

Disasters Management System Using GNSS

More information less loss..

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Disasters

The **disaster** is a major adverse event which are unusual to all living beings.

Types:

- ☉ Man Made
- ☉ Natural





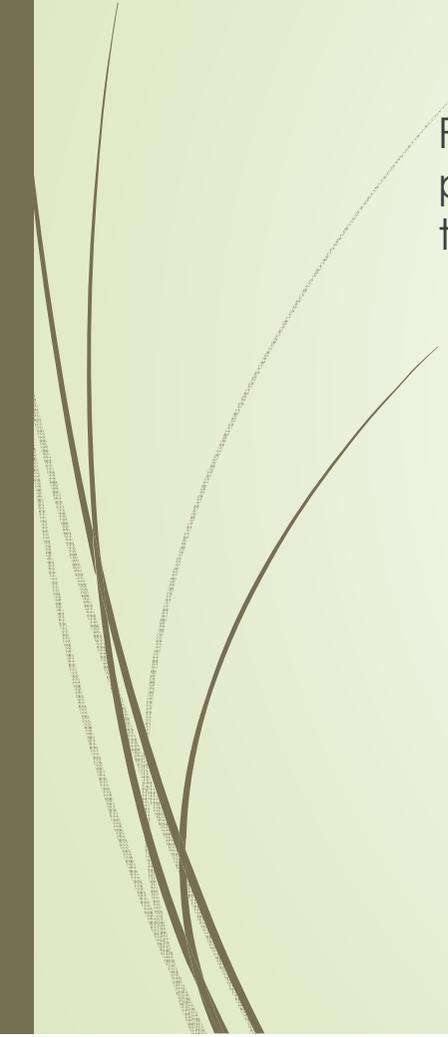
The problem

- **US\$3.6 trillion** in economic losses, with insurers paying out more than **US\$960 billion** over 1980-2016.
- **99,700** *deaths per year.*

