

Airline Management

You received a task to model an Airline's internal structure. A **Flight** has two Pilots, three Flight Attendants, and many Passengers. Plan and make classes based on the following requirements:

- Store every Airline **Employee's** **name**, **phone number**, **birth date** and **salary**
- You have to store which **languages** flight attendants speak from the relevant ones (English, German, Spanish, Russian).
- Every flight has a **unique identifier** and a random number of passengers between 100 and 250 (some overbooking is possible), and a language from the list above.
- Pilots can be either Captain or Co-pilot on a flight. A Co-pilot on a flight can be captain on another one.
- The airline provides premium quality **Analog Compasses** to pilots but only once, sometime after they got employed.
- We should be able to check if a flight is **ready to take off** (with checking every Employee whether they are ready or not); the **conditions of the clearance** are:
- The Captain and the Co-pilot have received their Compasses already.
- The number of Passengers is less than 220.
- All the Attendants speak the language of the flight.
- Log the steps of the clearance check (passed / failed, and why)!

Hints: you should have an abstract class or interface, use inheritance, data hiding and make sure there is no code repetition.