Draft1 - Sensor

I - Definition

We call a **sensor** a device which detects or measures a physical property and records, indicates, or otherwise responds to it. In our case, it can be a camera, a georadar, or a GPS.

II - Attributes

II.1 - Definitions

A sensor can have the following attributes:

- **sensor_model**, the model of sensor we use. For an example, "FLIR view pro R".
- **documentation_path**, the path of the sensor documentation in the MAM, like "/home/eeyes/doc/material/view_pro_r.pdf".
- **focal_length**, the focal length (in millimeters) of the camera, if the sensor is a camera, like "6.8" for $f = 6.8mm$.
- **output_extension**; the output extension of the data collected by the sensor, like ".mov", ".avi" or ".stl".
- **bought_date**, when the sensor was bought.
- **sold_or_broken**, if the sensor is broken, was sold or not used anymore, this attribute contains the date we stop using it.

II.2 - Description

II.2.1 - Graphical representation

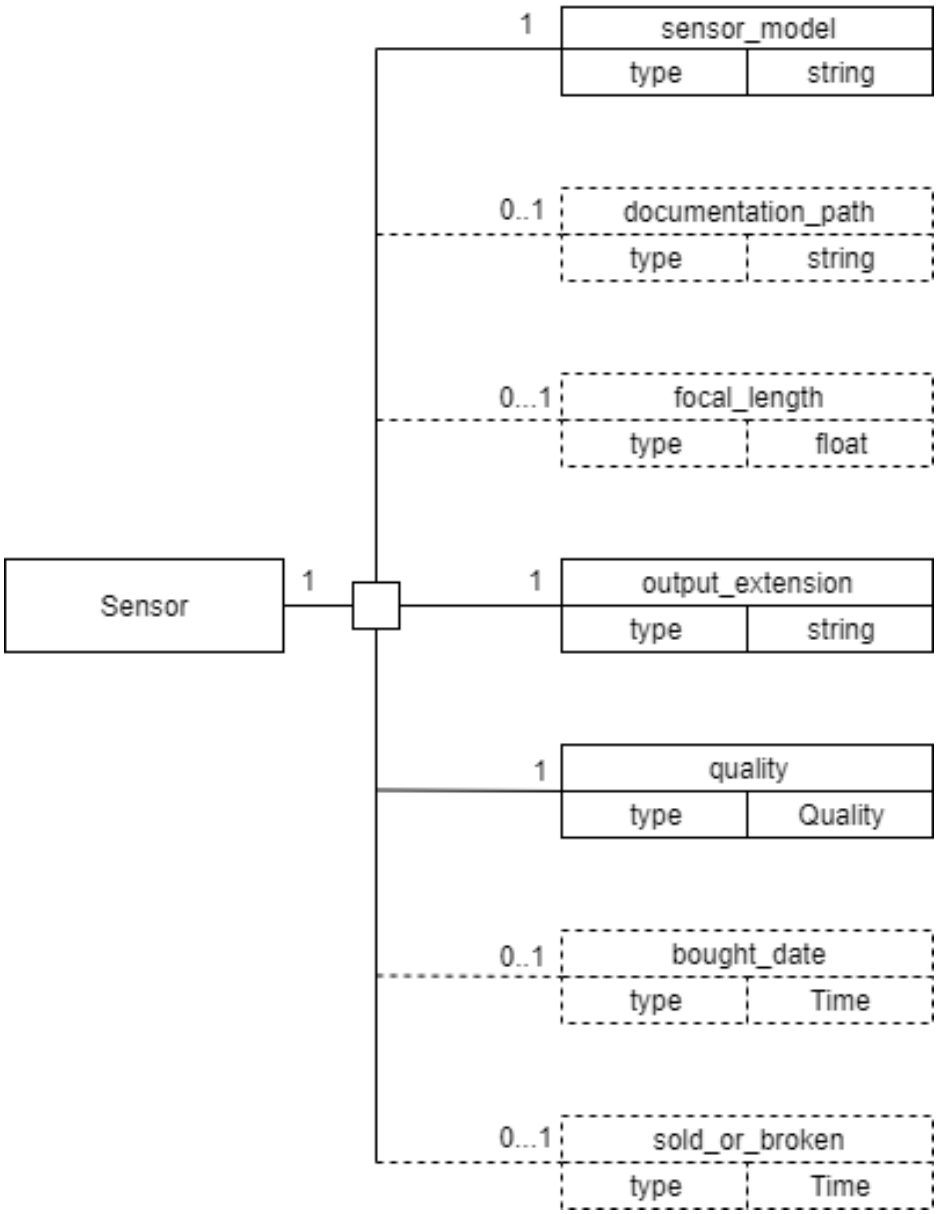

Figure 1: Graphical representation of a waypoint

II.2.2 - Description table

Name	Type	Expected length	Optional	Significant
sensor_model	string	~50	No	1
documentation_path	string	~100	Yes	2
focal_length	float	-	Yes	3
output_extension	string	~ 4	No	1
bought_date	Time	-	Yes	4
sold_or_broken	Time	-	Yes	2

Table 1: Description table

III - Examples

```
{ "sensor_id" : ObjectId("5bedacdee92e0f1838941fdc"),
  "sensor_model" : "FLIR view pro R",
  "documentation_path" : "/home/eeyes/doc/materi-al/flir_view_pro_r.pdf",
  "focal_length" : 6.8,
  "output_extension" : ".mov",
  "bought_date" : "2018-09-05T00:00:00,000+02:00",
  "sold or broken" : ""}
```

Figure 2: Example of a sensor in json