

General design

- The Drone class consists of a list of Flight objects it can execute; The Flight class consists of a list of TrickMoves objects with name in Enum Trick; Each trick consists of a list of IndividualMoves with fields: direction, speed, distance, and a boolean record representing whether it is recorded with its format. All classes above implements the interface Movements as they are all made of individual moves. The execute() command will be passed down level by level so that every move will be executed.
- In order to compare the flights by different strategies, static factory methods (createByMoveComparator(), etc) are used:
 - To allow the client to switch between different comparison strategies without having to tweak the code of compareTo() method. It's more convenient as the client only needs to change the name of the comparator to achieve flexible comparison.
 - To give the comparators access to private members of the class they compare without breaking encapsulation.

Client

• The client is able to specify the *speed* and *distance* of each trick they add to the flight; However, for the realistic aspect of the functionalities, certain moves in the tricks are pre-programmed. (For example, the TAKEOFF trick always starts with LOW speed, but the client has the freedom to program the speed afterwards.)