

## Additional Reading Materials

This parallel session is to get to know all your installed softwares so that in future you can get maximum benefits out of these softwares. Read when you get time.

### **SITL**

SITL basically provides us with a pixhawk. In order for a flight controller to work, we need to upload a program called [firmware](#). The name of the firmware we use is [Ardupilot](#) and the SITL provides us with a virtual flight controller with Ardupilot firmware.

<https://ardupilot.org/dev/docs/sitl-simulator-software-in-the-loop.html>

### **Gazebo**

Gazebo is a light weight [simulation](#). [Plugins](#) are additional softwares which enhance the current softwares capabilities by giving access to perform new tasks or by improving the existing methods of execution. Last part we installed a gazebo plugin which basically gives gazebo the data required of how the drone performs in its environment.

Follow this [site](#) to learn more of what we can do in Gazebo.

### **Mavlink**

Understandable form of message by our drone.

<https://ardupilot.org/dev/docs/mavlink-basics.html>

### **Mavproxy**

It is a means to control the drone by converting commands into mavlink messages.

<https://ardupilot.github.io/MAVProxy/html/index.html>

### **QGroundControl**

Qgc is used to control and deal with basic necessities of drones like tuning, configurations, data recordings, firmware updation and installation etc..

<https://docs.qgroundcontrol.com/en/>