

# ***Sistemas Distribuídos***

***Airlift***

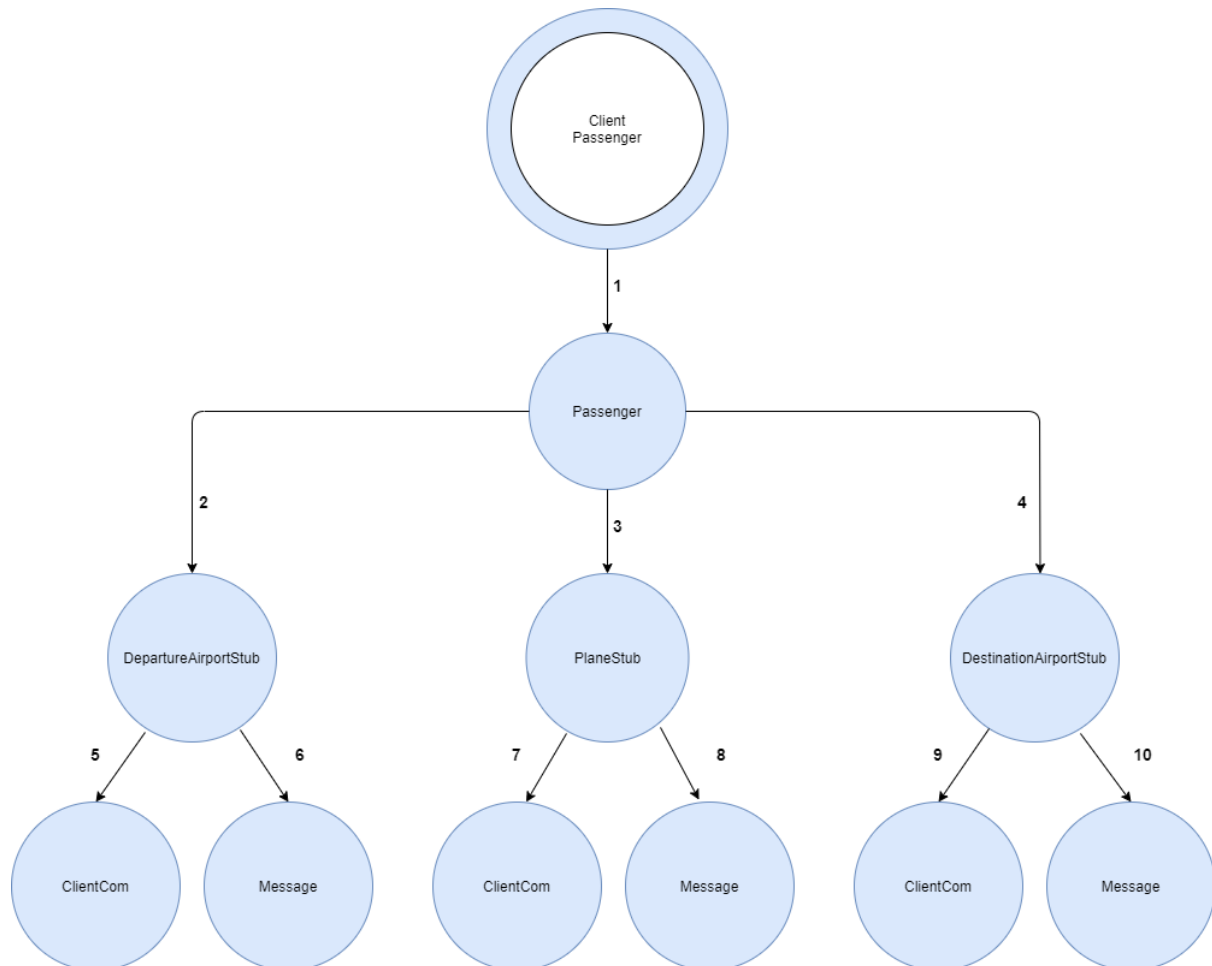
*version 2*

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