

CONFIGURING THE SENSORS

- ✓ The ***Application Developer (user)*** needs to first register the sensor to the system.
- ✓ Once the sensor is registered all its information like
 - **ID** – Each sensor will have a unique ID associated with it.
 - **Type** – This will indicate the type of sensor like temperature, motion etc.
 - **Location** - This will indicate the position of the sensor.
 - **Gateway Assigned** - Each sensor will have a gateway assigned to itself.
- ✓ Above information about the sensor will be stored in the repository documents. All the information about the sensor will be stored in JSON format in the database since ***MongoDB*** is used.

Example JSON format

```
{  
  "ID" : "Alphanumeric",  
  "Type" : "String",  
  "Location" {  
    "Longitude" : "In Radians"  
    "Latitude" : "In Radians"  
  },  
  ... ..  
  "Gateway Assigned" : "String"  
}
```

CONFIGURING THE GATEWAY

- ✓ When the **Gateway** boots up for the first time it obtains information about the sensors which are registered with the system from the repository documents.
- ✓ Once the gateway boots up successfully it is now ready to receive data from the sensors.
- ✓ Each type of sensor will have its associated **Type Handler** with the gateway.
- ✓ If the developer intends to register a new type of sensor with the system then appropriate **JAR files** need to be included for the type handler to recognize the newly registered sensor. This would be required to convert the data to the required format.
- ✓ To check whether the gateway has started successfully **Health Ping** messages can be used.