PHASE1:Problem definition and Design Thinking

The scope of this document is to identify the problem and find solution for everyone to reduce the noise by monitoring the noise pollution to create a noise free environment.

Problem definition:

- According to a WHO report half of India live in noisy surroundings and one third of Indians experience sleep disturbances due to traffic noise.
- One fifth of indians are regularly exposed to sound levels at night that could significantly damage health.
- There should be a system which shall monitor the noise coming from railways and other sources of noise
- Noise maps are based on numerical calculations and having display to give good measures of long term averaged noise level.
- However,these maps does not take into account the variation of noise levels,temporary construction work,emergency vehicles,squeak from hanging brakes on trains etc.

Design procedure

- In this device,circuit board is programmed to monitor the noise pollution,which is done using the sound sensor which can collect data of noise level and then data is stored locally in memory card attached in this device.
- Display can also be attached to the device so that we can check data and analyse it.
- Data is also stored on particular server using electric impulse.
- Electric impulse is very powerful tool for the IOT devices to connect with network.
- In electric impulse code libraries already exists to send data from impulse to services.