

Payraw Salih Design Doc.

Sequentially what happens in the main.cpp file is as follows:

- 1) Create map 50x50 initialized with '-' character (airport is by default at 0,0)
- 2) create mutex lock for every position of the map
- 3) create pthread that updates map every 10 useconds using usleep(10)
- 4) create pthread that creates an instance of struct drone which contains information for destination and origin of the drone. Send function update\_map which updates the position of the drones on the map as a parameter in the pthread create.
- 5) join the pthreads
- 6) lock the mutex lock for each position that has a drone on it. Release the lock when the drone begins to move.
- 7) output drone name and finished when the drone has returned to airport.