***Interaction diagrams:***

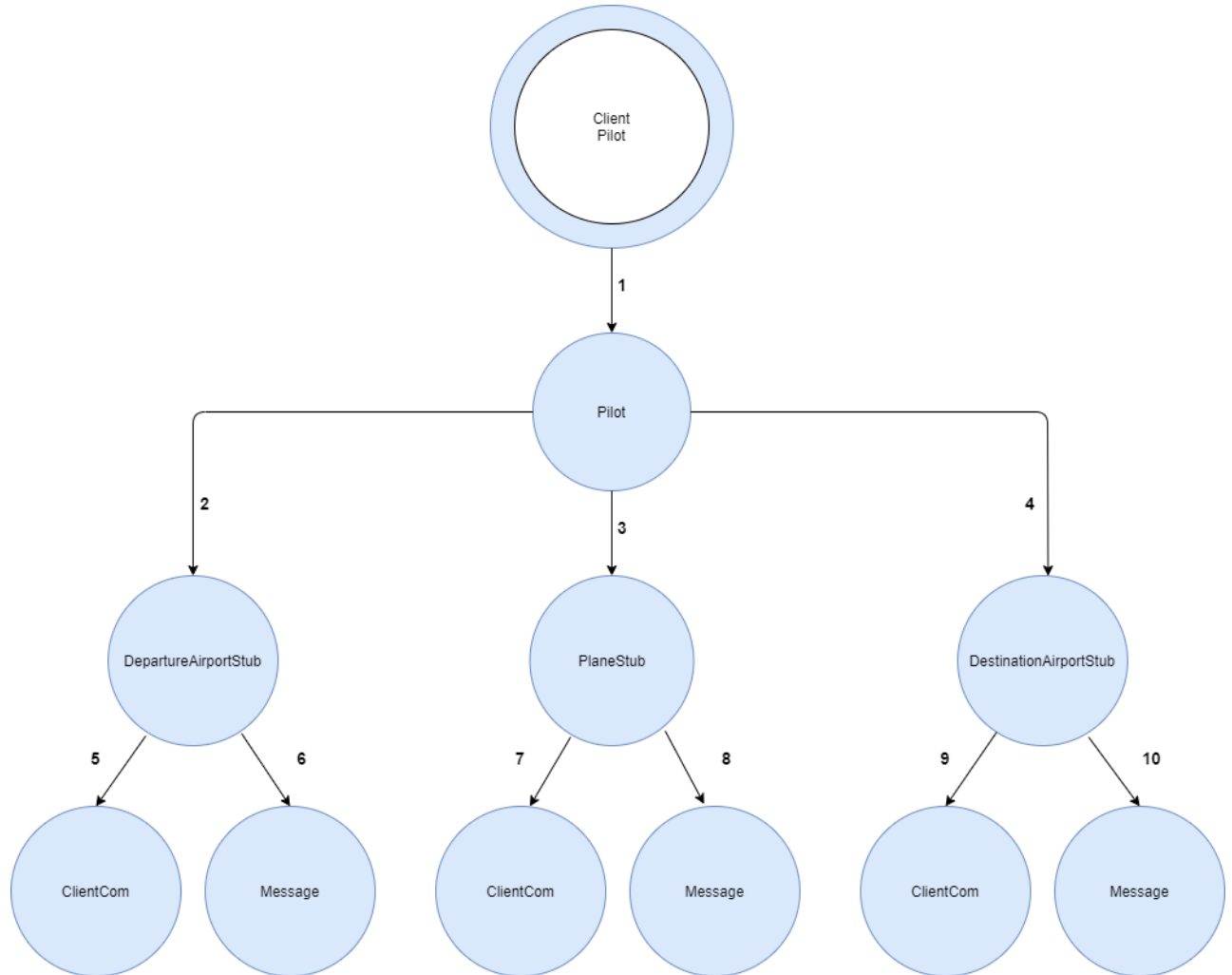
*Distributed message passing under the TCP protocol*

