |
| FOR-00004 | Satellite | Mumbai- 012 | ON | 01-02-2017 | 09-08-2017 |
| CO2-00005 | Sensor | Mumbai- 013 | OFF | 01-01-2017 | 10-08-2017 |
| SEA-00005 | Tide Gauge | Mumbai- 014 | ON | 01-01-2017 | 11-08-2017 |

- Device Id highlighted with needs immediate attention.
- On click the Device Id gives detailed Analytical Data along with Device information like the one shown in for CO2.
- Filter can be used to narrow down the search or area of interest.