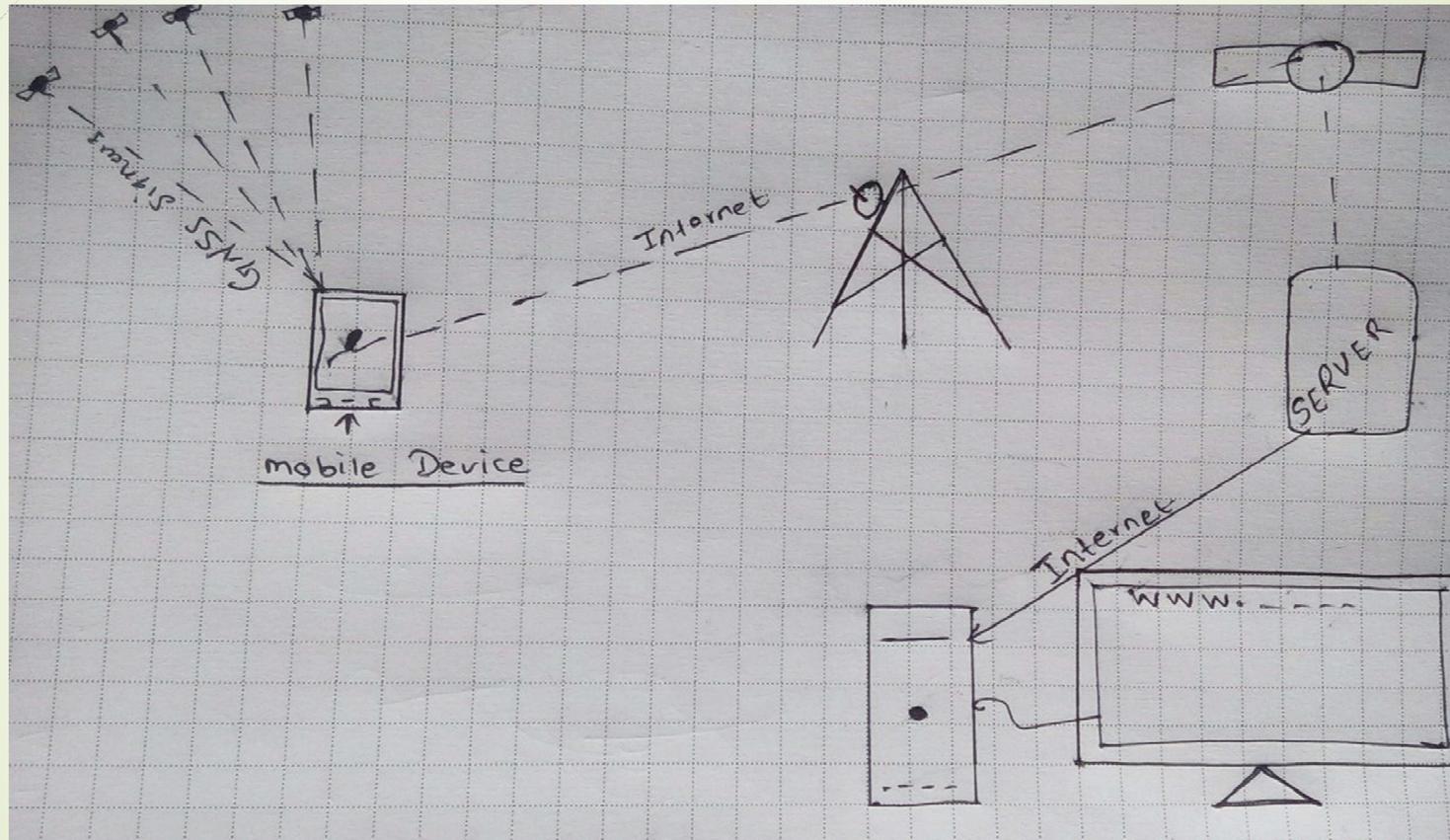


PRAKOP

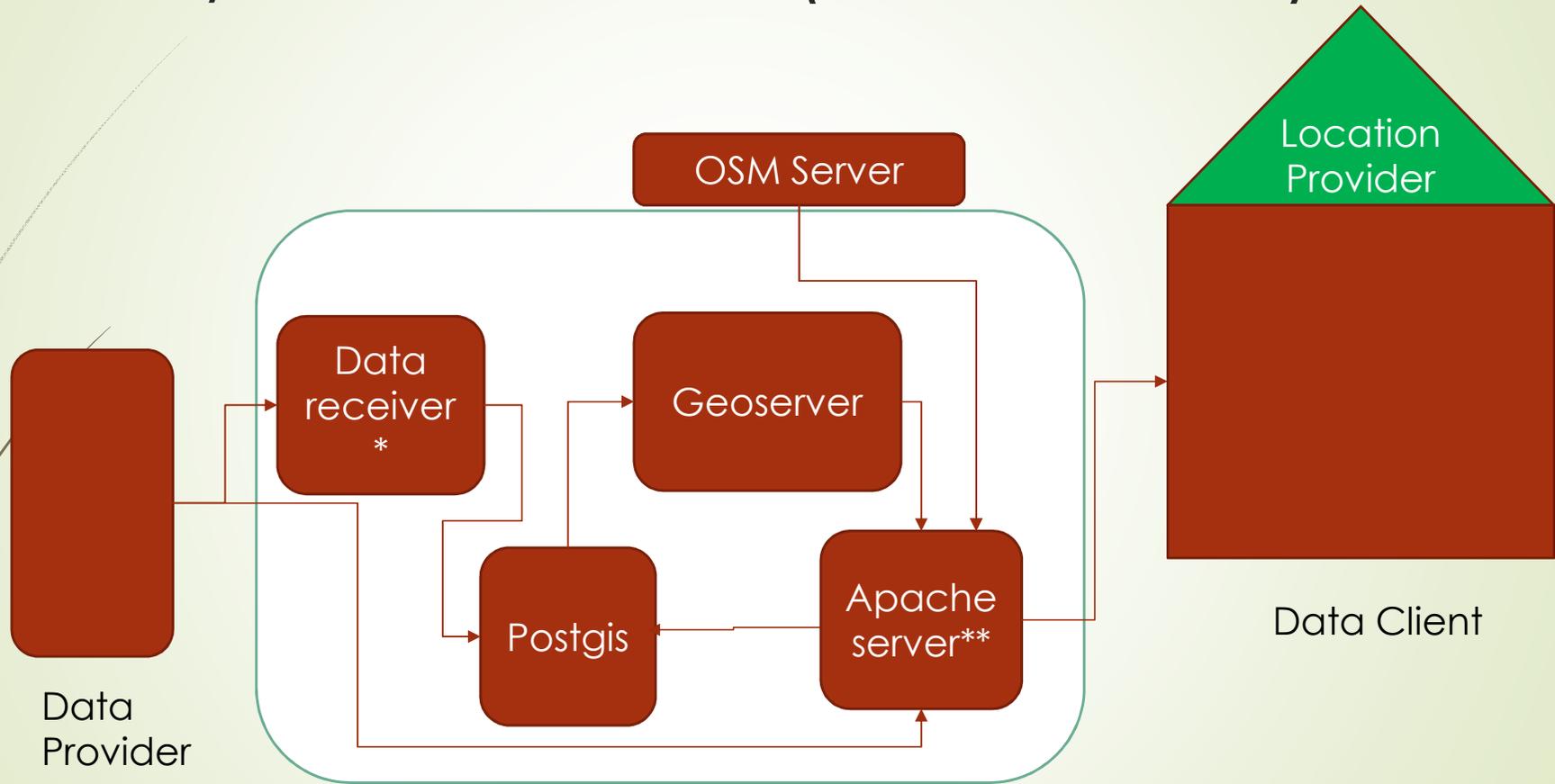
Prakop is an open source, collaborative, location aware, web + Android based platform which will provide the information about the disasters to users based on their location.



