

# Disaster Management Chatbot

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## Introduction

Natural disasters like earthquakes, tsunamis, floods, and cyclones are happening more often. This makes it important to be prepared. This project aims to create a smart chatbot that can give real-time updates and information about earthquakes. It helps users stay informed and ready.

The chatbot uses real-time data from USGS API. It also provides safety tips tailored to the user. In the future, the chatbot will be able to cover other types of disasters as well.

## Problem Statement

The primary goal of this project is to develop an intelligent chatbot that provides:

- Real-time earthquake updates based on the user's location.
- Access to historical earthquake data.
- General safety guidelines and emergency contacts.

This system is designed to improve disaster preparedness and ensure users have access to critical information during emergencies.

## Work Done So Far Chatbot Development

A chatbot was built using **Gemini** and the **USGS API** (United States Geological Survey). This chatbot can show earthquake information and give safety tips. Some key features are:

- **Earthquake Details:** Users can get earthquake information from anywhere in the world by choosing a time range. The data comes from the USGS website.
- **Country-wise Information:** The chatbot organizes earthquake data by country, making it easy to find information by region.
- **Safety Guidelines:** It offers general safety tips on how to stay safe during an earthquake.
- **Location-Specific Information:** The chatbot can give real-time earthquake details for specific cities like Patna.
- **Historical Earthquake Data:** It can also show information about major earthquakes that happened in the past and their effects.

## Future Features

The project is still ongoing, and several key functionalities are being developed:

- **Emergency Contact Information:** The chatbot will provide users with relevant emergency contact details during an earthquake.
- **Location-Based Services:** To improve user experience, the chatbot will automatically retrieve the user's location, eliminating the need to repeatedly specify it.
- **Multi disaster Support:** The chatbot will eventually be expanded to offer information about other natural disasters, including tsunamis, floods, and cyclones.