## Describe how you will achieve these objectives.

The program acquires for a 3 hours period, in the Columbus Module, temperature, humidity and pressure thanks to the sensors of the SenseHAT board and detects the presence of astronauts in the module by using a Pi-Camera as a sensor. In addition, real time position and environmental brightness of the ISS are calculated. All project details are better explained in our website at Brixia-AstroPi-4.github.io

The program is described in the flow chart available in the website. It contains 3 classes respectively for data acquisition, face recognition service (F.R.S) and the displaying of the team logo. Firstly, the program initializes the SenseHAT board, then the Pi-Camera and starts the thread of the F.R.S. Finally, parameters acquisition begins and data are saved every second in the data_<starttime>.CSV file.  At each cycle of the loop, the program checks if the F.R.S detects faces. If it does, the program logs the event and saves the data in the mentioned CSV file, showing the on board data on the LED matrix. The data displayed are not intended for the astronauts, but only for checking the functioning of the program.