

# Fast identification of Earth quake detected through Internet of things

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**Introduction:** Internet of things is a interaction between the things that consists of sensors and human. The main concept of the IoT is to allow things to be connected any time, any place with anything and any one, and any network and any service. By developing this we need a common operating platform that is middle ware. The middle ware platform enables sensor data collection, processing and analysis. Presently we design and implementation details of our proposed middle-ware solution namely mobile sensor data processing engine (MOSDEN). MOSDEN is designed to support sensing as a service model natively. MOSDEN is a true zero programming middle ware. That means user do not need to write program code this MOSDEN middle ware is used for push and pull data streaming. For data transaction between android mobile and sensors we can develop a special plug-in that is used for the better communication between the sensor and human.

**Index terms-** IoT, smart phone, RFID.

## I. BASIC INFORMATION ABOUT IOT WORK

in this section, we briefly discuss the background and our motivation behind this work. By using IoT we can connect to billions of thing to the Internet. This method is not possible and practical to connect all of them to the Internet directly. This is mainly due to resource constraints ( ex. network, communication capabilities and energy limitations) connecting directly to the Internet is expensive in term of computation bandwidth usage and hardware cast point of view. Enabling persistent Internet access is challenging and also negatively impacts on miniaturization and energy consumption of the sensor. due to such difficulties, IoT solution need to utilize different type of devices with different resource limitation and capability.

We believe that an ideal IoT middle ware solution should be able to take advantage and adapt to these different type of devices in order to make the solution more efficient and effective. One of the most critical decision that need to be taken in the domain of IoT is where and when to process the collected data.

**without IoT:**



**Fig1:**earthquake effect in different areas

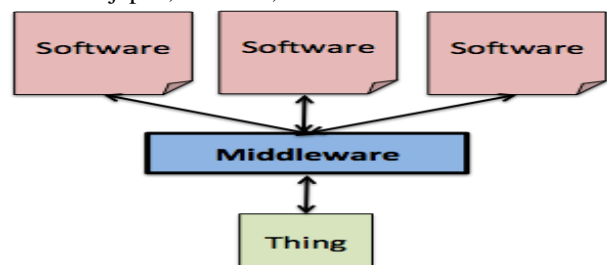
Simple observe above fig1 that is show how to impact society due to the earthquake. At the time of earthquake occur we can't anything try to protect our valuable movable elements

that easy to Cary equipments. At a small alert before curing earthquake we can try to save over valuable life

Earth quake mainly accruing at the bottom of the hills areas if the earth quake accrues. At the time of earth quake total earth will be shake at that time we can loss the valuable life. This is challenging issue in the technology developing countries because total building will be damage so we can loss the all the static contraction. Hear no chance to identify the earth quake. So we can also loss the movable equipments in this problem over come in Japan those are identification of earth quake using the snakes. Because snakes are easy to identify the earth quake at that time snakes are running one side that side peoples are going. So in this process is very risky process because living with snakes is more problem, so in present technology not to identify the earth quake.

**With IoT:**

In japan, America, north India Africa countries



has earth quake is major problem. Because earthquake identification technology is low. So we can loss

**Fig 2:** simple architecture about the IoT

the valuable life and static developments and movable equipments because only not to identify the earth quake identifying loss. So we are proposed methodology is very fatly to identify. So we can easy to save our life and give the security to movable equipments. In this methodology we can use the one accelerometer sensor that is used to identify earth

quake and then send the information to the nearest related office and also intimate to the nearest peoples through the sound alarm. This is useful for the save our life try to protected the movable equipments. So in this methodology is very useful for the all kind of counters.

## II. IMPLEMENTATION:

in this paper implementation we are taken the some physical objects that are arduino uno board that is accelerometer sensor to send the signal and smart phone or android phone for receive signal from accelerometer sensor additionally we can use one bell. bell is connected

to accelerometer if suppose any chance to earthquake occur it will alert the surrounding peoples.

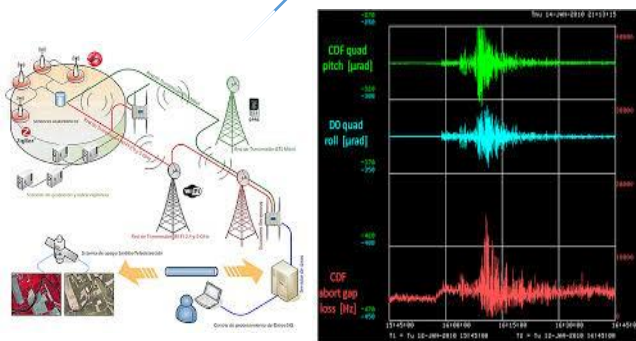
Now let's start for implementation of this paper firstly we can concentrate on the connection of arduino uno chip accelerometer from power storage. Accelerometer has two connections one is +ve and other one is -ve. The -ve wire will be attached to the ground in power side ports. Other +ve wire will be connected to the digital side 3<sup>rd</sup> port by using the breadboard we can easily connected

Now comes to the programming side implementation. In this paper is implementing on the android platform because this program run on the smart phone. So defiantly we are developing the program in the android platform.

In this paper smart phone will be receive the signal from the arduino uno chip (accelerometer) in this chip in side one web server is presented and it have the capabilities to receive the signals. That signal useful for the careful for surrounding peoples.

By using RFID signals chip will be alert to the surrounding peoples and Ethernet server functionality programming will be developed. Mobile send the HTTP request in JSON (Java server on net) format signal will be send chip inside server will be receiving that signal and chip server will be work on the given states of bell. In this bell signal will be send on HTTP protocols format and this program will be run on the web server.

## III. RESULTS AND DISCUSSIONS:



**Fig 3:** output representation and interaction between smart phone and chip interaction.

in this above figure we can easily analysis what is the process

is going on and how it is used total representation in the fig 3. it is very easy processing to protected the peoples from earthquake . Hear no suffering about the financial problem and etc...Because at less amount of money it will be chance to developed. By using this methodology we can save the money and time and valuable life without risk. In this technology is very useful for all kind of peoples whose are live in the earthquake repentantly occur.

No need tension about the IoT basics etc... It is just mobile operating. It can operate uneducated peoples also.

## IV. CONCLUSION:

We hope in this proposed methodology is very useful for the all type of peoples whose are live in the repentantly earthquake occurring areas. In japan, America, north India Africa countries has earth quake is major problem. Because earthquake identification technology is low. So we can loss the valuable life and static developments and movable equipments because only not to identify the earth quake identifying loss. So we are proposed methodology is very fatly to identify. So we can easy to save our life and give the security to movable equipments. In this methodology we can use the one accelerometer sensor that is used to identify earth quake and then send the information to the nearest related office and also intimate to the nearest peoples through the sound alarm. This is useful for the save our life tries to protected the movable equipments. So in this methodology is very useful for the all kind of counters.

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