## *Client Passenger Diagram*



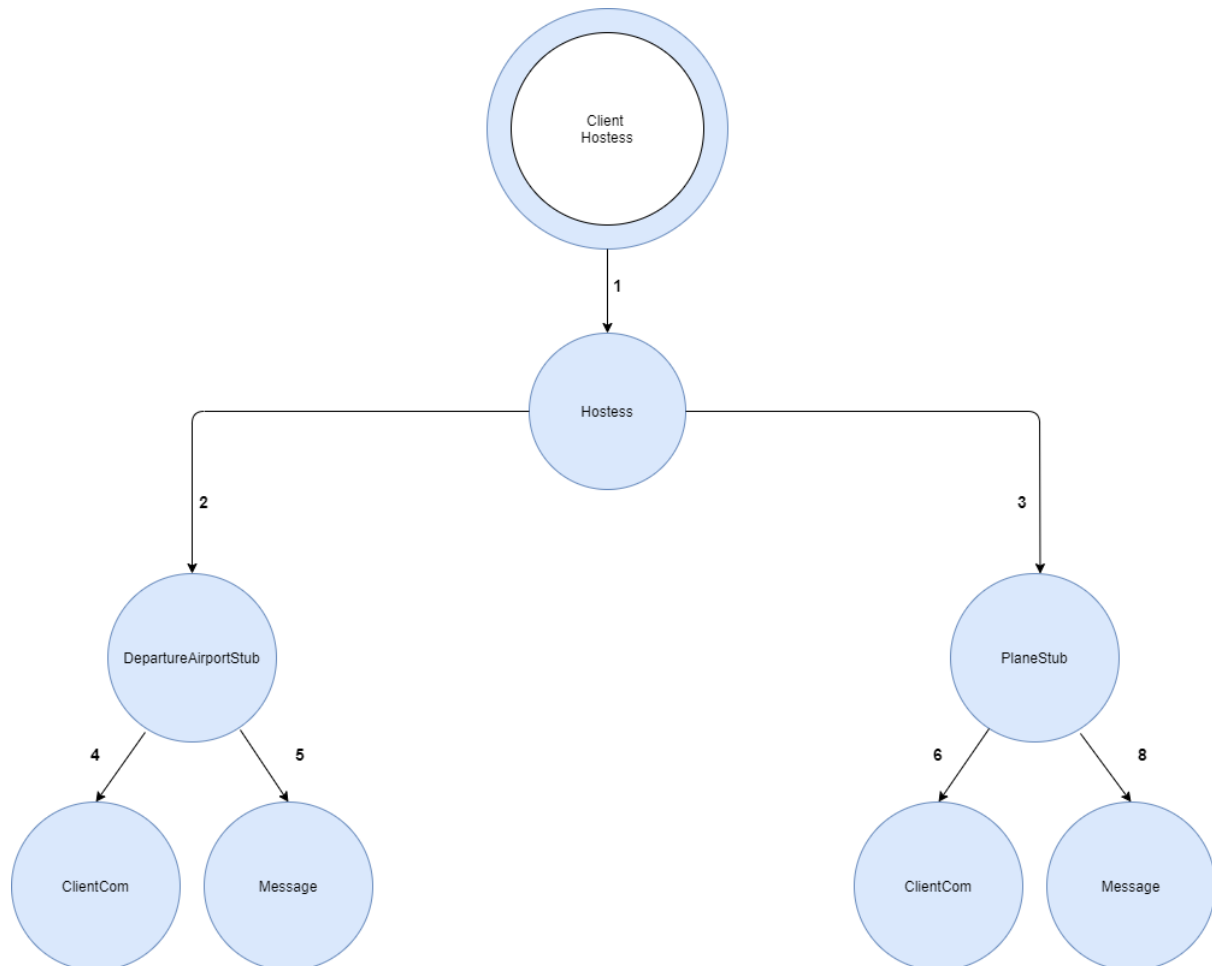
- 1** - Instantiate, start, join
- 2** - Instantiate, waitInQueue();
- 3** - Instantiate, waitForEndOfFlight(); boardThePlane();
- 4** - Instantiate, leaveThePlane();
- 5** - Instantiate, open(), close(), writeObject(), readObject()
- 6** - Instantiate, open(), close(), writeObject(), readObject()
- 7** - Instantiate, open(), close(), writeObject(), readObject()
- 8** - Instantiate, open(), close(), writeObject(), readObject()
- 9** - Instantiate, open(), close(), writeObject(), readObject()
- 10** - Instantiate, open(), close(), writeObject(), readObject()

