

## **ABSTRACT**

*The Current and future security aspects are needed in various fields of life today. The privacy factor also influences the importance of a security system. Often many cases of house neglect of valuables and house fire cases. In this final project which is adopted is an Android-based home security system. Where this security will work if the PIR sensor and smoke sensor are activated and detect movement or gas inside the house, and then the sensor sends a notification through the application installed on the android smartphone directly to the homeowner. In the application installed on the smartphone the owner can monitor the house and can find out that there is a movement that tries to enter the house without the owner's knowledge and can find out that there is gas inside the house when the homeowner is not there. Automatically the results of the data have been synchronized in the homeowner's personal application when there is no internet connection on the homeowner's smartphone. After an experiment the results of this tool are the range of the pir sensor from 20 degrees to 160 degrees, the biggest error of the MQ-6 sensor is 17%, the best service quality of this tool is throughput of 91 k, delay of 52.82 ms, and packet loss equal to 0*

**Keywords:** *PIR Sensor, MQ-6 Sensor, Smartphone, Internet.*