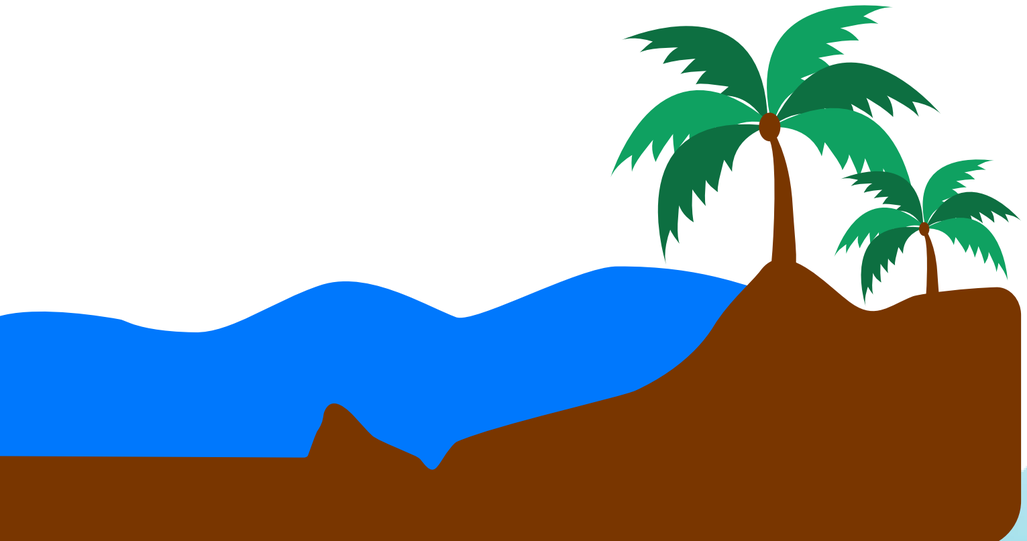
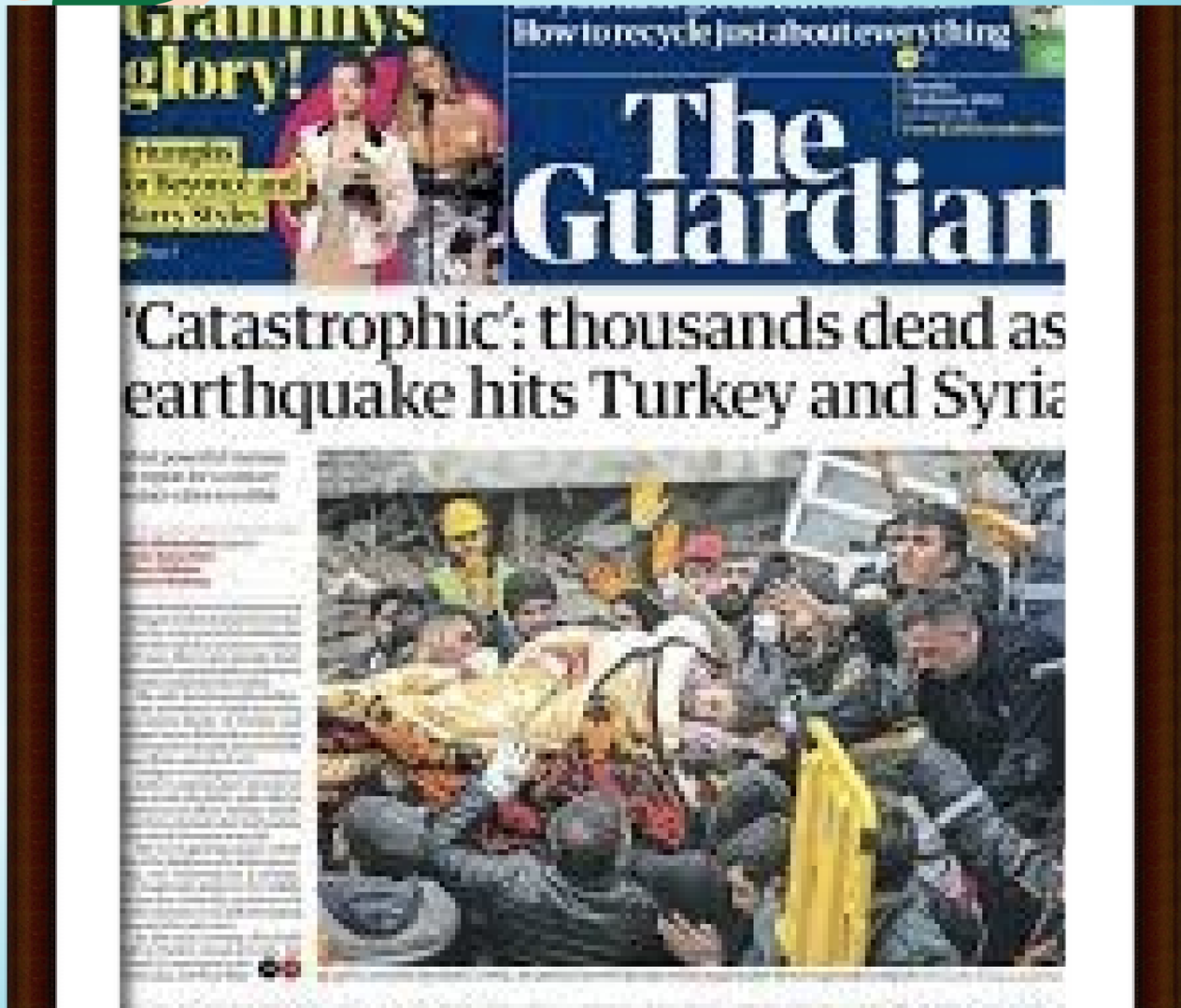
DISASTER RELIEF SYSTEM