## *Client Pilot Diagram*



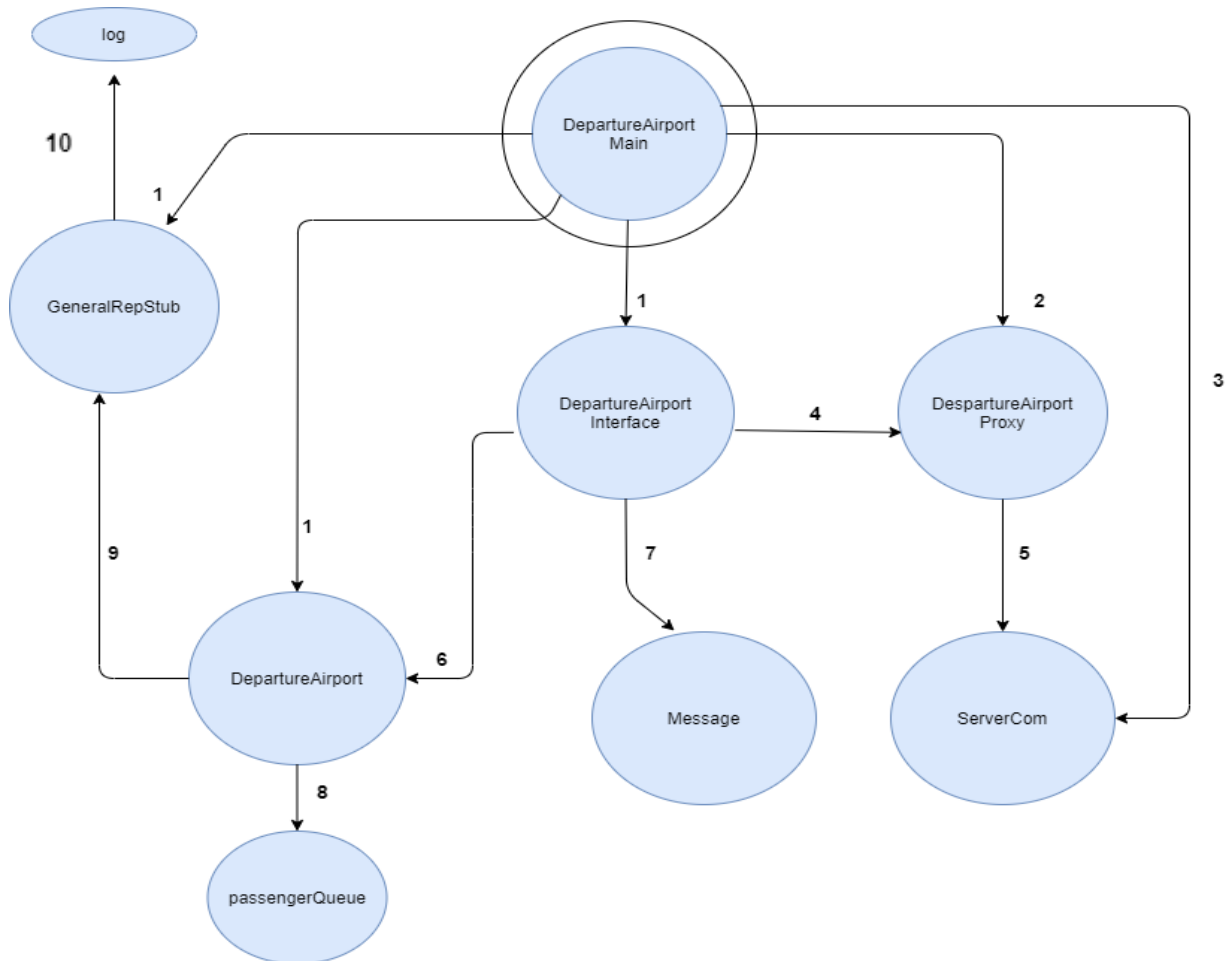
- 1-** Instantiate, start, join
- 2-** Instantiate, parkAtTransferGate(); informPlaneReadyForBoarding(); shutdown();
- 3-** Instantiate, waitForAllInBoard(); setAtDestination(); shutdown();
- 4-** Instantiate, announceArrival(nPass); getTotalPassengers();
- 5-** Instantiate, open(); close(); writeObject(); readObject();
- 6-** Instantiate, open(); close(); writeObject(); readObject();
- 7-** Instantiate, open(); close(); writeObject(); readObject();
- 8-** Instantiate, open(); close(); writeObject(); readObject();
- 9-** Instantiate, open(); close(); writeObject(); readObject();
- 10-** Instantiate, open(); close(); writeObject(); readObject();