Dumbo Design

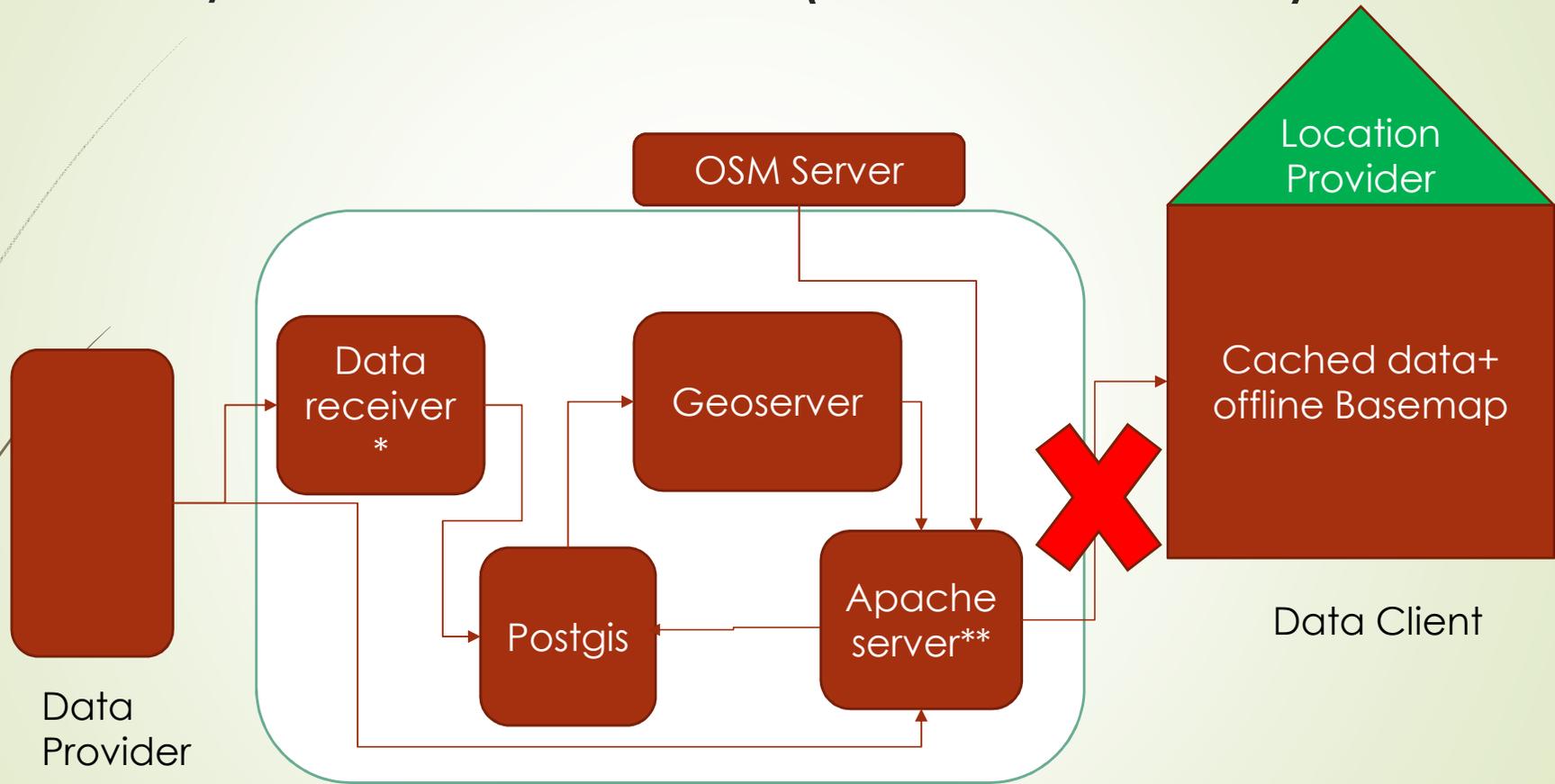


System Architect (online mode)



*Android open source provider
** Government data provider.

System Architect (offline mode)

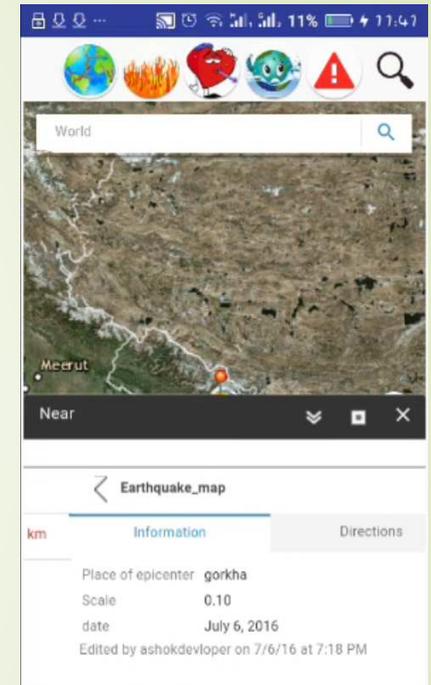
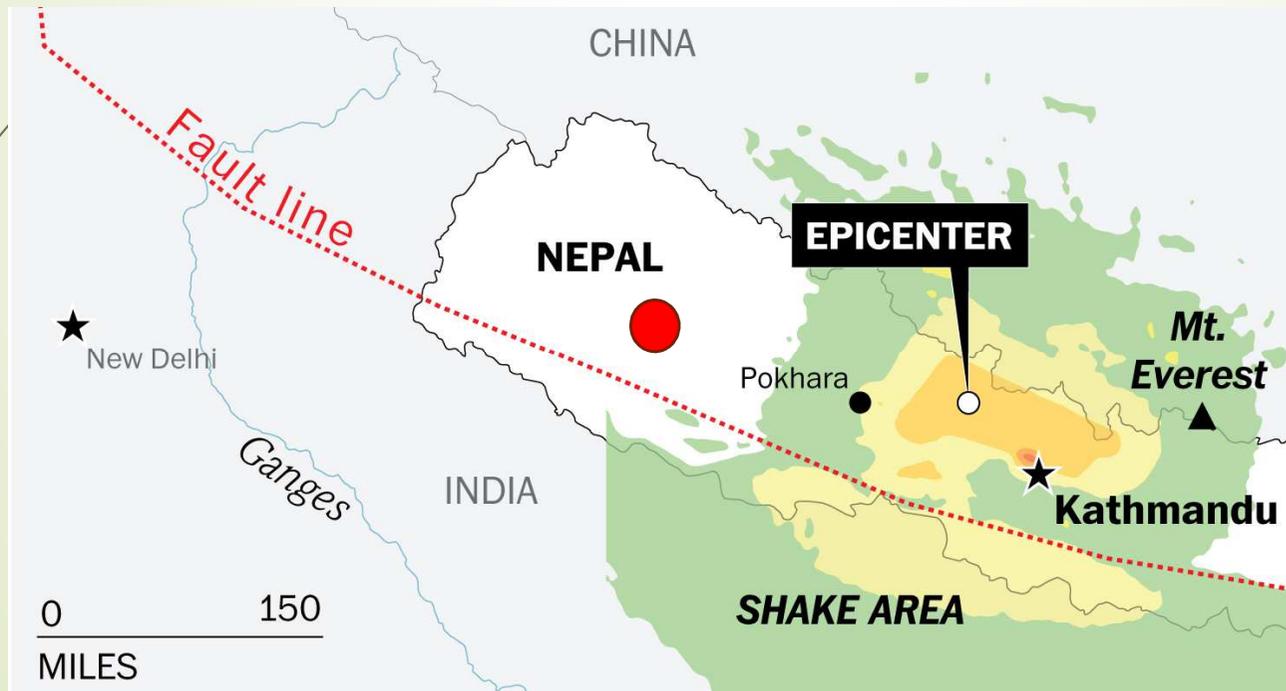