PROBLEM

Information systems and technology in most countries are inadequate to provide the needed management support for natural calamities.





SOLUTION

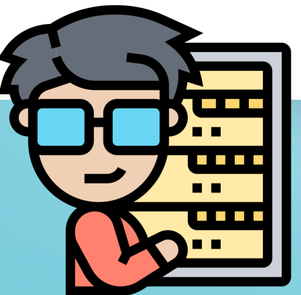
We have created an effective system which ensures safety to living beings in case of natural calamities.

How it works?

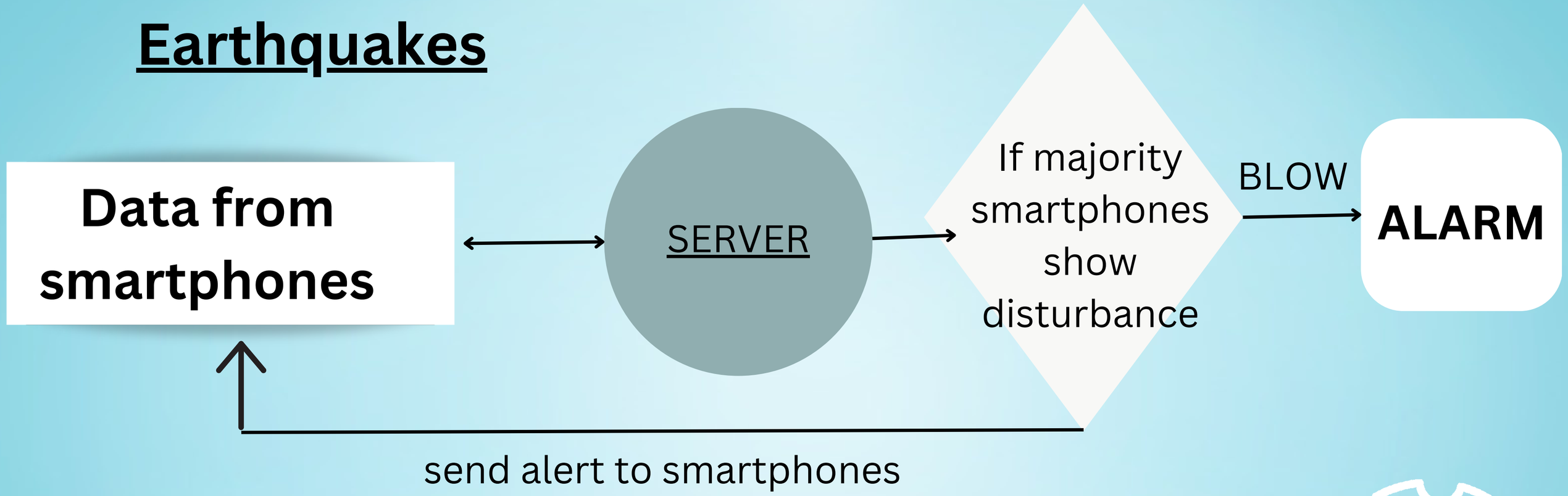
Every smartphone has builtin Acclerometer sensor, we have created a system that will gather accelerometer data, if earthquake is detected, the payload will be sent to the server.

For other events, like flood, huricane we rely on the Meterological Department to send payload to the server.

Once the payload is received by the server, the algorithm will process the payload and if the algorithm detects any disastrous situation the alert will be broadcasted to the affected and nearby region.



