Construct a UML class diagram for the following case:

An international airport requires a system to keep track of flight details for customers.

- For each flight the system needs to store the flight number, destination, departure time, departure gate, airline and flight cost.
- Some flights are direct flights, i.e. they fly non-stop to the destination and some fly via another airport to their destination.
- In the case of indirect flights the flight stops at an airport en route to its destination to refuel. Information regarding the transit airport must also be stored.
- The flight cost is calculated to be the cost charged by the airline per customer plus a percentage of this amount (the profit_rate).
- In the case of indirect flights an additional tax must be added to this amount per customer in order to cover refuelling taxes at the transit airport.
- Furthermore, on some flights additional passengers can board the plane at the transit airport. The system needs to keep track of whether boarding will take place at the transit airport or not.
- The system also needs to store details of the aircraft used for a flight. The aircraft brand, model and capacity (number of passengers that it can carry), must be stored for each aircraft.

You should represent in this class diagram (the main attributes, operations or methods (just the name), associations, possible aggregations or compositions and generalizations).

You can add few OCL constraints and notes (strongly recommended) to represent some constraints or to define some classes.