**Software Description**

Title: **Android Personal Data Collector Application [v3- Outside Environment Condition category]**

The android personal data collector application version 3 focus on how to get information about the outside user environment condition. In this application, we develop six main function that can indentify the condition of user environement. In this application we tried to exploit sensors such as gravity and orientation sensor to detect the device position, pressure sensor to detect ambient air pressure, proximity to detect nearby obejcts, temperature and light to define the environment condition which near with the device.

In this application, we develop six of main functions as follows:

1. GravitySensorProbe.java
2. LightSensorProbe.java
3. OrientationSensorProbe.java
4. PressureSensorProbe.java
5. ProximitySensorProbe.java
6. TemperaturSensorProbe.java

**GravitySensorProbe.java** and **OrientationSensorProbe.java**

Those functions are to get the information about device position. Based on information that we get from those sensors, we could define the device position.

**LightSensorProbe.java**

This file contain code that exploit ilumination sensor. The data that we get from this function is light sensor data such as the brightness, the light condition near with mobile device.

**TemperatureSensorProbe.java**  and **PressureSensorProbe.java**

Not all devices has temperature and pressure sensor but the newest device version already provided those sensors. In this application we also tried to develop code that can collect the information about the temperature and ambient air pressure.

**ProximitySensorProbe.java**

A proximity sensor is a sensor able to detect the presence of nearby objects without any physical contact. In this file contain code for collecting the data from this sensor.