Mechanism to detct Earthquakes

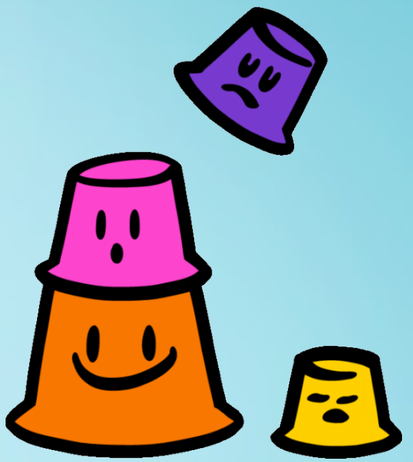


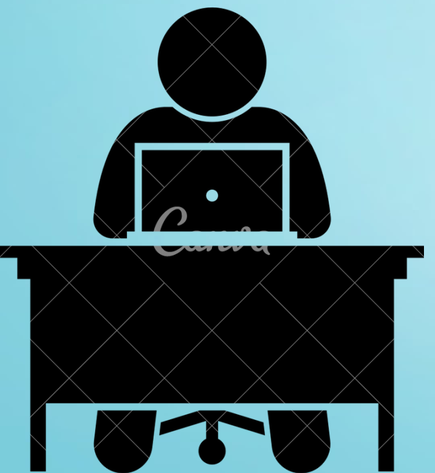
For Flood and Tsunami :-

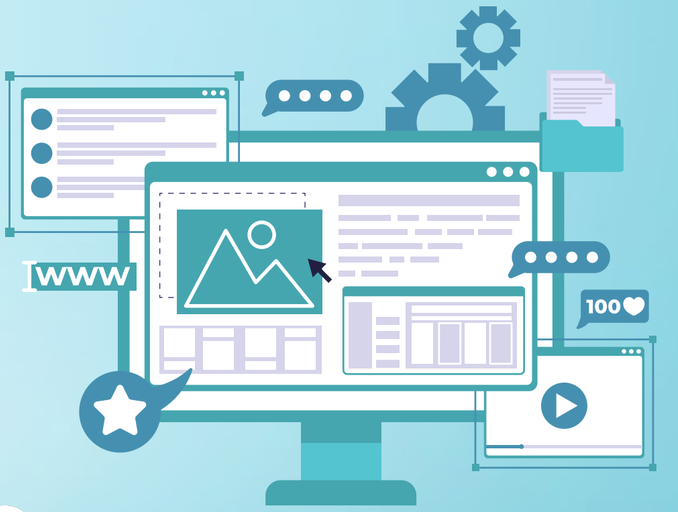
To detect Floods andTsunami we will use Google APIs , computer models' predictions and will send the emergency alert to the smartphones through our system accordingly.

TECH STACKS

- Firebase cloud messaging
- Android development
- Python
- Flask
- JAVA

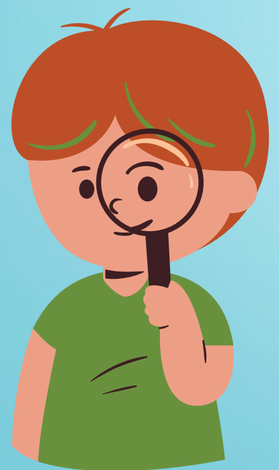


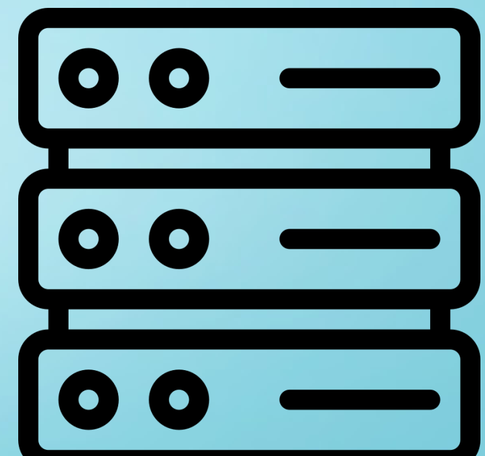




FEATURES

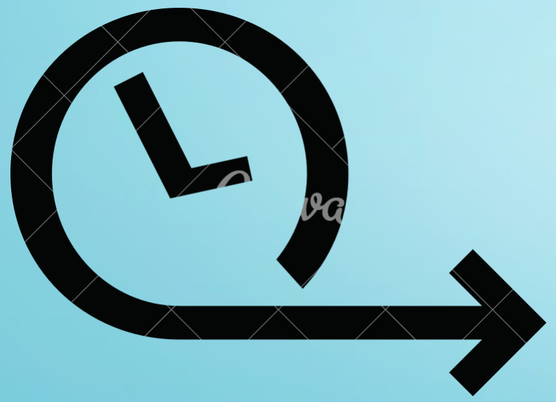
- **Smart sensing-** This system will collect data from smartphone sensors and trusted APIs .
- **Quick detection-** The data collected will be quickly processed by the central server.
- **Quick response-** In case of any catastrophic condition the alert will be sent to the smartphones and the emergency help mode of app will be enabled.





FUTURE ASPECTS

In future we will deal with seismic performance of structures during earthquake and evaluation of damage after earthquake. We will also foresees the potential consequences of Flood and Tsunami.



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