## *Client Hostess Diagram*



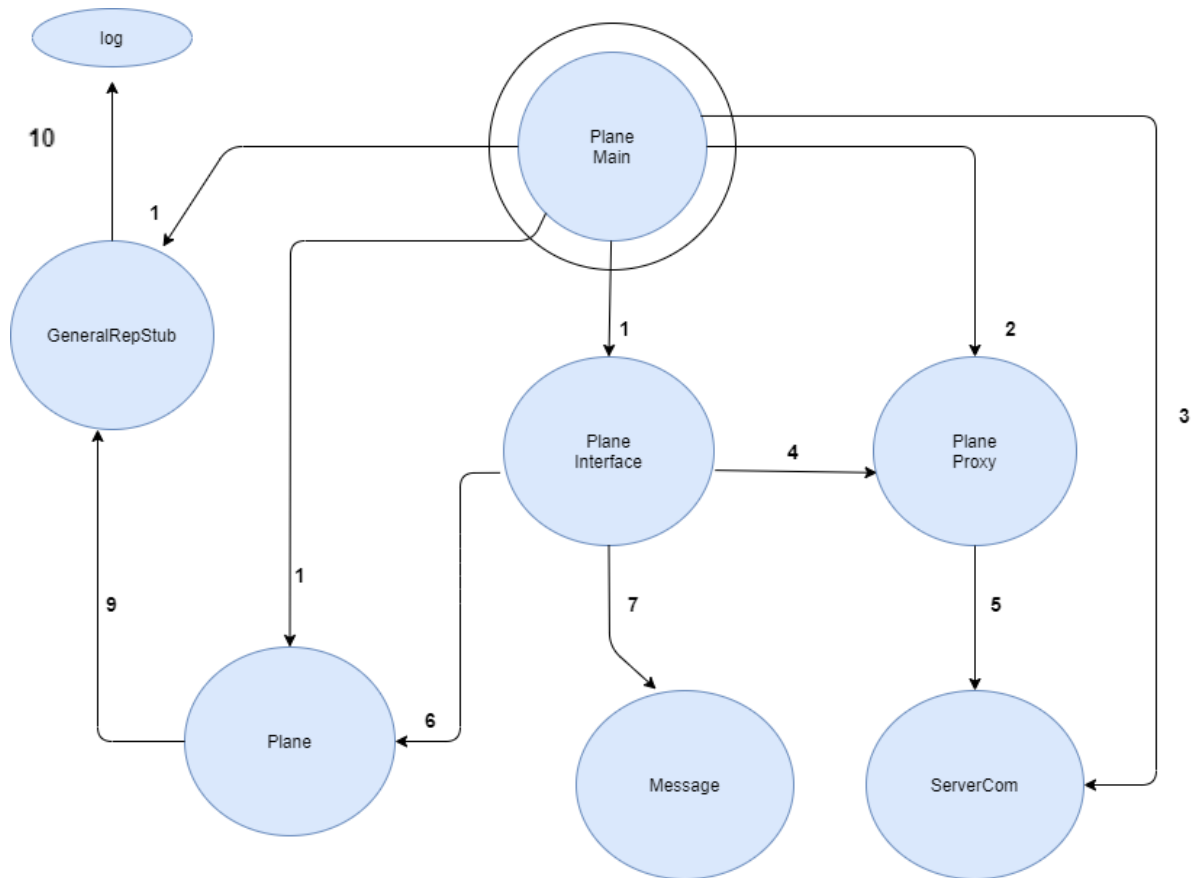
- 1- Instantiate, start, join
- 2-Instantiate, waitForNextFlight(); getnPassengers(); empty(); waitForNextPassenger(); checkDocuments();
- 3- Instantiate, informPlaneIsReadyToTakeOff();
- 4- Instantiate, open(); close(); writeObject(); readObject();
- 5- Instantiate, open(); close(); writeObject(); readObject();
- 6- Instantiate, open(); close(); writeObject(); readObject();
- 7- Instantiate, open(); close(); writeObject(); readObject();
- 8 -Instantiate, open(); close(); writeObject(); readObject();

## *Server Departure Airport Diagram*



- 1 - Instantiate
- 2 - Instantiate, start(), end();
- 3 - Instantiate, start(); accept(), end();
- 4 - getEntityState(); getEntityState; setPassId();
- 5 - readObject(); writeObject(); close();
- 6 - waitForNextPassenger(); checkDocuments(); waitForNextFlight();  
informPlaneReadyForBoarding(); getnPassengers(); parkAtTransferGate(); waitInQueue();  
shutdown();
- 7 - Instantiate, getType(); setType(); setInt1(); setState(); getState(); getId();
- 8 - Instantiate, empty(); write(); read();
- 9 - setPassengerState(); writeLog(); setHostessState(); setPilotState();
- 10 - Instantiate, println(); flush(), close();