Server

*Android open source provider
** Government data provider.

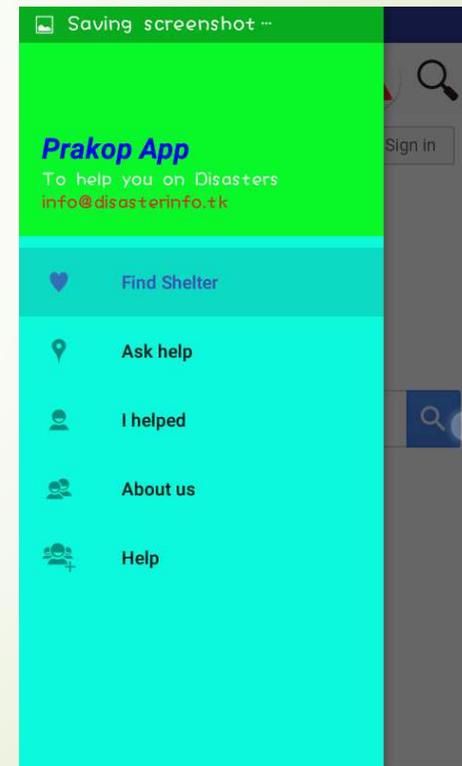
How this system help in reducing LOSS

- 1. Gives Information about Disasters at their locality



How this system help in reducing LOSS

- 2. Increase public participation on information about Disasters and support for open and collaborative Government.



How this system help in reducing LOSS

- ▶ Help to find places more efficiently and Routes to that Places



How this system help in reducing LOSS

✓ Help on easy Visualization of incidents.

The screenshot shows a web application interface with a map and a data table. The map displays a street grid with various landmarks like hospitals and schools. A red 'VS' is overlaid on the map. The table on the right lists system components with their respective counts and sizes.

| Component | Count | Storage Size |
|-------------------|-------|--------------|
| api_log | 44 | 6.4 K1B |
| api_settings | 0 | 1.0 K1B |
| badge | 1 | 2.0 K1B |
| badge_users | 0 | 2.0 K1B |
| category | 6 | 4.7 K1B |
| category_lang | 0 | 1.0 K1B |
| city | 0 | 1.0 K1B |
| cluster | 0 | 1.0 K1B |
| comment | 1 | 4.1 K1B |
| country | 247 | 13.1 K1B |
| externalapp | 1 | 2.2 K1B |
| feed | 0 | 1.0 K1B |
| feed_item | 0 | 1.0 K1B |
| form | 2 | 8.1 K1B |
| form_field | 7 | 9.3 K1B |
| form_field_option | 9 | 3.3 K1B |
| form_response | 18 | 4.7 K1B |
| geometry | 0 | 1.0 K1B |
| incident | 6 | 9.5 K1B |
| incident_category | 16 | 5.3 K1B |
| incident_lang | 0 | 1.0 K1B |
| incident_person | 5 | 3.2 K1B |
| layer | 0 | 1.0 K1B |
| level | 5 | 2.2 K1B |
| location | 6 | 5.4 K1B |
| maintenance | 0 | 1.0 K1B |
| media | 8 | 6.8 K1B |

