I - Definition

We call an **mission** any set of instructions given to a drone (or any other device which can hold a sensor) to collect data. The constraints is given by the user, and the steps computed by the mission planner. We store only the output of the mission planning module. It should be linked to an intervention and a drone.

II - Attributes

II.1 - Definitions

A mission can have the following attributes:

- **was_changed**, if the mission was changed during the execution, because of some obstacle in the way.

- **comments**, comments about the mission.

- **mission_end_time**, when the last step of the mission is done, and the drone is back to the ground base.

- **was_finished**, if the mission was finished. It could be false if the drone had to Return To Launch.

- **moving_duration**, the duration the drone is moving during his mission.

- **payload_weight**, the payload weight in kilograms.

- **pilot_name**, the name of the pilot if there is one. If the mission is an autonomous flight, the field can be filled with "auto".

- **flight_scenario**, the flight scenario describes the type of area the drone is flying over. It could be one of the following string : "S1", "S2", "S3", "S4".

- **mission_start_time**, when the drone leaves the base to start his mission, e.g. reach the first step.

- **type_of_mission**, the type of mission.

II.2 - Description
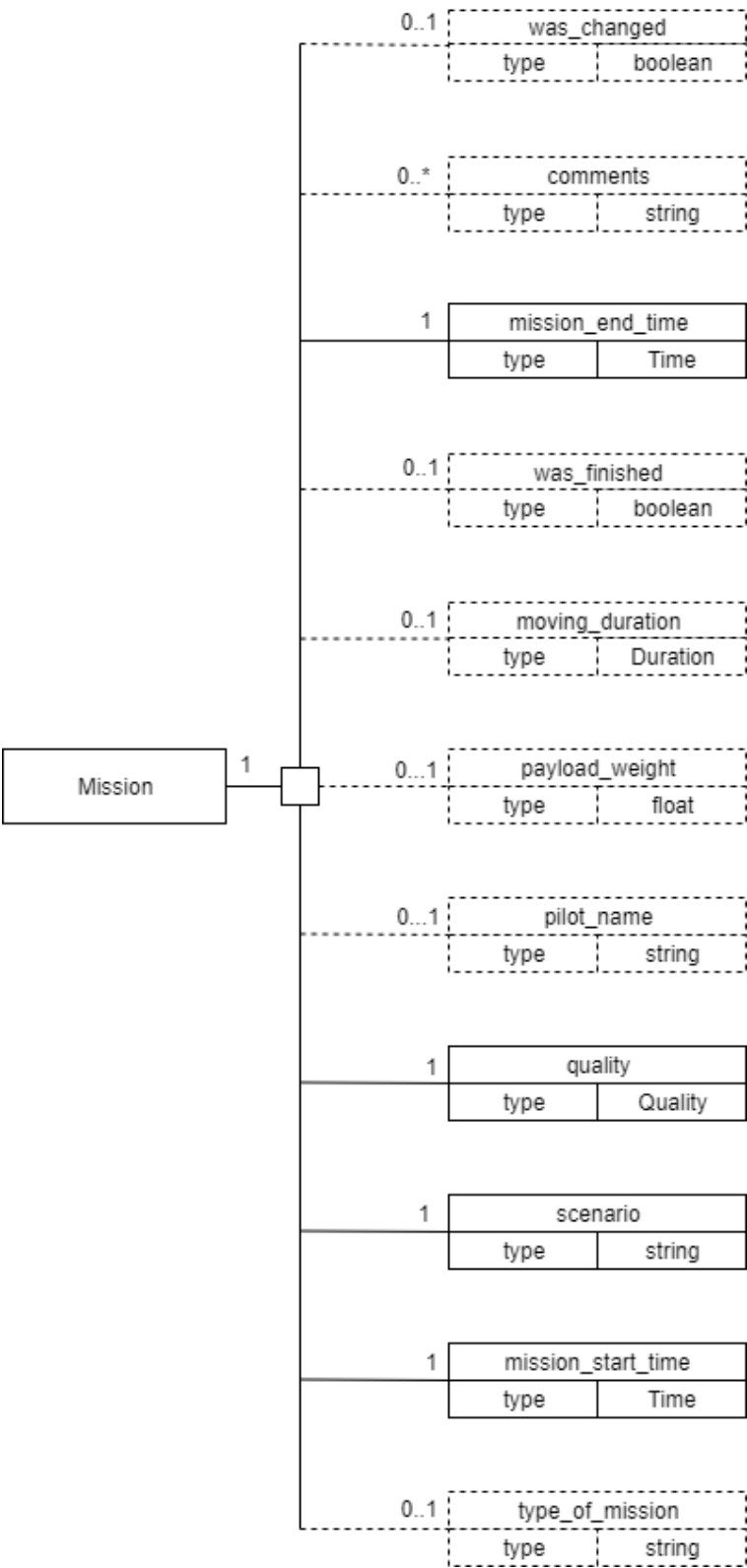
II.2.1 - Graphical representation

Figure 1: Graphical representation of a mission

II.2.2 - Description table

Name	Type	Expected length	Optional	Significant
was_changed	boolean	-	Yes	3
comments	string	200	Yes	4
mission_end_time	Time	-	No	1
was_finished	boolean	-	Yes	3
moving_duration	Duration	-	Yes	3
payload_weight	string	-	Yes	2
pilot_name	string	-	Yes	3
quality	Quality	-	No	-
scenario	string	-	No	1
mission_start_time	Time	-	No	1
type_of_mission	string	~30	Yes	2

Table 1: Description table

III - Examples

```
3  { "mission_id" : ObjectId("5bedabbce92e0f1838941fce"),
4    "was_changed" : false,
5    "comments" : "Third goal far from the original objective",
6    "mission_end_time" : "2019-05-02T17:05:56,000+02:00",
7    "was_finished" : false,,
8    "moving_duration" : "P0Y0M0DT0H19M53,254S",
9    "payload_weight" : 2.3,
10   "pilot_name" : "Olivier",
11   "quality" : 2,
12   "scenario" : "S1",
13   "mission_start_time" : "2019-05-02T16:36:52,154+02:00",
14   "type_of_mission" : "building recognition"}
```

Figure 2: Example of a mission in json