

# AJAY KUMAR GARG ENGINEERING COLLEGE

## INTERNAL SMART INDIA HACKATHON

**Ministry:** Ministry of Health and Family Welfare

**PROBLEM STATEMENT:** Role of Social Media in Public

Health Emergency Response

**Category:** Software

**Team Name: Eternal Void**

Team Member details:

1. Gaurav Dhiman (CSE/3rd) (Leader)
2. Pulkit Dhingra (CSE/3rd)
3. Ayushi Tripathi (CSE/3rd)
4. Deeksha Singh (CSE/3rd)
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6. Ishan Pandey (CSE/3rd)

# Role Of Social Media In Public Health Emergency Response

**Ministry/Organization Name:** Ministry of Health and Family Welfare

**Problem Statement:** Emergencies and disasters impact population's health. Public health plays a critical role in working with health and non-health sectors responsible for preparing for and responding to emergencies. In emergencies, a large numbers of people may require medical attention. Health care systems may be overstretched, and public order may be threatened. Hence, use of social media in public health emergency response.

**Team Name:** Eternal Void

**Team Leader:** Gaurav Dhiman

# Idea/ Approach details

The idea is to maintain healthcare and public order at the time of crisis by maintaining situational awareness at a rapid rate through social media.

Situational Awareness will consist of

1. Information about people in need.
2. Information about people that can help.
3. Broadcasting information to every relevant organization.

Features that our app will provide:

1. Help in finding nearby available healthcare systems.
2. Providing First aid/primary steps to be taken/provided to patients

# Technology Stack

1. **Nodejs** to create web server.
2. **Natural Language Processing** concepts to extract relevant information from social media and classifying information on the basis of various factors.
3. **Computer Vision** concepts to identify disaster related images on social media.

# Use Case

## **Formal Emergency Responders and Govt.**

**Agencies :** Paramedics and various govt. Organizations (NDRF) can live track people in need and people that can help .

**Informal Emergency Responders :** Various NGOs and private groups willing to help can visualize the disaster at the brink.

# Dependencies

**Twitter Streaming API**

**Geocode API**

**Bing Maps API**

**Disaster Relevant Dataset:**

Cloudflower and Crisis NLP organizations with their updated dataset provided a base to train the model on.