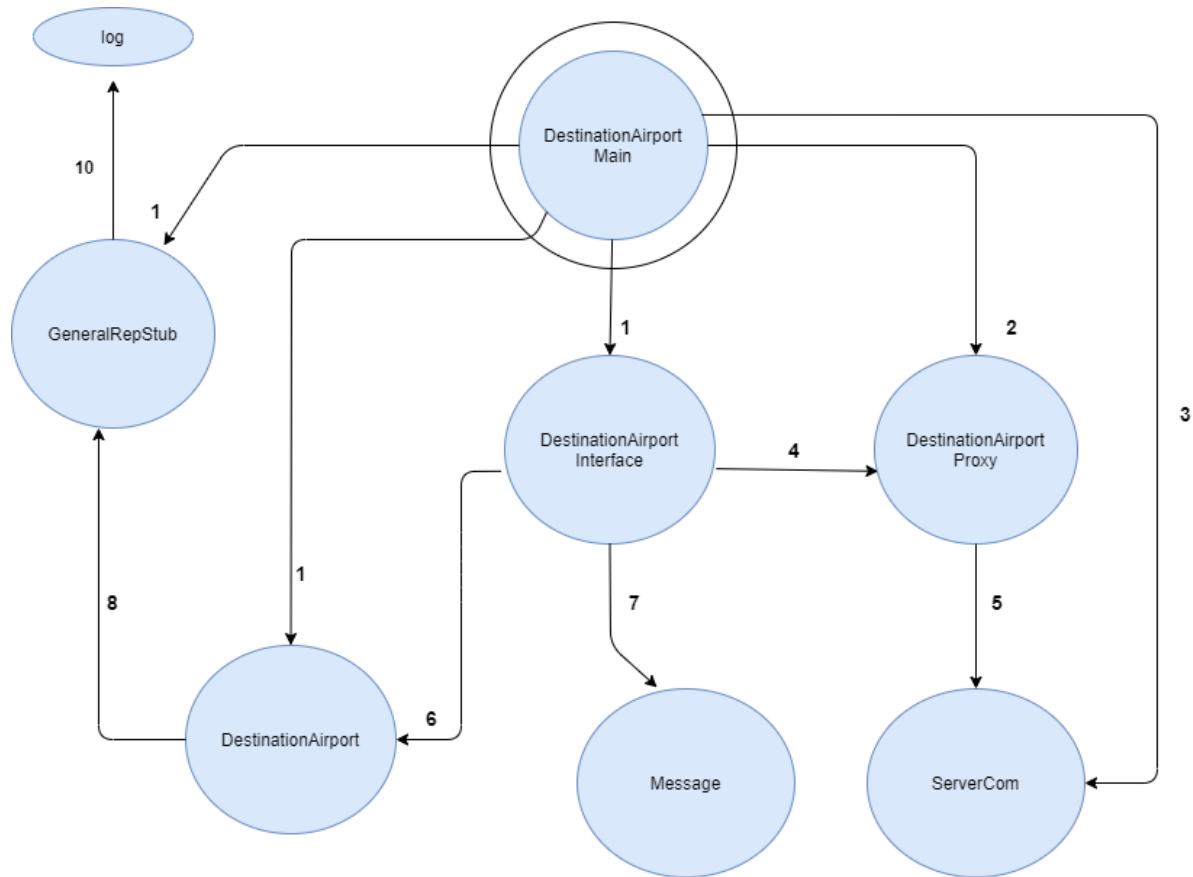
## *Server Plane Diagram*



- 1** - Instantiate
- 2** - Instantiate, start(), end();
- 3** - Instantiate, start(); accept(), end();
- 4** - getEntityState(); setEntityState(); setPassId();
- 5** - readObject(); writeObject(); close();
- 6** - informPlaneIsReadyToTakeOff(); setAtDestination(); waitForEndOfFlight(); boardThePlane(); waitForAllInBoard(); shutdown();
- 7** - Instantiate; getType(); setType(); setInt1(); setState(); getId(); getState(); getInt1(); getBool1();
- 8** - Instantiate, empty(), write(), read();
- 9** - setPassengerState(); writeLog(); setHostessState(); setPilotState();
- 10** - Instantiate, println(); flush(); close();

## *Server*

### *Destination Airport Diagram*



- 1 - Instantiate
- 2 - Instantiate, start(), end();
- 3 - Instantiate, start(); accept(), end();
- 4 - getEntityState(); setEntityState(); setPassId();
- 5 - readObject(); writeObject(); close();
- 6 - leaveThePlane(); announceArrival(); getTotalPassengers();
- 7 - Instantiate; getType(); setType(); setInt1(); setState(); getId(); getState(); getInt1();
- 9 - setPilotState(), writeLog(), setPassengerState()
- 10 - Instantiate, println(); flush(); close();