**Purpose of Sensor Manager – Motion Sense App**

Sensor Manager is a tool in Android that lets apps read data from the phone’s built-in sensors, like the accelerometer, gyroscope, and light sensor. These sensors help apps understand things like motion, direction, or the phone’s surroundings. The Sensor Manager makes it easier for developers to connect their app to these sensors and get updated data when something changes.

In my project, I made a simple app called MotionSense that uses the accelerometer. This sensor tracks how the phone moves in different directions: left and right (X), up and down (Y), and forward and backward (Z). I used Sensor Manager to connect to the accelerometer and show the movement values on the screen. Every time I moved the phone in the emulator, the app updated the values.

During testing, I used the Android Emulator’s sensor tools to simulate phone movements. I also added breakpoints in the code to watch how the sensor values changed. This helped me see when the app got new sensor data and how fast it responded. It was a great way to understand how Sensor Manager works in real-time.

Sensor Manager is useful in many real apps. For example, fitness apps use it to count steps. Driving or map apps use it to detect directions and turns. Some games even use motion to control characters or actions. Overall, Sensor Manager helps make apps smarter by letting them react to how the user moves or interacts with their device.