**Types of Sensors**

**MAD experiment : 07**

**DATE : 26.02.2025**

**Aim :**

To list the available sensors that are available in the android studio.

**Activity\_main.XML :**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
android:orientation="vertical"  
android:padding="16dp">  
 <TextView  
 android:id="@+id/infoTextView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:textSize="18sp"  
 android:text="Prithvi C 22BCS093"  
 android:textStyle="bold"  
 android:textColor="#4CAF50"  
 android:layout\_marginBottom="16dp"  
 android:background="#E0F7FA"/>  
<TextView  
 android:id="@+id/sensorTextView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Available Sensors:"  
 android:background="#FFEBEE"  
 android:textColor="#D32F2F"/>  
</LinearLayout>

**Main\_activity.java :**

package com.example.exno7;  
import android.content.Context;  
import android.hardware.Sensor;  
import android.hardware.SensorManager;  
import android.os.Bundle;  
import android.widget.TextView;  
import androidx.appcompat.app.AppCompatActivity;  
import java.util.List;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 TextView sensorTextView = findViewById(R.id.*sensorTextView*);  
 SensorManager sensorManager = (SensorManager) getSystemService(Context.*SENSOR\_SERVICE*);  
 List<Sensor> sensorList = sensorManager.getSensorList(Sensor.*TYPE\_ALL*);  
  
 StringBuilder sensorInfo = new StringBuilder("Available Sensors:\n\n");  
 for (Sensor sensor : sensorList) {  
 sensorInfo.append(sensor.getName()).append("\n");  
 }  
  
 sensorTextView.setText(sensorInfo.toString());  
 }  
}

**output :**

A screenshot of a phone

AI-generated content may be incorrect.