

## ABSTRACT

Nowadays, the development and the creativity of today's generation are getting increased. This is supported by the rocket and aerial robot competition activities. The interest in developing rocket and aerial robot, especially students, is coming up, not only for those students who have basic flight background. This is related with appearing of various research of students in the field of aviation, especially on rocket. One of research form on rocket is making a GUI (Graphical User Interface) as a ground station for rocket.

GUI (Graphical User Interface) as a ground station is an earth's station that is made to display the telemetry data that is sent from the microcontroller or from the sensor when it's released in the air in realtime. The process of sending and receiving of the data is done wirelessly by using X-Bee module. The GPS sensor is set as a rocket parameter to display maps and rocket coordinate.

GUI as a ground station is designed to show the movement of the rocket EDF-based GPS data and displays the latitude and longitude data as the coordinate value of the initial rocket launch ing at map, and BMP-085 sensor to display the air pressure data were converted into height data (altimeter) also CMPS-10 sensors are attached to the rocket movement accelerometer scores and gyroscope for rocket soared into the air in realtime.

*Keywords: GUI, Ground Station, Rocket*