

## **ABSTRACT**

*At this time telecommunications has become very important thing in our lives. Therefore the development of this technology will be very important to make it more easier for us to communicate. Obviously with advances in telecommunications technology will impact also on other technologies. for example is telemetry (remote measurement and monitoring system). Therefore, the transmission of information in the telemetry can be done in wireline and wireless.*

*At this final project, created an application that can be used to monitor temperature in a room. This application will be applied in monitoring the temperature in the room or a central server. So, if there is damage to the equipment inside the room, then the damage can be detected early from the room temperature. Abnormal temperatures may be due to a device that works improperly.*

*In this final project, J2SE becomes the program which is used to read information that is emitted from hardware system (sensors) to a computer which is equipped with GSM module with Windows operating system via a short message which is called SMS on GSM networks. And the data sent will be stored in a database namely MySQL. After the data is stored, then Java will present the data to the graphical form and alarms form. Monitoring the two parameters that becomes cases in this final project that is the temperature and humidity. J2SE the function of J2SE here is as translator from machine language into language which can be understood by human or can be read through SMS that we received after the submission of information from the hardware.*

*The results in this final project is a notification (SMS which changed into alarm form) or a graph form information to determine the condition of the room temperature and humidity which most of the results is a monitoring system of the room circumstances. So we can monitor the room without having to wait and can be done anytime.*

*Keywords: Java 2 Standard Edition, MySQL, SMS, and telemetry*