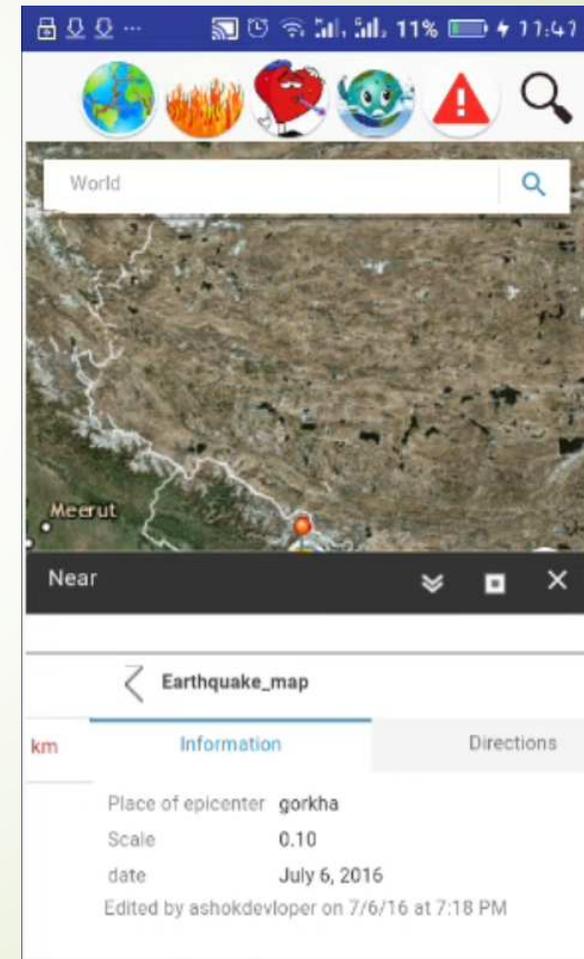
USE OF GNSS

➤ Routing



USE OF GNSS

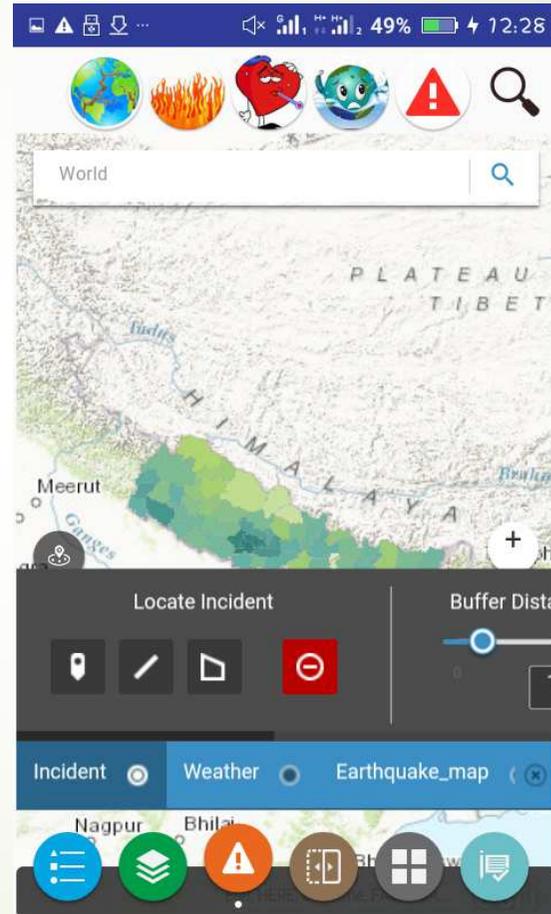
- ▶ Find Information about Incident in their locality
- ▶ Upload information based on peoples location



USE OF GNSS

Other nearby information:

- ▶ Weather forecasts
- ▶ Rescue camps
- ▶ Food, medic etc.





Implementation Strategy

- ▶ Self running system
 - ▶ AdSense
 - ▶ Possible Partners
 - ▶ UN
 - ▶ USAID
 - ▶ Different Governments
 - ▶ Red Cross
 - ▶ Other INGOS/NGOS
 - ▶ Providing our Database to Other INGOS



Upgrade..

- Report from SMS.
- Report from social media like Facebook, Twitter.
- Add 3D and street views.
- Give membership to public also.
- BugFix.



Conclusion





References

- ▶ Ministry of Finance
- ▶ Android Developer Guide ESRI
- ▶ WWW.GPS.GOV
- ▶ www.Wikipedia.org



Thank You

